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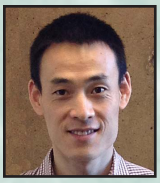
HealthWatch: A Diabetes Self-Management System for Personal Behavioral Rule Discovery



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Abstract

Although the current norm in personal health management system is to conform to a standardized process, this process is not appropriate for managing chronic diseases such as type-2 diabetes. Patients with type-2 diabetes experience different individual reactions to food intake and exercises: What works for one person might cause negative outcomes for another. This technical report describes HealthWatch (http://informatics-study.ics.uci.edu), a web system built to address this issue. HealthWatch allows users to use vague language to describe their health-related activities. It also includes various search and sort features that help users discover personal rules based on their personal records. A usability study with the HealthWatch system was conducted with 73 participants. The results partially confirmed the value of vague language in personal health management, and shed light on the future direction of HealthWatch.

Introduction

Diabetes is a chronic disease that is widely diagnosed around the world. It is the result of a dysfunctional pancreas that does not produce enough insulin (type-1 diabetes), or of the body not properly consuming the produced insulin (type-2 diabetes). Complications with diabetes can damage heart, blood vessels, eyes, kidneys, and nerves. According to WHO, there are 346 million diabetes patients worldwide. 2004 saw 3.4 million deaths as a consequence of high blood sugar. The World Health Organization (WHO) has projected that this number will double between 2005 and 2030 [1]. Among the three existing types of diabetes, Type-2 diabetes is the most widely diagnosed, and accounts for 90% of all diabetes cases. In contrast to type-1 diabetes, a type-2 diabetic patient does not require regular insulin injections, as the problem is that the body cannot use insulin effectively. Type-2 diabetes is often associated with excessive body weight and a sedative lifestyle.

Although diabetes is incurable once it has set on, there is much one can do to delay the onset and complications via diet and activity control. However, a major problem is that patients have reported different reactions to the same food or exercise. This "individual difference" is similar to how people's bodies respond differently in pain [2] and physical activity [3]. Studies have documented that experienced patients actively experiment with various food, activity, and medication combinations in order to find what works best for their own situation [4] [5]. Traditionally, patients use a paper diary to log all the food intake, activity, and glucose readings. Patients can then try to detect patterns that lead to unusual sugar level measurements. Once they establish a hypothesis, they can recreate the same condition and verify the unusual reading.

There are three ways to improve this practice with software tools. First, the success of this method relies on a complete record, which is tedious to collect. Second, the reflection requires an eye for details that takes time to train. This is a clear disadvantage for newly diagnosed diabetes patients, who would in fact benefit the most from the active engagement. Without immediate benefit, these patients may also lack the motivation to keep a complete record. Finally, this manual rule discovery is prone to confirmation bias, where the individual would seek information to confirm a formed hypothesis and ignore conflicting information [6].

There are various online or offline health management systems. However, they all focus on monitoring user behaviors against standardized procedures. The goal of such systems is to enforce users to adhere to a recommended lifestyle. These systems often use detailed input fields to capture quantifiable data. These data are then used in calculations based on established formulas (cf. weight management systems). Research in this domain often focuses on how to encourage users to practice the prescribed lifestyle consistently, for example, by providing easy recording

[7] or by creating peer groups [8]. However, type-2 diabetes patients need a system that not only captures the input, but also interprets it in sensible ways, and produces outcomes that encourage reflection.

With this shifting focus in mind, we built HealthWatch, a web application for personal behavioral rule discovery. The current implementation is used for preliminary user evaluation, and at the moment only includes the most basic features. HealthWatch has two main components: an interactive panel to record user data, and a table that presents an overview of these personal records. HealthWatch can be distinguished from other systems in two ways: First, it uses vague terms rather than standardized measurements. Second, it provides a rich set of tools that support a user's personal rule discovery. Our user evaluation guides the future direction of the development of HealthWatch. Our study confirms the hypothesis that users prefer free text input. Participants' response to the vague terms is mixed. This is however expected given that the health management market is dominated by systems that rely on standardized measures, as these systems deeply shape the user expectation.

In the remainder of this report, I will first describe HealthWatch in detail. Subsequently, I will present the evaluation design and the analysis of the results. I will end on a discussion of future work.

HealthWatch

HealthWatch is a web application built using MVC.NET 3.0 and Microsoft SQL server 2008. Most client side interactions are implemented using JQuery. The target users of HealthWatch are type-2 diabetes patients. We focus on three types of information that are most relevant when trying to discover personal rules: food intake, physical exercise, and glucose measurements. The goal of HealthWatch at this iteration is to collect user input and present the collected records in an intuitive manner. For this reason, all main features are located in one single page. In addition, there is a login/off page and a page for changing the password. The main page has two components: the personal record history and a form for record editing (see Figure 1).

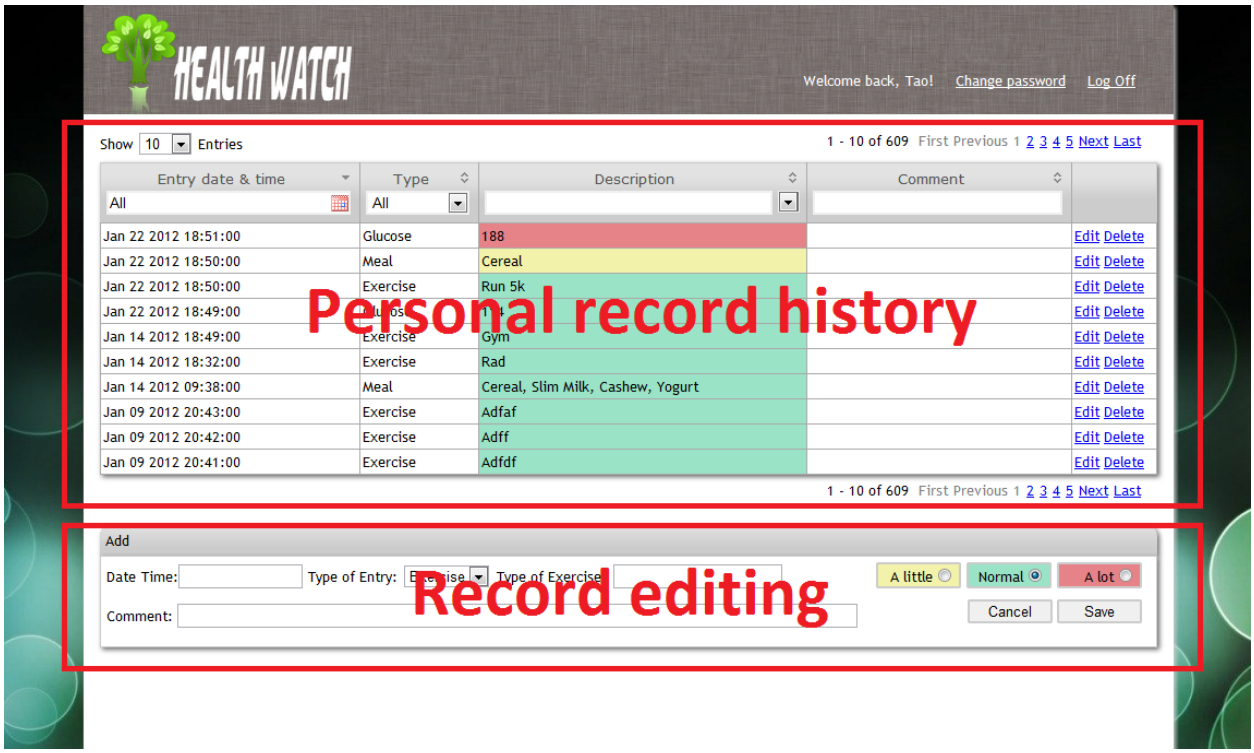


Figure 1 HealthWatch interface

Personal record history

The personal record history area shows existing records logged by the current user. It displays 10 records per page by default. Users can change this setting using the dropdown list located above the upper left corner of the record table. The total record number is displayed on the right hand side, above and below the record table. Top and bottom

paging controls are identical and support standard operations such as go to a particular page or the first/last page. It is replicated in both positions so that the user does not have to go all the way up if the table has been set to a long length and the user is on the bottom half of the page.

The table has five columns. The first four columns correspond to the information in the record: the recorded date and time, event type, event description, and an optional comment. The fifth column has two functional links: an "Edit" link that evokes and populates the editing panel (more details later), and a "Delete" link that deletes the record.

Color coding

To give the user an idea on how she is doing at a quick glance, the record table's description column is color coded. For food intake and exercise, the color code reflects the quantity color code used when the record is logged, whereas glucose measurement's color code is calculated based on a pre-configured range. Though not implemented in this iteration, the idea behind the glucose range configuration is to give users the ability to customize the system for their targeted ranges. Furthermore, it allows for incremental goals: a user can start at a bigger range and slowly reduce it while she gets better at controlling her condition. Once the configured range has been changed, existing data is displayed with the new color code, therefore fully utilizing existing knowledge.

Pattern discover aids

Some basic features are built into the personal record table to assist personal rule discovery. Specifically, all columns in the personal record table (except the last one with functional links) are sortable by clicking on the header (Figure 2). An icon located at the right end within the header indicates the sorting operations available: a double triangle—one pointing upward and one pointing downward—means the header is currently not sorted, but available for sorting; a solid triangle means the column is currently sorted (pointing upward means sorted in ascending order; pointing downward means sorted in descending order). When the page is loaded for the first time, the records are ordered by "Entry date & time" from newest to oldest. Sorting on the Description column is a little more complicated as this column has free text as well as a quantity (implied by the color code). Clicking on its header sorts on the description text, but a user can extend the filter panel to select "sort by quantity" (Figure 6). With this checkbox checked, clicking on the column header sorts the records based on their color codes instead of the description.

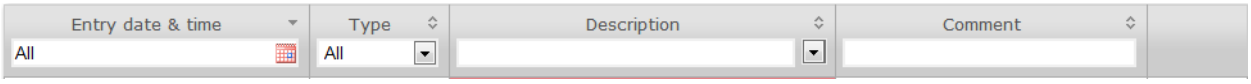


Figure 2 Sorting

Different filters are implemented based on the different type of information in each column. "Entry date & time" column shows the time of the recorded event. Given that users may be most interested in records from the recent past, the filter provides two shortcut options, "last seven days" and "last thirty days", as well as a date range picker to select a custom date range (Figure 3). HealthWatch records have one of the three types: meal, exercise, or glucose. Therefore, the filters for "Type" column are implemented as a dropdown list with these three options plus an "All" option. "Description" and "Comment" have free text data. These columns can be filtered in real-time based on user input (Figure 5). In additional to a free text filter, the "Description" column also has color code filters that allow a user to pick only information coded in one or more particular colors.

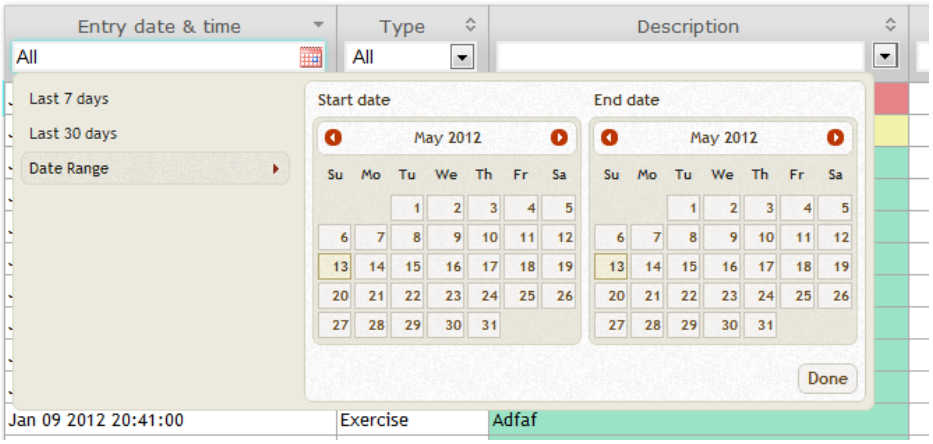


Figure 3 Entry date & time filters

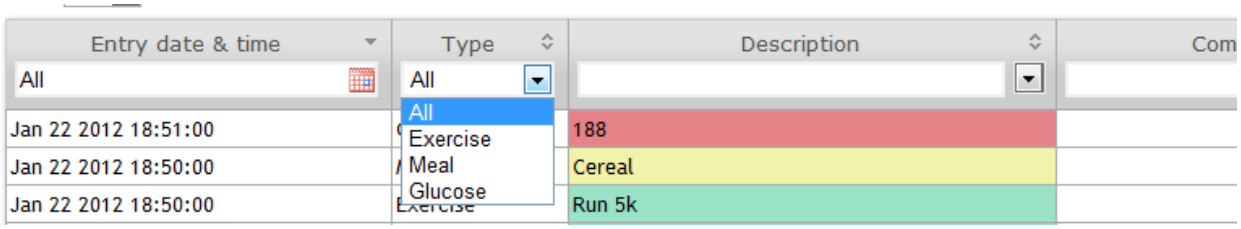


Figure 4 Type filters

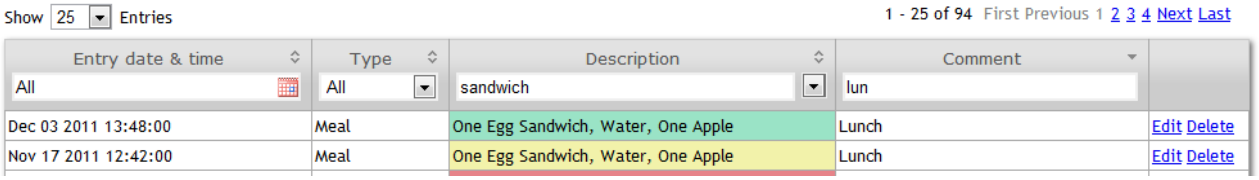


Figure 5 Description/Comment free text filters

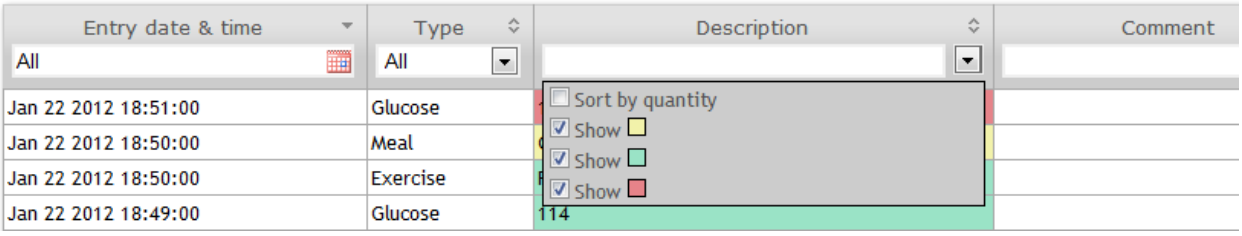


Figure 6 Description additional filters

Record editing

The record editing panel occupies the lower part of the page. By default, the panel is used to add new records. When a user clicks on the "Edit" link for a specific record in the personal record table, the panel will switch to its editing mode: the header will be updated to "Edit" and the fields are populated with the existing record's information (Figure 7).

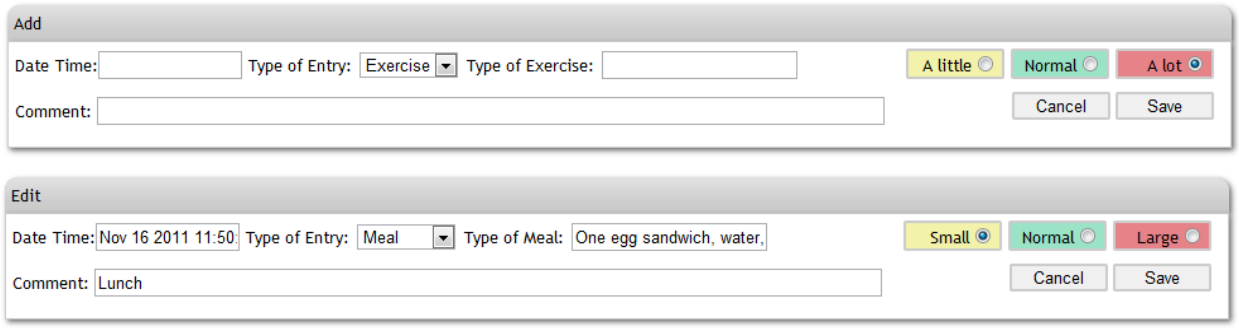


Figure 7 Record editing panel

The "Date Time" field in the editing panel employs a date and time picker. Users can pick a specific date and time or use the "Now" button to quickly select the current date and time (Figure 8). Type of entry is a dropdown list with the options "Exercise", "Meal", and "Glucose". Based on the selected type, the description field and color coded quantity buttons are updated automatically (Figure 9). The wording of the color coded quantity buttons for exercise and meal records are slightly different (a little, normal, a lot vs. small, normal, large). In general, they are designed to be vague, and it is up to the user to assign specific meanings. When switching to a new type, the default is the green "Normal" code.

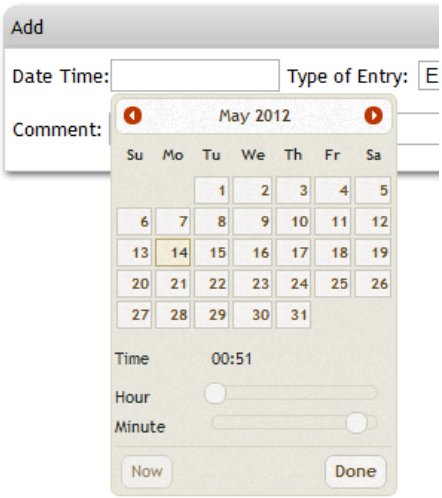
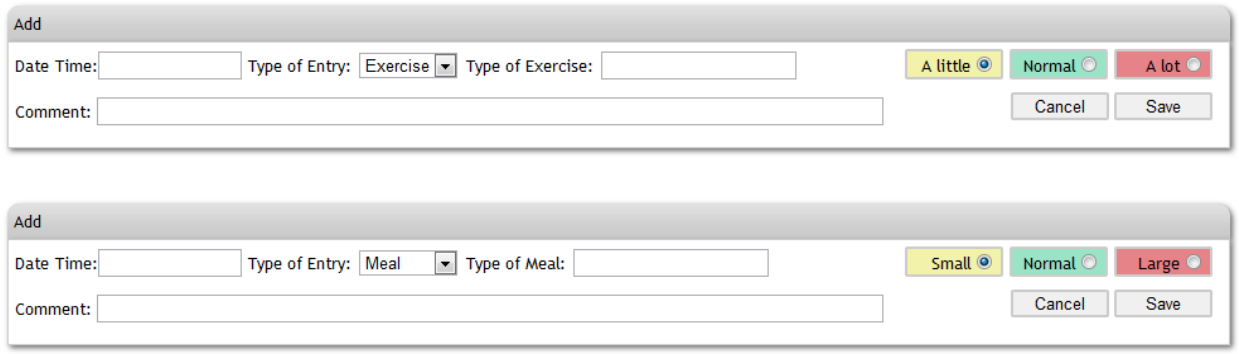


Figure 8 Date Time picker



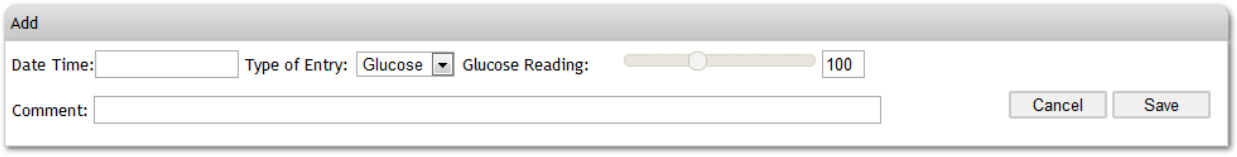


Figure 9 Type of Entry

Existing entry description prompt

As the main purpose of the system is to help discover associations between exercise or food intake and glucose measurements, it is important for a user to use the same term consistently. HealthWatch helps this by actively matching user input with existing records. When a user types the description for a new exercise or meal entry, the system will (after entering at least three characters) bring up a list of existing entries by this user that contain the text completed so far. For food descriptions, the list also incorporates food items published by USDA Nutrient Database, which has over 8000 different items. This list of suggested entries is often long, even after filtering on the user's current input. Since user past entries are more likely to be reused than the USDA items, they are listed first (Figure 10).

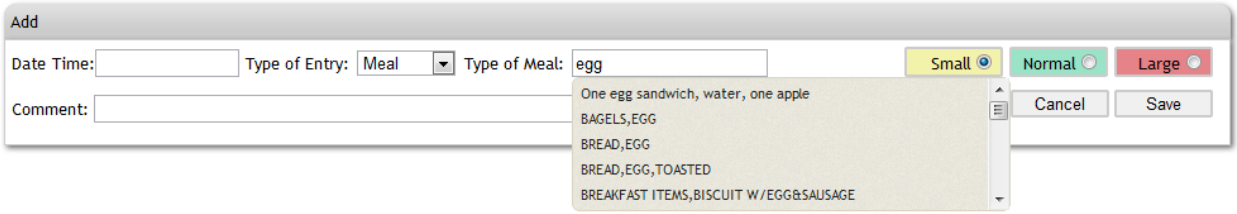


Figure 10 Prompt from exisiting records

Hide/show record editing panel

When a user sets the table to display more records, the table may push the record editing panel out of view. This could leave the user confused if she does not notice the browser's vertical scrolling bar. To avoid this situation, a client side script allows the editing panel to flow over the table if the table is longer than the viewable area (Figure 11). A light green background distinguishes the editing panel from the table itself. If an unobstructed view of the personal record table is desired, the user can hide the editing panel by clicking on "Hide Add/Edit Panel". This minimizes the panel and creates a small link in the lower right corner that can recover the panel with a click. When the user clicks on "Edit" for any existing record, this also recovers the hidden panel.

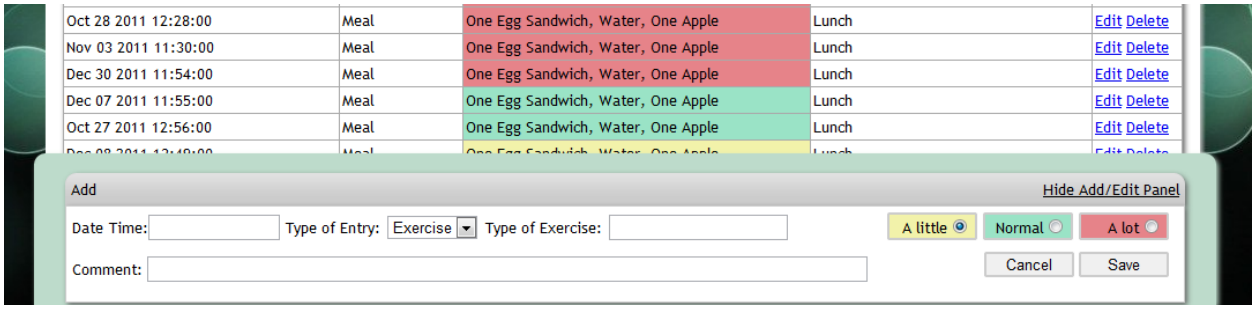


Figure 11 Panel flows over table

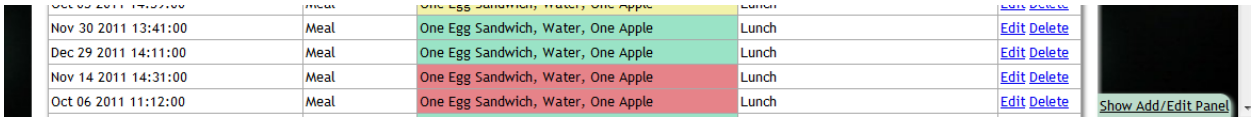


Figure 12 Panel minimized

Performance

HealthWatch relies on client-side scripting for its responsive interaction. When a page is loaded for the first time, the web application retrieves all records for the current user from the database. The page is then built by a client script based on these data. Changes (editing or adding records) are persisted back to the database. All other operations, such as sorting and filtering, are performed on the client side. A huge dataset can potentially slow down the operations. In order to assess the performance, HealthWatch was tested with over 5,000 records on the page, and performed well. If a real user logs ten entries per day, 5,000 records are equivalent to more than a year's records, which is sufficient for the user to establish personal rules.

Evaluation

We conducted a user evaluation on this iteration of HealthWatch to get some early feedback on the design. The evaluation was incorporated into an undergraduate class assignment. Students used the system for ten days. As it is not convenient for healthy students to measure glucose level every day, we modified HealthWatch to take pulse readings instead. Students were asked to record their meals, exercises, and pulse readings (which should be measured right after a meal or exercise). At the end of the ten-day period, students completed a survey with various quantitative and open ended questions (appendix 1-15).

73 students participated in the evaluation. The evaluation resulted in a total of 4318 entries, with a daily average of 2.6 meal entries, 1.1 exercise entries, and 2.2 pulse reading entries per user. We removed records that were not suitable for further analysis. Specifically, 115 records were deleted by the users themselves, and 918 records were entered two days after the event (the creation timestamp of the database record is 48 hours later than the date and time specified for the record). Even though it is possible that the participant honestly reported the event, we felt it would be hard to recall the exact details of the event more than two days later. We also noticed that some records were entered earlier than the time noted in the events. We accepted such records if they were up to one hour early, to allow for users to pick an early hour out of convenience (for example 5pm rather than 5:35pm). In the case of exercise, we extended the tolerated difference to two hours, as users might have very specific exercise routines and therefore already know what would happen before starting the exercise. Using these criteria, we further removed 8 exercise records, 22 pulse reading records, and 37 meal records. Finally, we flagged users who entered too many invalid records (i.e. more than 50% of their records are entered too early or too late) and removed all their other records as well. This cleanup process led to the removal of 1296 records; 3022 records remain for further analysis.

Analysis

System Usability Scale (SUS)

The survey that participants answered includes the 10-item System Usability Scale (SUS). SUS includes ten questions measured on a 5-point Likert scale. On average, HealthWatch scores 71, which compares well with other studies (Figure 13). The full answers for SUS are attached in appendix 1.

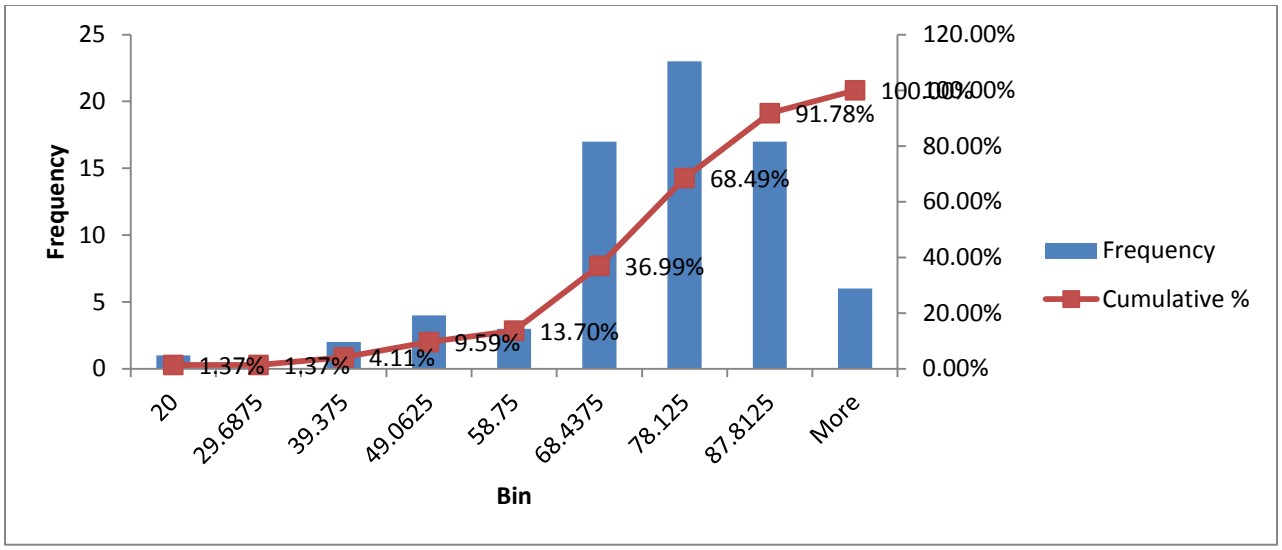


Figure 13 HealthWatch SUS score

Vague terms

Users use vague quantitative terms for exercise and meal entries (pulse reading entry quantity is calculated according to a pre-configured range). Table 1 shows the frequency of each term is used. In summary, most users use the default setting, "Normal", for either entry type. Between "Less" and "More", more users use "More" for exercise records and more users use "Less" for meal records. This corresponds to the expectation that users would conform to the social desirability bias.

Participants also answered the question "I don't know when to choose the normal, small (a little), large (a lot) options in the system" in Likert scale. The result shows mixed feelings towards the vague terms. 43.84% chose either "strongly disagree" or "disagree", 42.47% chose "strongly agree" or "agree", with the rest choosing "neutral". This mixed feedback seems rooted in a difference in understanding of the purpose of the system. Many had the impression that it was a system for fitness tracking, as they often made references to calorie calculation. Many also had the expectation that a third party would review the records at some point. It is no surprise that these participants would feel the language should remain objective and standardized. Recording pulse instead of glucose might also contribute to the confusion, as the latter would give a better idea of what context HealthWatch is designed for, whereas the former has no obvious implications. However, there are also many participants who argued that it was a good thing to use vague language. They felt that this would encourage the user to assign subjective but meaningful personal interpretations, and that non-judgmental language fosters positive reinforcement.

	Less	Normal	More	Total
Exercise	41	155	57	253
Meal	344	1164	180	1688
Total	385	1319	237	1941
	Less	Normal	More	Total
Exercise	16.21%	61.26%	22.53%	100.00%
Meal	20.38%	68.96%	10.66%	100.00%
Total	19.84%	67.95%	12.21%	100.00%

Table 1 Vague quantitative terms

Comment

New records have an optional comment field. In our evaluation, there were a total of 779 records accompanied by comments. This accounts for about 25% of all records. The distribution of comments among different type of entries is shown in Table 2. Often, users give more specific information regarding to the event in its comment field. Some are used as designed, i.e. to provide context information for easy recall. However, some participants put generic

terms in the record description field, and then used the comment field to add information that distinguishes one from another. This might be inconvenient should the user try to identify patterns later, as two seemingly identical records could be very different (for example, "breakfast" with very different food components). The usability of the comment field can be improved by making clear to users that only genuinely similar records should share the same description, and that the information in comment field is less effective for rule discovery. One possible implementation is to auto-populate both the description and comment field if the user picks the prompt from an existing record. This would implicitly remind users that when they select the same description, HealthWatch thinks these records are very similar or identical.

Type	Pulse	Exercise	Meal	Total
Entries with comment	201	96	482	779
Total Entry	1081	253	1688	3022
Percentage	18.59%	37.94%	28.55%	25.78%

Table 2 Comment usage

Free text entry
More than 78% of the participants answered either "agree" or "strongly agree" to the question "recording my food intake and exercises using free text was easy". Some reported via an open ended question that it was difficult to find the exact food consumed from the USDA list. Being able to just use free text is much more convenient.

Color coding
The use of color coding seems to be well received. One participant commented that the meanings associated with green, yellow, and red are standardized. Therefore, it is easy to understand what they imply. However, there are some questions when applying them on exercise records. For a healthy person, more exercises are often considered better. Therefore, some are confused why the red color is associated with more exercises. Type-2 diabetes is often linked to an inactive lifestyle. Nonetheless, a patient's glucose level can react differently when there is too much exercise or the exercise is too intense. Therefore, we believe that it makes sense to use a red color code in exercise records as well. This original purpose of the system, however, is not clear after we changed the measurement from glucose to pulse for the evaluation.

Self rules
Participants were also asked to come up personal rules based on the records. Even though any change in diet or exercise would unlikely to influence pulse rate in such a short period of time, most still came up with something, such as the short term impact on pulse rate after fatty food intake. About half of the participants reported details on how they formed hypothesis and tried to verify them subsequently. They often have confidence in the rules discovered even when the information on which these rules are based lacks exact details (e.g., food nutrition facts).

Participants described various processes to explore personal rules. The most valuable element is the participant's own reflection. This implies that the design goal of a personal rule discovery system should focus on providing necessary information and presenting it in an appropriate format. This is in contrast to a design in which the system presents rules to users directly.

Motivation
One big challenge frequently mentioned by participants is that daily recording is a tedious process. Not surprisingly, most participants started with eagerness but lost interest over time. The HealthWatch prototype aims to test the concept of personal rule discovery. Persuasive techniques were not included in this iteration. However, participants' feedback emphasizes the importance of nurturing motivation. Possible improvements include building reminder features, creating offline versions targeting mobile devices, and providing more feedback.

Future work
Personal informatics is receiving more and more attention. However, systems that align to standards still dominate the personal management system domain. This situation is reflected in HealthWatch's evaluation. However, the user feedback for HealthWatch indicates that a system that does not rely on standardized processes can still successfully provide assistance to its users. This is an area where much more can be done.

The future work for HealthWatch can be classified under three themes: improving the usability, developing information sense-making, and creating a ubiquitous system. HealthWatch starts with a plain interface, which we deliberately kept simple. The evaluation informs us that a calendar layout might suit better for the historical records presentation. The editing panel can also be improved by adding glucose reading as an optional field when recording a meal or exercise. HealthWatch can also help make sense of the information accumulated. The user's reflection is the key factor in finding patterns; the relationship between meal, exercise and glucose readings can be calculated and presented to users to prompt informed decisions. Information derived from records can also contribute to more effective feedback and to design short term incentives. Finally, it is clear that the most suitable form for HealthWatch is a cross-platform system including desktop and mobile devices. More should be done to improve the accessibility via mobile devices.

Conclusion

This technical report describes the details of HealthWatch, a self-management health web system aimed at helping type-2 diabetes patients to discover their personal rules concerning food intake, exercise, and glucose levels. A usability evaluation was conducted with 73 participants. The analysis covers various elements of the system such as the use of vague language, color coding, and free text entries. In the future, more work should be done to improve the usability of HealthWatch, to develop more sophisticated feedback strategies, and to support more platforms.

Appendix

1. SUS survey
Question 1: I think that I would like to use this system frequently
Question 2: I found the system unnecessarily complex
Question 3: I thought the system was easy to use
Question 4: I think that I would need the support of a technical person to be able to use this system
Question 5: I found the various functions in this system were well integrated
Question 6: I thought there was too much inconsistency in this system
Question 7: I would imagine that most people would learn to use this system very quickly
Question 8: I found the system very cumbersome to use
Question 9: I felt very confident using the system
Question 10: I needed to learn a lot of things before I could get going with this system

User id	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	SUS
3	4	1	5	1	5	1	5	2	5	2	92.5
4	1	3	4	1	3	4	4	1	4	1	65
5	2	1	5	1	4	2	4	2	5	2	80
6	3	1	5	2	3	1	5	1	5	1	87.5
7	2	2	4	2	4	2	4	3	3	2	65
8	2	4	3	2	3	4	4	4	3	2	47.5
9	4	1	5	1	5	1	4	1	5	1	95
10	2	2	4	2	4	2	4	2	4	2	70
11	2	3	4	1	3	2	4	1	4	3	67.5
12	4	1	5	1	5	1	4	3	4	3	82.5
13	4	2	4	5	4	1	5	2	4	1	75
14	4	1	5	1	4	1	5	1	4	1	92.5
15	3	3	4	1	4	3	4	2	4	1	72.5
16	3	2	5	1	1	4	4	5	5	2	60
17	2	2	4	1	3	2	4	4	3	2	62.5
18	2	1	5	1	4	1	5	4	5	1	82.5
19	2	4	4	1	3	1	5	1	4	1	75
20	1	2	4	1	2	4	4	3	3	2	55

21	2	2	4	4	2	2	3	4	3	3	47.5
22	3	2	4	1	3	2	4	4	4	1	70
23	2	2	3	1	4	2	4	4	4	1	67.5
24	4	2	4	2	2	2	4	3	3	2	65
25	3	2	5	1	3	2	4	2	4	2	75
26	2	2	4	1	3	2	4	3	4	1	70
27	3	2	4	1	4	2	5	2	4	1	80
28	4	2	4	2	3	2	4	2	4	4	67.5
29	3	2	4	2	4	2	4	2	4	2	72.5
31	4	2	4	1	4	2	4	1	5	1	85
32	2	4	3	3	3	4	4	4	2	3	40
33	2	4	1	2	3	1	5	0	4	0	70
34	2	2	4	2	3	2	5	3	5	1	72.5
35	3	3	4	2	4	2	4	3	4	2	67.5
37	4	1	5	1	5	1	5	1	5	1	97.5
38	1	5	2	3	2	4	2	4	1	4	20
39	4	1	5	1	5	2	5	2	5	2	90
40	4	2	4	1	4	2	5	2	4	2	80
41	3	2	4	1	4	2	4	3	4	3	70
42	2	1	5	1	4	2	4	3	5	1	80
43	2	2	4	2	3	2	4	4	3	2	60
44	3	2	4	2	4	2	4	2	4	2	72.5
45	3	2	4	1	3	2	5	3	4	1	75
46	2	4	4	1	3	2	4	4	3	1	60
47	2	4	2	3	2	3	0	3	3	2	35
48	1	4	2	3	4	2	2	5	2	2	37.5
49	4	3	5	1	4	1	5	1	5	2	87.5
50	4	1	5	2	3	1	4	1	5	1	87.5
51	3	2	4	1	4	3	5	4	5	1	75
52	2	4	2	1	2	3	4	3	4	2	52.5
53	3	2	4	1	4	3	5	1	4	1	80
55	4	1	5	1	4	1	5	2	4	2	87.5
56	3	3	4	2	3	3	4	2	4	2	65
57	2	3	4	1	4	3	4	3	4	4	60
59	1	2	3	1	3	1	4	2	3	1	67.5
60	3	1	5	1	4	1	5	2	4	1	87.5
61	2	2	4	1	3	2	5	1	4	1	77.5
63	3	2	4	2	3	3	4	3	3	2	62.5
64	4	2	5	1	4	3	4	2	5	2	80
65	2	3	4	2	4	2	3	4	3	2	57.5
66	1	2	5	1	3	3	5	1	3	2	70

67	3	1	5	1	4	2	5	1	3	1	85
69	3	1	5	1	5	1	5	1	5	1	95
71	3	2	4	2	4	2	4	2	4	2	72.5
72	4	1	5	1	4	2	5	3	5	1	87.5
73	4	2	5	1	3	3	4	3	4	1	75
74	3	2	5	1	4	4	5	1	4	1	80
75	3	2	5	1	3	3	4	2	3	1	72.5
76	3	1	5	1	4	2	4	4	4	1	77.5
77	1	4	3	2	2	3	4	4	4	3	45
78	1	3	4	1	3	3	4	3	5	1	65
79	2	1	5	1	3	4	5	3	5	1	75
80	4	3	4	2	3	2	5	3	4	2	70
81	4	2	4	2	4	2	4	3	4	3	70
82	3	3	4	1	3	4	4	3	3	2	60
											70.99315068

2. Other survey questions in Likert scale

Question	Total reply	Not answered	Strongly disagree	disagree	neutral	agree	Strongly agree
The controls such as button, textbox, do not work as I expected	73	1	22	27	8	12	3
I am not sure what is going on after I click on a button or select an entry from a list	73	0	31	32	3	7	0
Recording my food intake and exercises using free text was easy	73	0	4	6	6	38	19
I prefer to select from a customized list of meals and exercises rather than using free text, even if the initial setup of personalized lists take more time	73	0	28	24	9	9	3
I don't know when to choose the normal, small (a lot), large (a lot) options in the system	73	0	11	21	10	21	10

3. Survey open-end question: Do you understand the meanings of the color menu (red, yellow, green)? What are they?

Yes I do understand the meaning of the colors menu. A red highlight means that there was a lot of activity, green means normal activity, and yellow means little activity depending on whether it is food or exercise.
I think the meaning of the yellow color is to indicate pulse whereas green and red indicate the quantity of something whether it be exercise or a meal. If I did not analyze my inputs and make that connection, I wouldn't have been able to know because it doesn't indicate on the web page otherwise.
The color menu represents the intensity of the action. Red represents a high pulse, a large portioned meal, or high intensity exercise. It is the extreme end of the spectrum. The green represents the norm. Therefore, a normal pulse rate, an average sized meal, or exercise that does not exceed one's comfort zone. Yellow is the low end of the spectrum in terms of intensity, thus representing an extremely low pulse, very small sized meal, and light exercise that may be less strenuous than normal activities.
The color corresponded with the size of the meal or the intensity of the exercise. Red was a lot, yellow was a little, and green was normal.
Yes. Yellow means a little, green means normal, and red means alot/high.
Red: In comparison to the normal amount of exercise or amount of food, it is a lot. Or high pulse. Green: In comparison to the normal amount of exercise or amount of food, it is the normal amount. Or normal pulse. Yellow: In comparison to the normal amount of exercise or amount of food, it is a little. Or low pulse.
Yes these colors marked when something was large, normal, or small. Red indicated large (or out of range for pulse) green indicated normal (in range) and yellow indicated small (or below normal range for pulse).

Yes, the colors are fairly simple to understand. Red means alot, or more than normal, green means normal proportions, and yellow means a little, or less than what is normally eaten/exercised.
I assumed for the most part that they were in regards to the amount of food we ate, the amount of exercise we did, and the extremity of our pulse. Red meant that had a high pulse rate, green meant that we ate an average sized meal, and yellow meant that we exercised only moderately (for example).
Yes. Red: a lot, Green: normal, Yellow: a little.
Yes I do understand the meanings of the color menu. Red stands for a lot, yellow stands for a little, and green stands for normal. This helps to compare how much you ate and exercised in respect to your pulse rate. I noticed that eating and exercising a lot did increase my pulse rate. I also noticed that my pulse rate was lower in the morning and increased throughout the day.
Red = a lot yellow = a little green = normal
Red, yellow, and green were the color scheme of normal, small, and large.
Red means a lot, green means normal, and yellow means a little.
Yes, the color indications meant the size of the meal eaten. Red mean "a lot," green meant "normal" and yellow was "very little."
I feel as though I understand the meanings of the color menu to some extent. Yellow means that my pulse was too low. It also means that I did not eat much of the meal I recorded. In other words, it was a small portion. Green means that my pulse was at a normal level. It also means that I had a normal amount of the meal recorded. Red means that I either had a pulse that was too high or a meal that was a large portion. However, because there was not a criterion for what constitutes as a small portion or a large portion, I did my best in deciding which portion to fill out.
Yes I clearly understood the meaning of the color menu (red, yellow, and green). The reason why I understood it is because near every color there is a description for each color. On the yellow color theres a text that states “a little”. On the green color box theres a text that states “normal”. And finally, on the red color box theres a text that states “a lot”. The way the color boxes were made allowed it to be easy to use in describing the level of actions of each entry “meal, exercise, and pulse”.
Yes, i understand the color menu. Yellow means small portion food or below average pulse. Green means normal portions of food or average pulse. Red means large portion of food or high pulse.
Yes I understand the color menu. Green corresponds to what is normal or average, yellow indicates a deficiency or low abnormality, and red indicates a excessive or high abnormality.
A lot, a little, and normal... from my understanding when we log in an entry we pick a category of whether or not we do this activity a lot, a little, or normally.
I do understand the meanings of the color menu. It means quantity or amount. Red= A lot. Yellow= A little. Green= normal.
No, I have no idea what they mean.
Yes, I do. The color menu helped a lot with quickly looking over which ones I should keep track of because I might over eat or my blood pressure might be too low or too high.
yes. red = a lot; yellow = a little; green = normal
Yes. Each color represents a different amount of portion serving.
Yes I understood the meanings of the color menu. The red a lot, yellow was small, and green was normal.
The color menu referred to the amount of activity that was done. A little, normal, a lot.
Yes I understood the meanings of the color menu, it wanted to know the proportion of the meal or exercise, also for pulse it would indicate if it was within normal range or not. Yellow meant “A little”, Red meant “A lot” and Green meant “Normal”.
Yes. Red= a lot, Yellow= a little, Green= normal
Yes I understand the meaning of the color menu. The red means that you either had a heavy meal where what you are eating has high calorie count and a bigger portion than what you would usually eat. The red can also mean that your pulse is relatively high. Another meaning for the red is your exercise regiment is relatively high. The green color means that your meal, exercise regiment, and pulse are the regular standard and not high or low. The yellow color means that your exercise, pulse, and meal are relatively small or low.
I think it represents if it was a large or small meal..or little to a lot of exercise.
Yes. Red means bad or alot, Yellow means a substantial amount or a cautionary amount, and green means ok
The colors are trying to suggest what healthy levels are for eating, exercising, and pulse rates. All of these activities should be done in moderation and too high or too low for any of them could potentially result in health problems, especially for people with chronic illnesses like diabetes patients. As a relatively healthy college student trying out this system however, these colors were not quite as meaningful, but it did help me to see certain patterns in my eating habits and how they affect my pulse rate.
yes the color menu represent either small, medium or large amount of either exercise or food intake.
I understand what the color menu means. Red means "a lot," yellow means "a little," and green means "normal."
No I never understood what those meant, I assumed that red meant exercise but that’s all.
Green means good like having normal exercise and a normal meal. Yellow means not eating or exercising a lot. Red means overeating or over exercising.
Yes i do understand the differences between the red, yellow, and green color menus. The red indicated if there was a lot of food eaten in the

meal, or if the exercise was hefty, and if the pulse rate was too high. the green indicates whether the meal was normal, or if the exercise was normal, and if the pulse rate was normal. The yellow color menu indicates if the meal was small, or the exercise did not consist of much movement or physical moving and for pulse rate it showed if the pulse rate was too little.
Red: ate more than my regular amount, green: my normal amount of food intake for that specific time, and yellow: ate less than normal
Yes. Yellow- small/a little Green- normal Red- large/a lot The colors were the same for meals, exercise, and pulse which made it slightly confusing. Different colors should be used for the different categories to make it easier to read when going back to view the log.
Red is a lot, yellow is low, and green is normal.
Yes, I understand the meanings of the color menu. - Red means a lot, in terms of food intake or exercise. Red on a pulse measurement means an individual's pulse is very high. For example, my pulse was 98 after I jogged. The system showed up as red because the pulse reading was higher than ninety. - Green is moderation. It is in between a lot and a little. - Yellow means a small amount or a little. I considered a snack, such as a banana, to be "a little."
Yes. The red color meant that the exercise/meal data you entered was "a lot", the green meant a "normal" amount, and the yellow meant "a little amount".
The color menu is an indicator of different amounts and ranges for certain activities. For exercise, yellow indicates a little, or less intense exercise, green indicates a normal amount, and red is intense or vigorous exercise. For food, the different colors indicate the amount of food consumed, with yellow being a small snack/meal, green being a moderate portion, and red being a large meal. Last, for pulse, the colors determine the rapidity of one's heart rate.
red was a lot; green was normal; yellow was a little
Yes, the color menu is easy to understand. They stand for quantity, for example red is a lot, green is normal, and yellow is a little. It is used to measure how much exercise you think you have done, what your pulse range is, or how much food you have eaten.
a little, normal or a lot intake
Yes they showed you the AMOUNT of something you did. But thinking about it now I can't remember which one was for which amount. This system could be greatly improved as the selection of these amounts was very ambiguous. Also the the fact that these colors were the same across all three categories (meal, exercise, pulse) was confusing when looking at the historical list.
I do understand the meanings of the color menu. The red meant a lot, the yellow meant a little, and the green meant normal.
red= large yellow= little green= normal
Yes, I do understand the meanings of the color menu. The yellow represents a little food, the green represents medium amount of food, and the red represents a larger amount of food.
Yes , red means too much , green normal amount of food taken that I used to have normally , and yellow less than the normal amount.
Yes. Red is for large or heavy dose/frequency. Yellow means light. And Green means medium or moderate or normal
Yes, they are the level of intensity I work out or the amount of food I intake. The user judges their actions into three criteria listed above when they input their data into the system.
Yes, different levels portion size and whats normal and not normal readings (pulse)
I believe that green is good and preferred. Red is too much or too high. Yellow could be increased
Yellow refers to a light/small workout or meal, green determines a normal or average workout or meal, and red refers to a heavy or big workout or meal.
For meals: Yellow is for small meal Green is Normal meal Red is large meal For exercise: Yellow is for a little exercise Green is normal exercise Red is a lot exercise
To my understanding, I assumed that it meant the portion of my food and amount of exercise. Yellow was a little, green was normal, and red was a lot.
Yes, red symbolizes greater than normal, yellow symbolizes less than normal and green symbolizes normal. These three color menus are all included for the three categories of pulse, meals and exercise.
Yes, the colors basically mean how much of it did you eat, workout or how low/high your pulse was. Green means a little, yellow was moderate and red means high or a lot.
Yes, it indicates how much of the entry you did, either a little, normal, or a lot.
Yes. They indicated quantities. Yellow means low/small amount. Green means average/normal, red means high/large amount.
The color menu makes somewhat sense. This menu indicates the "amount" of meal or exercise done.
The colors represented the meal sizes: yellow= a little, green= normal, red= a lot. Additionally, the colors signified the pulse level: yellow= was too low or below average, green= normal target range, and red= too high or potentially dangerous
Yes red means Alot, yellow means a little, and green means normal
I do understand the meanings of the color. Red means a large meal, yellow means a small meal, and green means a medium meal. Where it said "a little," "normal," and "a lot" they were colored in the specified color. Also, whichever portion you had selected, the entry on your list would be that color. So if I had ate a meal that was considered "a lot" my entry on the list would be the color red.
Yes I understand the meaning of the color menu (red, yellow, and green). Those are pretty standard colors that I feel like pretty much everyone understands. Red is too much, yellow is in the middle, and green is good
Red: A lot for exercise / Large for food Green: Normal for both Yellow: A little for exercise / Small for food Color menu tells you how much of a certain food or activity you did.

I understand that yellow means "a little", green means "normal", and red means "a lot". Based on the color coding, I can see that it allows easy viewing and identification. Because of the colors, it will also allow for the individual to be more aware of their eating habits.
Red- meant large portion, high exercise, high pulse.
I know that red means large or the pulse is too high. Yellow is normal and green is also normal.
I'm not sure. I think red is for a large meal, green for a normal meal, and yellow for a small meal. At first though, I was the most confused about the pulse colors. Whenever I began to enter my pulse, the system always marked it has red - which really scared me! But then I assumed that it meant my pulse was too high, so I tried to take steps to lower it. After that, my pulse was always automatically marked as green.
Yes, the categorical quantity of the entries we are putting in, such as pulse, food or exercise.
Yes, how big my meal is. Yellow-a little, Green-Normal, Red-alot
Yes, the red color means that either the meal was heavy, the pulse was high, or the exercise was very tough/rigorous. Green means that the meal was light (such as a snack), the pulse was low, or the exercise was moderate to light. Yellow means in-between the two colors, so a moderate intake/pulse/activity.
Yes. Red: heavy meal Yellow: light meal Green: average meal
Red, yellow, green correspond to the amount of activity in the event you had input. For example, RED in a MEAL would mean you ate a lot during that meal.
Yellow means a smaller amounts of lower values Green means average amounts of average values Red means larger amounts of higher values
Yes, the represent "A Little" (yellow), "Normal" (Green), and "A Lot" (Red).
I do believe I get the meaning of the different colors in the menu as they seem to be somewhat self-explanatory. After looking at the menu's the red menu colors either means "too much", "a lot" when talking about exercise, and "Large" when talking about meal size. Also for pulse "red" means a relatively "high" pulse. The yellow color indicates a "small" meals size, a "low" pulse, and when speaking about exercise, it means a "little" exercise. The green is the color indicating a "normal" heart rate, a "normal" sized meal, and a "normal" amount of exercise. Post-experiment the user can use these indicators to analyze what meals and exercise correlate to how low or high the users pulse indicated in the data.
Yes. Red: a lot, green: normal, yellow: a little.
I'll admit that I initially wondered what the entries were, though I later realized (only after some thinking) that they corresponded to the three options {a little, normal, a lot}. This wasn't that obvious and it is also of questionable utility considering that they really only apply to two of the three entry types (exercise and meals, not pulse). This is another reason for coupling pulse with one of the other two entries as I suggested above.

4. Survey open-end question: Do the vague descriptions "normal, too much, too little" make sense to you? Or do you have difficulties using them? What are these difficulties?

They did make sense, but it was just depending on my perspective. For me, eating a small bag of chips was a too little portion. Then a regular $1 sized bag chips is a normal portion, and a $3 bag of chips is a large amount. I did not have difficulties using them. I actually did have difficulty comparing between normal and a lot of exercise at work. I do a lot of walking at work, so I just put I walked a lot.
No, they did not make sense to me because they were very vague terms. I had difficulty using them because I wasn't sure what exactly constitutes a "normal" or "large" and how that would be applied to exercise. The terms are way too vague to be considered even helpful so that feature wasn't even necessary at all.
I feel as though I have a pretty good idea of what is Ônormal, too much, or too little' for myself, but since they are very subjective it might be difficult to get accurate measures from every person using the system. There were definitely times when I was unsure where the line was between normal and too much, as oftentimes with meals I would rationalize to myself that the portion of meal was normal.
Again, I would have more confidence in the system if it specified the units of measurement instead of using the vague categorical words.
Yes they make sense, I applied to these descriptions to what I normally do/eat but I understand that what I refer to normal may not be normal for others, so there is that issue.
It was difficult determining what the baseline was to compare for "normal, too much, or too little." Is this based on what is healthy for my BMI or is this compared to my normal intake? It would be more useful if I knew what was healthy for me in comparison to a standard so that I can adjust for exercise or food intake accordingly.
I think this is what the greatest difficulties of the system were. They were not defined well and therefore I did not know when to make such distinctions of what was too much to too little. These need to be defined better explaining what would be a meal that is too much or a meal that is too little. It would be based of BMI of the user instead of making a general assumption about all users.
the descriptions aren't too vague, except maybe when classifying the amount of exercise different values should be used such as time. Normal exercise for me may be too little for someone who exercises frequently, so this can cause possible difficulties for testing larger populations. but overall, it was pretty easy classifying the size of meals with small/normal/large.
I sometimes had difficulty distinguishing what was or wasn't normal, mostly in terms of my food proportions, but for the most part I could tell the difference.
The categories made sense to me. I used my own measurements of a normal portion, overeating being a lot and under eating being a little.
At first they confused me, but I realized that they were applying to the meal portion and exercise intensity. I still found this to be quite subjective since it is different for every person but I ended up setting a standard for myself and realized what "normal," "too little," and "too much" mean to me in relation to my exercise and eating habits.

Simple to understand.
The descriptions were too vague, nothing is "too much" for me.
It makes sense to me, it's just hard to distinguish sometimes with food because some people might think their size portion of food is normal when actually it's either too much or too little.
No, there were no vague descriptions and they made complete sense to me.
The vague descriptions make a little bit of sense to me. I understand that pulse should be in the normal range, because too much would be too high, and too little would be too low. On the other hand, in terms of a meal, I had trouble deciding how much I ate. One person could interpret a normal amount of food differently from another person. It depends on the person. Also, because I did not exercise in these 10 days, I was not able to use the system in terms of exercise, so I don't know what constitutes as normal, too much, or too little exercise.
The vague descriptions normal, a little, and a lot made sense to me. It is easy to understand what the system is asking. For each entry one can describe the level of action by clicking normal, a little, or a lot. For example if the entry was a meal, the level that would be chosen would describe the size of meal the individual ate. If the entry was exercise, the level of description would describe how intense or how much the exercise was. Finally, when the entry was pulse, the system automatically inputs the level of pulse "a little, normal, or a lot" according to the heart rate being enetered. Overall, these descriptions were easy to understand for myself, however I can see why some may get confused because the levels are kind of broad. For example, I can see why someone would have trouble trying to figure out if the food they consumed, or the exercise they have done would be considered a little, normal, or a lot. People have different standards, as one person may believe that 30 mins of exercise is a lot, another may find that 30 mins of exercise is rather little.
I don't think they are too difficult to use. Its only difficult in that it can be vague, so at first i had to assume that this type of meal is either normal, too much, and too little for me.
It is too vague just because again we do not have a relative scale or do not know what these measurements are comparing too.
Yes, they make sense but I have difficulty using them. These general terms will differ in quantity from person to person. Too little to a big man could be the same as too much for a little girl. A more concise measurement might be more helpful.
The "vague" descriptions does make sense to me. There are no difficulties using them. It was simple and easy to understand and use.
I didn't really notice this till later use and decided to continue to ignore it.
It's a little hard to distinguish what is "normal, too much, too little," but I kind of guessed or estimated. Everyone has a different definition of what is overeating or what is under-eating, or even how much we exercise.
They make sense, but they should be more defined. People may have different perceptions of what "normal" is. Some people may think two slices of bread is a "normal" meal, while others may consider that to be "too little"
They do make sense too me.
I feel like these are very vague. The system does not know anything about your personal body size or weight or eating habits so it cannot tell you if a meal is too much or too little for you.
No, the vague descriptions can be replaced with something less vague. The descriptions do not sound professional at all. It irritates me to the point it sometimes confuses me.
Yes the descriptions made sense to me, its clear, did not have any difficulties.
The difficulty in these terms is that the interpretation of each category may differ among the different users.
The descriptions are not difficult for me to understand. I would describe my daily input of meals, exercise, and pulse by the putting the amount of too much or less or the standard that I feel and is not difficult to use.
I don't remember using those descriptions.
No they don't make sense. I don't know how to classify anything as any of these 3. It's impossible because I eat til I'm full, and thats normal, and that's what everyone does. Unless you're on a diet these things don't matter. Moreover, most of the time I don't think people know when they've had too much or too little.
For the most part the descriptions of "normal, too much, too little" do make sense. I do prefer the scale that is currently used on the system of "normal, a lot, a little" because it holds less of a negative connotation. Since these are vague descriptions, sometimes there are cases where a line must be drawn and a decision of which to record is necessary. Labeling things as "too much" or "too little" adds a negative meaning and I would be more inclined to record something as "normal" instead of "too little" or "too much". I did not have any issues using them and found it pretty easy to judge if my meals were normal size or not for me. If I was stuffing myself then I would consider that "a lot," and if I was eating something small where I would still be hungry after then it was "a little." As long as I was being honest with myself it was not hard to decide the size. I knew when I was eating more than I should have or less than I could have.
it makes sense to me. the only reason it might not make sense is if a person doesn't really know what is too much or too little for them.
The vague description do make sense to me. However, sometimes I have difficulty deciding if my meal was too big or too small.
The only thing is that we don't know what the system means when they ask for the amount. To us a portion could be large due to how much we normally eat, but could be normal for the system
These descriptions make perfect sense, because it makes the system very personal with their own judgement. If someone else looked at my record they may think I exercised and ate a lot more or less than I actually did. This vagueness works for a single user, but can cause confusion for other users and requires their best judgement.
The descriptions are a bit vague, but at the same time they make sense. If you think about it too much it becomes difficult to pick one to use when choosing it for a meal or an exercise but if you go with what comes to your mind at first thought when you write what food you ate or what exercise you performed it seems to go perfectly fine. At times for some exercises it was hard to decide whether or not it was too normal

or too much, because some peoples normal exercises can be another persons week long exercise, it depends mostly on the person themselves.
makes sense, each of us are sized differently and we always know what amounts we normally eat.
The descriptions make sense, but I feel that it is not a good way to monitor my activities.
They don't make sense to me so i find it hard to use them. The reason is that I don't know what they are suppose to be for. I personally used it to rate my heart rate.
The descriptions make sense to me. As stated above, "normal, too much, too little" can also be respectively correlated with the colors green, red, and yellow. It depends on how an individual interprets the amount. A snack would be considered as "too little" to me. A sandwich with juice would be "normal" for me. Additionally, a steak dinner with three different side dishes would be "too much."
It did make sense to me but it was extremely unspecific. I honestly feel as if it didn't really help me realize my food intake/ heart rate patterns at all. The only difficulty would be about specificity.
The descriptions weren't too difficult to figure out, and I did not have difficulties using it.
the descriptions make sense to me and are not difficult to use
They do make sense to me because I can use my judgment to decide if I ate a lot or a little. I can compare it to what I normally eat however this can be a problem. Everyone has their own definition of what is a lot or a little. I base what my quantities are by how full I am, if I feel full then I ate a lot. But my "a lot" is different from everyone else's since I am small and skinny. Also another difficulty is that I just guess. Sometimes when I am unsure I just mark normal. Using that scale is very relative.
It somewhat make sense but again I don't know what they really mean. My normal might be a lot for others. How does indicating this actually help? and how do I really measure it? This is my question in mind.
Not it was very difficult and didn't make much sense. It was hard to decide if something was a lot or a little because it is entirely subjective to how much I feel I had, but maybe I am just a small eater and a big meal is really a normal meal for something else or vice versa.
Even though I knew what they meant, the vague descriptions did not make too much sense to me. When it came to pulse, I understood it since I knew what a normal pulse was. However, I found it difficult to use it because what it considered to be a lot of food or a little food may be a normal amount of food for me. The difficulties were considering who's opinions we were considering when choosing one of the vague descriptions.
No, I just thought it would depend on my definition of what normal or too much would be.
Yes, the vague descriptions do make sense to me and I do not have any difficulty using them.
I think it makes sense to me and it is easier than the terms of nutrition that not all the people are familiar with .
Makes sense. But different people should be have different notions, possibly create discrepancy.
I understand the intention of the descriptions listed above, but I have difficulty using these terms. The level of intensity I feel are not consistent. What I may consider a normal meal tonight will be too much tomorrow night due to factors such as drinking too much water before the meal or feeling sick to fully enjoy the meal. Thus the level of satisfaction is not consistent due to so many factors affecting my body each day.
These descriptions are fine.
I have difficulties using them because they are too vague. I don't exactly understand how much is too much or too little.
Yes, the descriptions make sense to me. No, I do not have difficulty using them. In my opinion, there is no real definition for "normal, too much, or too little". It is based on how much your body can handle as an individual. A workout that would be "too much" to me may be determined as too little or normal to someone else.
No they make complete sense and I do not have difficulty using them. Since amounts are subjective to the person, I do believe it is best that they are not further defined and that the user determines based portions/exercise on his/her personal needs/goals.
It was a bit confusing, because I didn't know how to judge what was too much and too little. So majority of the time I stayed normal.
They make sense but it is difficult to use if the user does not know what their “normal” exercise or meal amount is.
To me, it is just my opinion if it is too much or too little. For example, if I eat more than I usually eat, I would say too much. Some difficulties that I could have is how much exercise because I don't know the amount of exercise I am supposed to have regularly.
I wasn't sure how much was too much or too little because maybe something that is normal for me, would be considered too much for another person if this data being used. I didn't like the vague descriptions of those three options. Maybe if you could enter several different things for each day instead of selecting the date over and over again. Perhaps preset areas that you can fill in instead of selecting what you did such as for the pulse, meal, or exercise.
I didn't have difficulties, I just assume normal is the normal amount of food I eat, and I use my experience to judge whether the food I eat is considered "small amount" or normal etc.
I had difficulties using them because I would not know on what scale I'm basing off of what is "normal, too much, too little" is. Also, these vague descriptions were chosen mostly on how I felt about my meal and exercise, which in comparison to what the conventional amount should be can be completely different.
I think these descriptions could be more specific as they are very subjective. Perhaps serving sizes or cup measurements could represent how much normal, too much, or too little means. Overall though, I did not experience any major difficulties with these categories.
I had difficulty distinguishing what was considered as normal, too little, and a lot when inputting my meals into the system.
These descriptions were a bit vague for me because I describe the portion of my food different than others. Usually what people consider normal I consider them normal. It might be because I have a bigger appetite and can eat without being full easily. However, if I do get full then I know I ate a lot. However, I used them according to my definitions so it was not difficult for me. If a meal was something such as a coffee and a

bread it would be small, if something was satisfying and hit the spot just perfect it would be normal, and if I felt bloated and disgusting after eating then it would be a lot.
The vague descriptions "normal, too much, too little" do make sense to me and I feel like they are appropriate because if it was less vague it would be harder to use to describe each persons activity situation. No I did not have difficulties using them.
They make sense, but normal for one person can be too much or too little for another. But usually I ended up picking normal for most of my entries.
These types of words are the terms that are easily misdefined by doctors when using different systems. I myself came up with my own definition as to what was "normal, too much, too little". My definition of too little was when my stomach was okay with what I ate, but was still hungry. Too much was when I felt too full. Normal, was just in between.
There were pros and cons to this. the pro was that it allowed you to not feel guilty or bad for eating " too many" or "too little" calories. Granted it is important to know this to a certain degree and maybe once in awhile like a couple times a week, it would be okay to input calories just to make sure you are getting enough and are not overeating.
It makes sense with the definition that I'm using. Im not quite sure what definition the system is using.
The vague descriptions didn't make too much sense to me at first. But then I decided to make up my own definitions for them. I decided to use what I thought a "average" person would eat. So even though I might consider my snack to be 'normal' size, I assumed an average person would consider it "too little" - so I marked it as too little. I wish someone had explained to me how I was supposed to use them, though.
Sometimes I had difficulty using them because I didn't know if certain things I ate were considered to be normal or too little. For example, when I'd eat yogurt with granola I didn't know wether to consider it normal or too little.
There is no standard in what is considered normal, too much, or too little. It is very subjective to the person inputting the information. I only entered the information according to how full I was. But I do not fully know if the information entered was compared to standard or to my standard eating habits.
Yes, these descriptions are simple and easy to use. I don't see how anyone can get confused when rating their own data because these three categories are plain and simple.
They made sense and was easy to use.
They make sense to me but they are subjective. Sometimes it's easy to say a lot but it may not be a lot for someone else.
They do make sense generally. No normal person is going to weight out their food or try and calculate caloric count in order to determine portion size. So it made it easy to just put them in general catagories, it just requires people to be honest.
These descriptions of "normal, too much, too little," are way too vague to be used in a system as important as this one that monitors a person's daily health. They do not make sense because these measurements are entirely objective; too much to one person can be considered completely normal to another person, and even considered too little to a third person. They are difficult to use because I'm not sure whose interpretations of these descriptions we are using. My interpretation of these phrases may be completely different than the interpretation of the health care professional who is reviewing this data. In addition, too much or too little exercise is completely relative to the person recording the information as well. To a sedentary individual, "too much" exercise may be a one mile jog, but to a marathon runner, this exercise is "too little." There needs to be a set standard to which these measurements are held.
These descriptions I did understand although found it interesting that there is no parameter for what each of these constitutes, basically leaving what is “normal, too much, or too little” up to the users disgression, which may perhaps skew the users analysis of their data post-experiment. “Normal” is labeled with a green colored text box, the “too much” is indicated by red, and the “too little” is a yellow text box. In addition one difficulty for users may be that a color is not given to pulse rate until after the data is entered, and does not indicate what the colors mean necessarily for pulse rate, so we basically have to assume it means “low, normal, and high”.
They make complete sense.
I actually found these somewhat vague descriptions as useful rather than a hindrance. The less I had to think about what I was to enter the more likely I was to actually log my meals, etc.

5. Survey open-end question: What other system features or functionalities might help you better record health information persistently?

Besides using an electronic based record, you can actually use a paper record. The advantages of a paper record can be having to write our any information that you desire to be in the record. When using an electronic record, most options are given to you and you just pick which one responds to you.
System features that would better help me record information would be: a way to input the time with numbers instead of using the scale, a calendar format instead of a list format, a way to have a look at the overview of a week of food intake and exercise.
Just one little feature that I kept making mistakes with, was the fact that the time was recorded using the 24 hour clock rather than the 12 hour clock. I made that mistake a few times, but I got used to it after a few days.
I think I could better record health information persistently if there was a way I could text the information about my food consumption or exercise from my phone to the system. That way I could text it right after a meal or work out when I'm on the go and away from a computer.
I would say some sort of a alert/reminder like a text message to remind me to record my food intake and exercise plan.
A calendar for planning future exercise or food consumption goals would be useful.
I think a picture system would be a nice addition to such a program. Users would have an option to take a picture of the meal they are about to eat before hand then could post it to their records. This way the program could determine what is a large or small meal based on the picture. Also users would be able to keep a more accurate of what they ate and could post all the photos at the end of the day.
If this system was more developed, maybe reminders or alerts sent to my email or phone (text message). It was easy to remember to report food, but remembering to take my pulse right after eating was difficult. Another difficulty was recording the time. It started to get tedious using

the scroll tab, so maybe having a box to enter in the time and AM/PM would be easier. Also, military/24 hour time was a little tricky, and I had to edit some of my meal times because I recorded the wrong time.
Pop-up computer or cell phone reminders might help me to better remember when it is time to record my food, exercise, or pulse data, since oftentimes I would forget right away.
Having a larger library of food choices, rather than free hand text. But if the system had a way of automatically filling with the free hand text it would be much easier to use.
I think that there should be an option to set up a customized list of foods. Also, the system could automatically log in that food at the same time each day so that it records that you eat that same thing for breakfast, lunch, and dinner on a daily basis. I think that the system allows this but I think there should be a setting where you could automatically set which days it has this inputted so you would not have to do that manually since it is fairly tedious to do so. This will help one stick to a daily pattern and portion. I think that would help me because it would be like I am following a special diet. Inputting exercise in advance would help motivate me to stick to that specific exercise schedule.
I would like it to include calories depending on the type of food input.
User-entered foods and such should be saved or at least customizable to be consistent.
Instead of recording at what time you ate just break it down into breakfast, lunch, dinner, and snacks so it is a little quicker. It would also be nice to have calories with the food to see how much your body intakes daily. For exercise keep track of how many calories you burned by recording how long you exercised for. The amount of calories you burn will depend on the type of exercise and the duration. With this given I believe it will motivate more people to record their health because the number of calories will get their attention.
If there was some device that could read our heart rate so that all readings were consistent. It was difficult to gauge sometimes, but I understand it would be too costly to maintain.
I think that if the system had a record of what constitutes as normal, too much, and too little in terms of me as a person and if the system provided advice for me personally, I would record health information persistently. However, the system seems too vague and general and does not fit to the individual's unique qualities and characteristics.
I think a function one can have is if there was a scroll bar for an already submitted entry. For example, the breakfast I eat on a daily basis is the same. Rather than typing and submitting the entry every time, there should be a scroll button of already stored entries that one can choose from. This function would help record information persistently.
Other features the system might have to better record health information persistently is to have a feedback or a reminder program that could be sent to one's phone to update your health information.
The system should include an automatic suggestion message after any abnormal inputs. This way, the user can better understand what habits they should change and are therefore more willing to input information to get more feedback. Also, I think that they should mobile version so that when people are on the go they can still input their information.
An alert system to remind me to use it, one that I can turn off once I get accustomed to using the system; this would be very helpful for getting consistent use out of the program. A text box for time entry instead of only a scroll bar might also help. If a phone application was made that could sync with the online version it would also help usability. An option to create a list of goals or objectives for yourself regarding program use would help as well.
Other features that I would recommend that would help people record health information more persistently is taking a picture of what was eaten so they would know exactly what they have consumed. Another feature is instead of just saying "meal" have like "snacks" or "drinks" so it would be more clear for the user.
Instead of forcing people to use the scroll bar to select date and time, maybe use a drop-down menu to increase speed of usage.
When dealing with meals and exercise I rather just write it down or download an app because it was hard using this over my phone and I hate having to go to my computer. I ended up just writing a majority of it out then entering it.
A timer or reminder on my computer may help me remember to record my health information more persistently.
Having a time indication of am or pm and not having the entries be just a long list of data.
I think age, weight, background health issues, and calories of food would be helpful things for this program.
Instead of having user select from a list, have pre-made buttons that users can press to facilitate the process. This way the user is not frustrated by the slow process of choosing from the list everytime.
I think that the free text is good, however I think there should be more options in the drop down menu. For meal there are some options, but I don't think there was enough, and it wasn't so specific. Although for exercise I didn't notice any options, so that should be included. Since this is a web system I would expect a lot of options, and would expect it to be an easy and convenient thing. Some may consider the user to be lazy, because they don't feel like inputting a simple meal or exercise. However, because this is a web system as a user I would like it to make my life simpler (especially considering if I was a chronic patient). Also recording the pulse rate was tedious.
Being available in other ways, sometimes is it hard to write down information after you have eaten. Creating a app for smart phones.
Other features I can think of that can help better record health information persistently is to record your daily intake in meals in more detail such as adding a calorie count. If you were to add a calorie count it can help people that are over weight and better their portion of meals.
An easier way to record the date and time.
Reminders, since remembering to use the system is very hard and can be easily forgotten. Also somehow having the system itself classify things as red yellow or green would be better.
There were a couple things that would have helped me to better record my health information. First, a reminder feature would have been very helpful. Being able to set text message reminders for each day around the time I expected to be eating meals would definitely have helped me to record data persistently. Another idea would be to have a reminder alert when long periods of time go by without a new entry. I was relatively good about recording my meals when I was at my computer, but when I was eating on campus or out with friends I found that it was

easy to forget to make an entry. A simple reminder would have really been helpful. Another feature would be a mobile app, or better mobile compatibility in general. With the majority of the population on smart phones now, this makes sense for greater convenience. At first I attempted to do entries on my phone, but it was incredibly difficult and at times frustrating to do so. I ended up just keeping a log in my phone, and imputing them when I got back to a computer. Being able to easily make entries on the go would be much more efficient.
there is almost nothing i can think of to help me record health information better. its pretty simple and easy to use. but i don't think the slider is necessary for the pulse since its easier to type in the pulse number. I felt the pulse recording was hard to maintain because I forgot to take my pulse a couple of time. it also seems like a hassle to take your pulse after you eat especially if you aren't around the computer to record it right away.
If there was a drop-down menu when you are entering your meal. If the system had some more items, it would be a more efficient way of inputting food. If there was a mobile application for this system, it will be easier to input everything.
Maybe storing it on your phone rather then having to go online
Graphs or charts can be implemented to help track the changes of health progress to create a better understanding of how your personal lifestyle choices are resulting.
The three most important one were already given in the system, but to further enhance the findings possibly there could be a section for, a specific location as to where the person was when whatever event occurred. It could possibly enhance the health information record further.
Mobile version, reporting functionality.
A feature that could possibly remind me to enter my information after each activity would help, such as the system sending me alert by email. Also, if the system had an easy to use cell phone app that I could use the information would be more persistent because I do not always have my computer by me to enter data right after I eat or exercise.
Have reminders to do it and tell you what the red, green, and yellow are for.
I personally didn't like that the time recording option was in military time. I would have liked the option of choosing either "am" or "pm." Also, I had difficulty obtaining internet access on my laptop sometimes. I think creating a similar system on a cell phone app would be more portable and handy so that people could easily record food intake, exercise, and pulse.
Other system features or functionalities that can help me better record health information persistently would be a specific list that has many of the food groups we eat (I feel as if there were very little for Health watch), a specific way to enter how much exactly we are eating and how much exercise we are having instead of "a little" , "alot", or "normal". Another feature that would be beneficial would be some sort of reminder that can be connected through the phone. The biggest difficulty was remembering to record everything down. I was missing days and I had to recall a lot of information.
Perhaps if this system devised an on-the-go application, for mobile phone (since I personally was not always granted access to a computer), it would be cool to update health watch through your phone. Now a days people use their phones for everything, it may make people more inclined to update and record their information more diligently.
if people are to use this type of system they should be given a pulse reader incase they do not have access to one
What would help tremendously is a morning, afternoon, and evening portion of the program. When I look at the past data entries they are all a blur and I have to read each individual line to see what it is. If one day were had sections for morning/afternoon/evening I can clearly see what it is that I did that day. There should also be an option for no breakfast or no exercise. That way people can see what was missed. Reminders and beeps could help throughout the day to remember to record information. Sometimes what you want to put is not on the drop down list. Maybe it would help to open up a separate page when you click meals and have different categories for the food groups like bread, veggies, and fruits. Pictures might help too! To make it more visually appealing and interactive. Graphs of your progress will help the participants be more proactive in their routine if they see the consequences visually. You can also see trends. A comment section on how you feel during the day will also help physicians and caregivers get a better reading of their patient. For example, I feel sick today and that is why I did not eat or exercise as much. When you click on the entry, there should be more details available. Like for example if you are not supposed to eat dairy and you did, there should be a notification.
Mobile version of the page, automatically check current time and date. Easier calendar input. consider iPhone scroller style calendar
The pulse rating was not well integrated at all. As a user I had no idea how to record or take my pulse. The only way I can see this system working better is possibly a device connected with your computer that automatically takes that reading for you and updates the website acourdenly. Also for exercise you should be about to quantify how much you did in number. Worked out, ran ____ miles in ____ amount of time. I did ____ number of sets of _____ exercise. For meals a calorie counter or some type of sytem which always me to analysis my over all health over the past days.
Perhaps there could be a feature that records sex, height, and weight and automatically labels your entry as low, normal, or high. This would require a customized list so that people had a menu to choose from.
A note pad file would be just fine, with a format. So that way I wouldn't necessarily need the internet to record what I'm doing. Really depends on how the person is using it. If its a calorie counter, it just needs to recognize more things as to help the user count calories. As stated above most of my meal entries weren't pre-listed.
Other system features that might help better record health information would include the approximate calorie intake of food, suggestions to add to the food intake (cheese, bread, oil, etc), also an pre-counted calorie counter showing the average calorie per food item.
I think it will be Easier way when I press to text my food taken , not all the food shows and it is hard to find my food. Also, if there is an alarm reminder to remind me every time I eat that I have to enter my food taken.
Perhaps a voice helper or interactive tutorials made especially for different demographics.
My biggest complaints was the user interface of the program and the non-portability of the program. I tried logging into the program using a smartphone but I faced an error adjusting the time for a new entry. To help overcome this issue, an app version with the same features or more and is more smartphone friendly should be considered.

Phone App
If there is a way to set reminders when you're on your computer because I forgot a lot.
If the system offered a feature that would tell us more information about the food we eat or the amount of calories we should be eating to maintain a healthy lifestyle, that would be the most beneficial. Also, if the system recorded our sex, weight, and height so it would be more personalized, the system could offer suggestions and guides to exercises and eating control.
A reminder might help to use the system, especially about recording your pulse. That was the most difficult thing for me to remember to do.
Right after plugging in food or exercise, there should be another box conveniently placed with each option for pulse. Instead of calculating pulse in a separate entry. This way it'd be more effective and convenient.
System features that could help would be a reminder that is sent to the user so they do not forget to record their observations. Also, it could be made more complex if the user had to add in more specific amounts of food for example cups, tablespoons, etc. It would be more work but it would allow for more efficient recording. Other functionalities that may help is being able to organize your entries is to be able to sort it by specific days so you can compare different days, also being able to organize your entries by specific pulses, meals or exercise. This way an individual could easily compare their pulses after different meals, etc.
Other features that could help me record persistently could be some kind of reminder, such as a text of when I usually eat or one every couple hours. Also, when I eat or do something physical, there could be some kind of device that reminds me to go input in my information before I forget.
Maybe if you could enter several different things for each day instead of selecting the date over and over again. Perhaps preset areas that you can fill in instead of selecting what you did such as for the pulse, meal, or exercise.
A calender view, instead of a list of entries? More visual display.
I think that recording sleeping hours is important, since sleep is an important aspect in one's health.
Although this may be a tedious feature, it might be useful to have a calorie count or calculator in the system so that individuals can monitor how many calories they are consuming in their meals. This can be an optional feature for those who are particularly interested in tracking their energy intake, however I would take advantage of such a feature if it were offered.
if the system wasn't online and you can just keep a log on your phone without using the internet and when you do have internet it will automatically update what you have on you phone to the internet.
Instead of having to enter the time we had ate, it would have been better to say breakfast, lunch, dinner and snacks in between. Since I eat breakfast whenever I wake up or when I have time I still consider it breakfast, it just depends on the person. But I must admit the time was annoying especially in military time. Also the customized search was not helpful in my case so I would rather not even have that setting.
Asking about stress and fatigue might help me better record health information persistently. Making an iPhone app would really help me better record my health information persistently.
Improved UI, mobile phone app (android/iphone), added food selections.
A better structured list for the choosing of the foods. Also, a phone app for the system would be very helpful since I do not always have access to my computer. I myself used an app for taking my heart rate.
Honestly, making this system available an app on your phone. People are always on the go, always go out to eat, exercise at the gym, etc...It would be easier for them to more consistently input data and have the data be more accurate if it was done through their cell phone device which people have on them 24/7.
ability to tag with "@" such as @pulse or @exercise so I don't have to use the dropdown.
Having the time in military time was kind of weird - I kept trying to have to try and convert it in my head. Also a better explanation of the sizes and the colors.
Some features that could be added is the amount of calories to be able to distinct the terms "normal, too much, or too little" because our own understanding of certain things might not be accurate.
If I was to login and the current time was already set, that would be helpful. I would only have to plug in numbers. But I would also have the option of changing the date and time. If pulse appeared together with food/exercise so I wouldn't have to add another entry. I doubt I would enter my food or exercise before I do it. Usually, its been after. So I could do so while entering the pulse.
A feature that would be easier to record health information persistently could be an application on smart phones that would allow us to access the website quickly and input our data right after the event.
Sometimes I would forget to add pulse, so if the system reminded me about taking my pulse would be helpful.
More interactive features maybe with pictures of what you ate, iphone camera recording, voice recognition in recording text
An application on a smart phone will enable people to record instantly instead of trying to access the website remotely. Also perhaps a calendar application which sets reminders daily or multiple times daily to update.
I might better record health information persistently if this system was more portable/mobile, for instance if there was an application for a mobile phone. I would often forget to record information the day that I exercised/ate, so I would have to recall this information from the day before and record it. This isn't so difficult if you are just trying to recall and record your meals and exercise from the day before, but when you have to recall what your pulse rate was at various times during the day it becomes increasingly difficult. If there was a mobile application that I could use to record the data on the go, for instance at a restaurant or at the gym, I would be more diligent about recording the information. In addition, the food menu should be broken down in a more detailed manner. When i type in "salad" for a meal choice, the only choices that come up are "salad dressings." This might lead the user to become frustrated with the system and refuse to record data any longer. Also, there could be a drop down menu created for the input of exercise. Last, I think that the date and time should be separated. You should be able to choose the day from a pop up calendar, and then in the next field there should be a space for hour and a space for minutes, along with a designation of am/pm.

Other functions that may help this systems functionality would be to be able to enter all three types of data (exercise, pulse, & meals) at the same time at once rather than tediously go one by one through the topics entering data individually. The system could have one screen to enter for each subtopic of data on at one time, on one screen, for each day. This would make the data entry efficiency much better and much easier for users to use. In addition, being able to view full days of data instead of everything one by one may make the data retrieval for analysis post-experiment more efficient and more easy to understand for users.
A caloric calculator would be really helpful.
Mobile versions. I was oftentimes not near my computer after a meal and I forgot to record it when I got back. Having a mobile app for such a thing is expected nowadays.

6. Survey open-end question: Did your motivations and perceptions about the system change during the course of the evaluation? Can you describe it?

My motivations to use the system actually decreased because I personally don't like to log the activities that I have. I mainly remember what I do, so I feel that it is a waste of time for me to log my activities.
At first, I was annoyed to be using a system that didn't really help me at all in recording my caloric value and exercise but as I got to use it more, I could see how it would be helpful for someone who is not counting calories and just needs a general reminder of what they consume and do during the day. It's a very vague yet broad way to keep a conscious mindset of what goes into their system and what they put out. I don't see it being very helpful for people who want to be detailed in their calorie counting and exercising.
My motivations and perceptions definitely changed over the course of the 10 days. At first I was highly motivated and excited to keep track of all my activities, however, many days I felt like it was a chore to record everything. Then eventually it somewhat became part of my routine. Additionally, the system made me more aware and mindful of the foods I was eating, and allowed me put more effort into planning my schedule for the future to allow for more time to exercise.
No, my motivations and perceptions about the system did not change during the course of the evaluation.
At first I did not like using the system since it is tedious to have to record ALL food intake and exercise, but I did get use to it after a few days.
My motivation to use the system decreased because it was tedious having to input every item every day. Additionally, I did not see how it helped better my health since there was no clear indication of health improvement other than the pulse, which fluctuated sometimes not in accordance with exercise or food consumption. It would be motivating to have some kind of graphical representation of my health improvement.
Yes. Initially I was excited to use the program because I want dot keep track of my health and the types of meals I was eating. But after about 3 days the programs started to become a chore instead of a voluntary action. I felt like I was getting tired of checking my pulse after each time I ate. Or recording every little snack/meal I ate.
not really, i was already interested in this assignment since it is something different. it is more personal while we can monitor ourselves yet put ourselves in the place of a person who has to monitor their health on a daily basis and what they are going through.
Not particularly. The system remained pretty constant throughout the 10-day period. No options or anything of the sort changed to alter my perception of the system.
At the beginning of using the system I thought it was fairly easy and not difficult to use. But as time went on, it seemed tedious and time consuming. By the end of using the system for ten days I thought the program was boring and an element that I was not excited to use.
Yes, when I was using the system the first couple of days, I was very motivated to exercise so that I could input that into the system. Due to my schedule though I was not able to meet my personal goals of exercising every day but I did consistently log in my meals which I found satisfying. I also had a gauge of where my pulse rates were at certain times of the day and was consistent with recording that as well.
Updating my diet everyday kept me aware of what I was eating.
Motivations and perceptions of the system got worse as I used it more. Became more and more cumbersome to use.
No in all it's a good system I just feel they can include more to make this a better system for recording health.
The system became less tedious to use as I started to incorporate it into my daily routine. It was something that was challenging to remember at first, but after a few days, it seemed normal to do.
My motivations and perceptions about the system did not change during the course of the evaluation. I actually thought about the specific problems I had with the system (like the vague descriptions and how to make the system better) while I was using the system for the first time.
My motivations and perceptions of the system changed during the course of the evaluation. At the begnning of the evaluation I thought that the use of this system was pointless and boring. However as the days went by I found myself enjoying inputting information into the system as I realized the more I input information, the more I realize more about my eating and exercise habits.
My motivations and perceptions about the system did not change during the course of the evaluation. I don't like to exercise in general and the system did not change or give me any motivation in wanting to exercise.
The system didn't seem to motivate me because I didn't feel like I was learning anything useful about my health. It addressed information that I already knew. For example, I already knew that when I ate small meal that it would be listed as abnormal or below the recommended normal meal. The system was good to keep a journal as far as your daily intake, but it didn't really change my habits of doing anything.
Yes, the assignment sounded cool to begin with. I like the idea of getting hands on experience testing/evaluating an actual health information system. I have realized it can be very tedious, it's not something I would be interested in but I am very appreciative that people take the time to perfect systems like this for patients.
My motivations and perception of the system did change throughout the weeks. I was very excited going into this project, but after using it for a few weeks, I found it very tedious. I also thought it would be harder to use, but it was fairly easy to understand.
Nope.

It didn't really change. When I first started using it I was confused and thought it was ridiculous. As I continue to you it, I saw how useful it might be, especially with the color menu. However, like I said, I rather write it out in a journal or something. It might be more motivating.
No, my perceptions about the system stayed the same during the course of the evaluation.
They did not.
No I did not change the way I eat or exercise specifically for this system. But it did allow me to see a lot of my eating habits.
I initially thought it was a pretty impressive program, until I realized all it did was capture information into a log. I had hoped for a results or analysis summary of my current health.
My motivations started to decrease during the course of the evaluation. I became very lazy as a user, again because I wanted it to be simpler for me, and make it feel less of a task. However, it gave me a new perception for people who have chronic disease and who have to do this on a daily basis. It made me realize how much time and work had to be spent on tracking one's health, and also somewhat endure the how tedious it can be.
No they were the same throughout about the systems, but being able to see a log that keeps everything you eat and the pulses; changes your views on whats good to eat and what's not.
Yes during my course of the evaluation I can describe that each day knowing that I had to record my meal intake and pulse intake it would motivate me to eat healthier and not eat unhealthy junk food.
Not exactly. but after continuous use, the system was a little easier to use.
No none of the motivations or perceptions changed for me.
At first I saw this just as an assignment and something I had to do. I thought that the system would help in organizing my entries and could potentially be used to find patterns as the data accumulated. Over the course of the ten days I came to realize just how difficult it was to remember to do entries and how inconvenient it was to do sometimes. I did my best to keep on top of it and try and experience what it would be like for chronic care patients that would need to do recording like this for the rest of their life. I found that as the days went on, I began to see the system itself as more of a hassle. The web system required extra steps when I was not at a computer since I had to to record when I was eating and then remember to to log it when I was at a computer as I went through my day. It would have been much easier for me to just keep a record on my own, or a mobile app would have been great for the convenience instead of the web system.
No my motivations and perceptions did not change.
During the beginning of the course, I felt excited inputting my data to see what I eat. This felt like a food diary. However, as time progressed, I felt more lazy and troubled to input all the meals and pulse information. Although it was only three meals a day, and 3 pulses a day for me, the date input was tedious.
No not really. I usually don't watch what I eat or how much because I am relatively thin
The way I saw the system before hand was close to useless, because I never recognized myself as unhealthy. But after seeing my record, I could easily see how much little changes can make a difference. Therefore this changed my motivation towards living healthier.
When i first started recorded, the finding and recorded were much more detailed but as the days went by it become somewhat repetitive and the records become less in detail. The motivation begins to wear off at the days go by because your excited the first few days and then it becomes like a whatever its not a big deal sort of thing. And eventually it becomes a hassle to the point where you don't want to do it because you the outcome is going to be of a specific exercise or meal that you eat.
Not really, i do not normally exercise, I wanted to start a regular exercise routine and see if my base resting heart rate decreases to 65 consistently but i never got around to it, since the food intake did not alter my heart rate, I was not motivated to alter my food intake.
The more I used the system, the less I was motivated to use it. It would have been nice for the system to give back feedback. Such as, am I eating too much, or too little. Do I need to exercise more? Is my pulse healthy for the way that I am eating and exercising. I didn't like that I was just entering in information without any feedback in return.
Yes, it made me want to healthier and exercise more because it made me conscious of how lazy I was.
I didn't mind recording my daily routine into the system for the first few days. However, my motivation to continuously record declined. It became very tedious and annoying to do it after everything I did.
No. I knew, beforehand, that I was going to forget to record some of the data. I also knew that it was unspecific and although it is quite reliable, I have used other systems (Calorie Counter on the iPhone)that have made my standards pretty high. I did try to be more motivated as I continued through the evaluation and reminded myself; but it was still difficult.
My perceptions of the system did not really change too much. I remained indifferent about it.
the system made me realize how much i was eating a day and made me think was was too much or too little
My motivations only slightly increased. This is because I knew that I had to get work done so towards the end I increased my efforts. Also it became routine so I was more used to inputting data whereas at the beginning I was having a harder time incorporating it into my schedule. My perception was that it became easier over time. And yes my motivation to use the system increased as I could see my progress.
I try to remember to enter everyday. To be honest the data is too little it doesn't interest me. I know what I ate and how I feel after, tell me something I don't know. Like what I can change or what effects am I getting.
No, as I used it I was already thinking about all these things. Not a good system sorry.
When I first started using the system, I felt as thought it was fairly simple and easy to use. As I started to use the system more, I found more things that were difficult. In addition, if I would forget to update a meal, or if I did not have access to the internet, going back and uploading a meal was a little difficult.
Not really, I expected it to be like a journal and that's essentially how I used it. I did get annoyed that I had to be online to use it though,

otherwise if it were just easier to open up then I'd have no problems with it.
Yes, my motives and perceptions about the system did change during the course of the evaluation because I saw what kinds of food I was eating and how much. It made me evaluate a better and healthy eating regime so that I would get my necessary amount of dietary supplements and vitamins from the foods I was eating. Helped me understand why I am a certain way and how to improve healthy eating.
Yes , first I was so excited to use it , and I felt it it is easy to use but after few days I can not find my food in the menu that decreases my motivation. may be because it is just an assignment , I mean I would think that the patients might be more motivated to do it to monitor their health .
The system is simple. And I personally have no significant health obstacles to pay attention. However, this system could be very powerful for people with chronic diseases for people who need to constantly monitor their food intake.
Yes based on my 10 day progress report, solely relying on the program and memory had its limits, which explains the gap from March 1st to 3rd. In order for a more detailed and accurate report, I had to rely on third party programs right after I intake a meal or exercise.
Yes, very inconvenient over the 10 day period.
I liked it less. It just kept feeling like more of a burden than anything actually useful especially since I didn't really understand I didn't enjoy being forced to do it.
Yes, my motivation and perception did change throughout the system. I knew that the system was a simple monitor of our daily intake and exercise so I did not expect it to provide more information and knowledge about my lifestyle. It did however give me a more organized idea of how I eat because without it, I could easily forget what I consumed a few days prior. Recording my daily intake allowed me to see what I had eaten in the past and motivated me to improve to a healthier lifestyle. For example, if I saw that I ate too much sugar in one day, I would keep that in mind and avoid it in the future.
I think a log is helpful to monitor health. However, staying consistent is a personal problem for me. An app on the phone might be helpful since everything is based on hands-held technology.
While using this system, I was motivated to do more exercise, even though I barely did any. When I plugged in all the food I ate and the lack of exercise I had, I felt guilty and wanted to make my evaluation appear healthier.
My perception changed, at first I saw it as "busy" work but as I continued using it I found it to be very helpful if you were to try to diet. I also enjoyed seeing my pulse after different exercises and meals.
Yes, I basically was not really aware of how hard it was to remember to put the stuff into the website. It made me realize how hard it was for those who have diabetes, hypertension, and other disease, to do this everyday of their lives. It has motivated me to eat better and live a better lifestyle.
A little. I was more aware of using the system, but at times I would forget about it and forget to enter things that I ate or did.
Not really, I just use it to do the assignment, I wasn't expecting it to provide a great list of functions.
At first it was a hassle to log in, record the day's information, and to record my own pulse, but after a while it became interesting to see the change and trends of my pulse rate after a certain meal or exercise.
At first I believed the system to be ineffective and time-consuming. However throughout the ten days, I realized that this system really helped me track what I ate, how often I exercised, and pulse rate after those activities. After a couple of days, I began to take better note of what I was eating and in which quantities. I also realized that it would be beneficial if I exercised more often. So in short, I felt more motivated to take better care of my body and overall lifestyle during the use of this system.
My motivations and perceptions about the system change throughout the course of the evaluation because at first I didn't like how I have to input the information in the system but after I got use to it, it wasn't that big of a deal anymore. Also after I download an app on my phone to check my pulse rate, it made things easier and motivate me a little more to input the information to the system. Also seeing what kind of food I was eating also motivate me to input my meals into the system as well.
No I didn't know what to expect with this system and for the ten days the system didn't really change my perception of it. It didn't really have a negative connotation if I ate too much or if I didn't exercise, so every time I had to enter my info I just entered it and didn't really care to view my list of entries. I felt the same way from the beginning till the end, since it didn't help me in my case I wouldn't keep the system.
My motivations and perceptions did change about the system during the course of the evaluation because it became more tedious to enter information every day just because it was kind of inconvenient. Quicker access like an app would have solved all the problems.
Not really, it felt more like work having to add my data into the system everyday.
I began to notice that it was helpful once I got used to defining the proportions of my food. It was helpful in the sense that I noticed I would eat larger meals on days that I did not exercise. Looking at this information, I linked it to the amount of time I had on those days, and came out with the conclusion that time constraints were highly influencing my eating habits.
Yeah. At first, I got off to a very sluggish start. Because I placed to much focus on depending on "my fitnesspal" which is an app that I have on my Iphone, that I use religiously so it was a semi- difficult transition to remember to also input stuff on my laptop. But after awhile, I would remember whenever I was using my laptop to first input my data then proceed with my homework and other assignments.
No it hasn't. I was already mentally keeping track of all my meals and exercise.
Yes, while I first I thought the system was kind of boring and I wasn't very interested in it. After using it for enough days and gathering enough entries, it was cool to look back on my history. I liked being able to sort it buy size of meal or other things as well. So I then I thought it was kind of cool
Yes, my motivations did change during the course of the evaluation. As I recorded the information that I needed to put in, I was motivated to work out more and eat less. When looking at the amount of food I was consuming and how much I wasn't working out, the system made me want to write that I had worked out to make myself feel better.
At first, I was worried about not know how to use the system so I took a lot more time into inputting my data. I was instrinsically motivated to learn how to use the system. It seemed not very user-friendly at first but got easier during the course of the evaluation. However, as it got

easier, my motivation to use it decreased. It became a tedious system to frequently use.
When I first heard about the system, I thought it would be a bit of a hassle to record every meal and pulse following the meal, but as it progressed, I got used to the system and kept track of my food intake, which in turn made me choose healthier snacks.
no
I felt the same both before and after using the system. I think it is a great tool but with some modification, could be better.
At first, I honestly thought the program was more or less a waste of time. But as I began to use it, I saw the tracking and logging of all food and exercise was useful in my daily life and also showed me how much I am eating and working out. It shows the blunt truth as opposed to the "truths" you tell yourself.
Yes, i became increasingly less motivated to enter my data as the period of evaluation went on. It is annoying to have to log on to a computer and enter your data for the day each day. It would be much easier if there was a mobile app that could be used on the go and information could be updated easily once a meal or exercise regimen is completed. At first I thought that the system was going to be incredibly easy to use but as time went on and my entries became more detailed it became obvious that this would not be true.
My motivations changed through the experiment for the better. I changed my mind because, although I felt the system was tedious and repetitive, it became much easier to enter the data after a couple of days of data entry. Also, as I learned the system and used it I began to like the compiling and organization that comes with this system and can see myself using this system for other things that require the organization information/data.
Yes. I was pretty motivated about the system at first, but then I got caught up with other things and didn't keep up with the system as much as I should have.
My motivation to use it certainly declined as time progressed. This is due to a combination of factors, mostly that it was cumbersome to remember to input every meal that I had, especially because a computer wasn't immediately accessible most of the time. Motivation drops considerably as the time after an event passes so I think having the ability to immediately input data after a meal (mobile version) is essential.

7. Survey open-end question: Based on the data that you recorded, what exercises or meals keep your pulse rate low or high?

The exercises that I do at the gym actually keep my pulse rate high. But the exercise that I do at work, which is just walking a lot, just keeps my pulse the same.
Right after exercising, my pulse rate would be really high but then would slow down as time would pass. Meals or snacks that were highly processed seemed to keep my pulse rate a little higher than normal, but there was no considerable difference.
Typically tap dancing keeps my pulse lower than more intense exercising such as a long run. Personally, many of my meals kept my pulse at an average rate. I tried to vary them a bit, but it was hard to see any large fluctuations in pulse due to food intake.
The meals that kept my pulse rate low were breakfast that includes yogurt, a bar, and coffee, as well as chicken noodle soup. The exercises that kept my pulse high are runs on the elliptical.
Lifting weights and boxing using a punching bag kept my pulse rate high, but I already knew that before using Health Watch. Eating a lot of food at one time did raise my pulse rate a bit compared to my baseline normal pulse rate.
Yoga kept my pulse rate low and swimming and biking kept my pulse rate high. Foods high in fatty content like pasta or pasta alfredo and high in sugar content such as Gatorade or chocolate also kept my pulse rate high.
When I would exercise my pulse would become high but after about 10 minutes my pulse would return to about 60-70. By the time I got to recording my pulse it would be at that amount. Also my pulse would raise when I would eat spicy foods. It would return fairly quickly as well thought. Based on the information is didn't seem like my pulse fluctuated much. It was generally between 60-75.
the one time I did exercise, it was the cardio workout that kept my pulse rate high. also, drinking alcohol raised my pulse significantly for the time being. for the times when I did remember to take my pulse, it was usually higher after fried foods or food not normally eaten (like the moroccan food), and it was high after breakfast because I was late and ran to catch the bus despite only eating very little.
Walking uphill kept my pulse rate higher than any other recording, and lighter meals usually kept my pulse rate lower such as cereal or sandwiches
My pulse was the lowest with low sugar food intake, such as grape-nut cereal. My pulse was the highest after my 8 mile runs.
Usually my pulse rate was relatively stable in the mornings, with an average of 66, a low of 60, and a high of 80. After exercise, my pulse rate was relatively high which was expected. Eating yogurt and cereal kept my pulse rate relatively low. Orange juice spiked up my pulse rate. Also, I drank an energy drink and that increased my pulse rate as well.
I did not keep a pulse of every meal. that would be too cumbersome. I just tested my heart rate after every exercise day. I keep my heart rate relatively high whenever I exercise so that I get a better workout.
Any exercise kept my pulse high, eating foods kept it normal.
I didn't keep track of my pulse rate. I know though that when I exercised my pulse rate was higher and when I ate a lot of food my pulse rate was lower.
For me, my pulse rate pretty much remained consistent throughout the entire trial period. However, whenever I ate more rich and fatty foods, I noticed a slight increase in heart rate. Also, the bigger the meal, the higher my pulse was.
Unfortunately, I was too busy to exercise during these 10 days. Meals that kept my pulse rate low include snacks like Ritz crackers with water, pancakes, eggs, and sausages, pringles, a peanut butter and jelly sandwich, and taquitos. Meals that kept my pulse rate high include beef and rice, raviolis, a burger and fries, and fried rice. From these results, it seems as though fried foods keep my pulse rate high while small snacks keep my pulse rate low.
Overall, my eating habits are persistent on a daily basis. Before using the "health watch" system I was aware of everything I ate. However after using the system I found myself aware of how my heart rate changes according to the different things I consume and the things I do. After exercising on avaerage my heart rate would be from 136-139 which is rather high. After eating breakfast my heart rate would be between 73-

78, and finally after eating dinner my heart rate would be between 79-88. Analyzing this information I was able to find that my heart rate increased as my food intake increased, and greatly increased after exercise.
Based on the data that i have recorded meals that included alcohol would increase my pulse rate. And meals that included fish or fiber my pulse rate would decrease.
It depended on whether or not I took my pulse right after or later. My pulse increased after a meal but would decrease later. Any cardio exercises makes your pulse rate high.
Didn't exercise. Lighter meals seemed to give me a lower pulse, those that were more processed carb loaded seemed to give higher pulse.
The exercises that kept my pulse low was short slow walks. The meals that kept my pulse low were vegetables and low sodium/ low sugar snacks and beverages. The exercise that made my pulse increase was high intensity lifting or recreational sports. The meals that increased my heart rate was sugary snacks.
My pulse is fairly consistent.
My pulse rate was never too low, but I noticed that if I ate a lot of oily foods like fast food my pulse rate would jump.
Cardio work outs kept my pulse rate high. Based on the data, eating a hotpocket in the morning kept my pulse rate higher than eating pasta in the evening.
Usually big meals would increase my pulse rate.
Cardio is what kept my pulse very high and things like doing leg machines or crunches my pulse wasn't as high.I found that for meals, it was bigger meals that made my pulse rate be a little bit higher than smaller meals.
Running for a long time would keep my pulse rate extremely high. While walking keep my pulse rate fairly low.
Although the only exercise I do is walking, I noticed that my pulse rate would always increase after. Also in terms of meals, most the meals that I consumed during the day I noticed had a slight increase in my pulse rate. I couldn't tell how much my pulse rate was affected in the morning because I always consumed the same meal (cereal), I didn't change it up besides eating different cereals.
The ones with lots of carbohydrates are what had high pulse.
I noticed each time I would take my pulse rate after my exercise routine of running and cardio my pulse would be much higher than when I am eating after meals. My pulse is relatively low during the day when I have not eaten much or have done much exercise.
I didn't exercise much, but that's when my pulse was highest. After meals, my pulse was higher than usual.
My pulse doesn't really follow any pattern according to meals.
Over the course of the ten days I did not exercise enough to tell what kept my pulse rate high or low. For meals though it seems to suggest that small and normal-size meals keep my pulse-rate at a pretty average level usually in the 70's. Large meals seemed to increase my pulse rate to the 80's. They were generally heavy and relatively unhealthy, so I'm not sure if that played a role in the increased pulse rate in addition to the quantity of food. I am also not sure if the increase was also due to the fact that all of my large meals were consumed in social occasions and not alone in my apartment like the majority of my normal-size meals. I imagine that being in a social setting with lots of activity and excitement could cause my pulse rate to increase as well.
well after my large meal i think my pulse was definitely a little higher because my body had to work harder since it was starting to feel uncomfortable after all the food. mostly after exercising my pulse would be higher than if i didn't exercise.
I maintain a regular pulse by eating small amounts of food, but my pulse increases as I eat "a lot" of food. I did not exercise for the past ten days, but I figured out that my pulse will be higher during and after exercises. I do not usually get low pulse rates.
? My pulse rate is high when I do dance, which I do everyday because of dance practice and it is low when I am sitting in my apartment just relaxing
When I actually was exercising and eating complete meals my pulse rates were lower. Therefore playing golf and basketball helped and meals like thai chicken and ceviche had lower pulse rates.
After recording the data i began to see patterns that would form after performing certain exercises or eating certain meals. For example, working out and do exercises at the gym would raise my pulse to almost 100, which was understandable because working out in the gym increases heart beat from lifting weights and running on a treadmill. Other exercises such as walking long distances or playing a sport like bowling did raise pulse rate but not the point where it was excessively high. I noticed also that eating food enriched with fatty substances such as cheese or eating food right after an exercise also increased pulse rate significantly. The majority of the food that i ate was fast food or outside food which could also have an impact on the pulse rate. Another thing i noticed was that if i ate something sweet my pulse rate was increased.
None that I could decipher.
During the 10 day trial period, I was not exercising. But after each meal, I did not see a major difference in my pulse rate. It seemed constant. However, my pulse was usually lower in the mornings.
Meals that were high in fat made my pulse higher and lower with healthier food. My exercise in doing running would be higher than that of lifting weights.
Heavy meals or meals that were "a lot" tended to fasten my pulse rate. Exercising at an intense rate, such as running, also kept my pulse rate very high.
The exercises when I was running on the treadmill kept my pulse high and meals that were hefty and larger than my other meals made my pulse higher as well. Meals that I had at restaurants like Panera and Subway or meals that had a lot more calories (like hot dogs, fried rice, spaghetti)also made my pulse rate high. My heart rate definitely decreased during some exercises like using the machines or stretching. Meals like cereal/milk, a granola bar, a fruit, or any light snack kept my heart rate pretty low. I assumed this was because it contained less calories and less fat.

It was hard to tell in terms of meals because I mainly took my pulse rates before and after exercises. But in terms of exercise, it consisted mostly of dancing. I had the highest pulse rate on days where I had dance practice that was over 1 hour (so an estimate of 3 hours of dancing).
heavy foods had made my pulse low and longer exercises made my pulse high
Walking and swimming definitely kept my pulse rate high toward the hundreds. This makes sense because exercise gets the heart pumping and beating faster to convert more energy. My pulse rates were low when I ate snacks and higher when I ate bigger meals. I guess my body was working on digesting my food.
Eating too much of any food or greasy food tend to raise my heart rate. I realize I'm not exercising and not eating regularly too.
N/A
Based on my data, weight lifting keep my pulse fairly high, a lot higher than I thought it did. When I ate fast food, I noticed my pulse was higher in comparison to when I ate healthy, my pulse was lower. In addition, my pulse in the morning after breakfast tended to be lower than my pulse after dinner.
Any kind of exercise would raise my pulse rate really.
Based on my data recorded, exercises that keep my pulse rate high include cardio workouts rather than weights and circuits that keep my pulse rate low. Meals that keep my pulse rate low include small snacks and food that's keep my pulse rate high include junk food, coke, sweets, and a large amount of food.
Going to the gym for one hour makes my pulse high. on the other hand,eating steak or meat makes my pulse rate low. I guess this is because of the high cholesterol and fat in the meat.
Light meals generally let me keep my pulse lower. The bigger the meal, the heavier my heart has to work. And generally, jogging, running is a high stress activity so it generally brings me pulse up very high.
Exercising on long walks yielded a low pulse and running for 10 minutes yielded the highest heart rate.
Low sodium foods resulted in low pulse readings. Exercise and fatty foods brought up my readings,
Coffee tended to raise my pulse rate, so did cardio exercises. Most of my pulse rates were high or on the high side of normal so I don't know what would bring it down. Although when I had smaller meals or waited awhile before taking my pulse that is what brought it to normal
Based on my data, my pulse rate seemed to have stayed a steady low rate. I believe since my meals and exercises were pretty consistent and routine for the 10 days, my pulse rate stayed between 60-65 the entire time.
My best guess would be after breakfast my pulse was pretty low. From personal experience, when I do intense cardio workouts, my pulse reaches 150.
Foods with more salt made my pulse higher, healthier foods such as bok choy kept my pulse in a lower rate. Overall, unhealthier foods such as pizza and korean rice cakes, made my pulse go higher, while foods like chicken were lower.
The exercises that kept my pulse the highest were anaerobic activities such as sprinting and heavy cardio exercise. The exercises that were lowest were weightlifting and volleyball, which can be considered aerobic activities. The meals that increased my pulse were meals that I ate "too much" or snacks that I had immediately after working out because my heart rate hadn't completely come down yet. The meals that kept my pulse low were scrambled egg whites and oatmeal in normal amounts. In general, my pulse was fairly low between 50 and 60 at rest.
It seemed that sometimes after I workout, such as lifting weights, my pulse is a little higher than normal. Other than that, what I ate and drank, my pulse was pretty even and what I consumed did not really change it.
The only exercise I really get is dance so naturally, my pulse is higher after that than after I eat. I don't know what foods made me have lower pulse rates because I didn't measure after every meal.
If I eat normal or less than normal amount of food, I usually have lower (normal or low) pulse. If I ate a lot then I usually have a higher pulse. And if the food I ate are very oily and contains a lot of fat then I usually have hight pulse. And I always have high pulse after excercise (even if they are light excercises).
Cardio-related exercises kept my pulse rate high, but I noticed that after a while my pulse rate became more consistent. In terms of meals, high-protein meals kept my pulse rate low whereas more carb-filled meals kept my pulse rate high.
Running always and consistently kept my pulse at a healthy and normal level. Because I did not do any other type of exercises throughout the course of the evaluation, I cannot remark if other physical activities would have affected my pulse differently.
Based on my data larger meals made my pulse rate a little higher then normal and of course exercising made my pulse rate go up.
The time I was practicing for my performance of step and stroll I had the highest pulse of 102. I had the highest pulse rate when I ate eggs and bread. Perhaps because I was full of energy that day and it was a day out of the blue that I decided to eat breakfast. After me performance I didn't work out again, so I should probably incorporate that in my daily routine. Chow mein and spaghetti kept my pulse down to 60. So protein and exercise kept my pulse rate high while carbs kept my pulse rate low.
Moderate exercise and light meals keep my pulse rate low and intense exercise and bigger meals make my pulse rate high. But I noticed that whenever I was stressed, my pulse rate was relatively high even if i had a light meal...
Seems like when I ate pasta and carbohydrates my pulse was higher than normal.
Big and greasy meals like the pizza I had at one point drove up my pulse rate to almost 80. Cereal kept my pulse rate at the low 60s.
My pulse rates were pretty consistent. It was always around 60 beats per minute when I ate or did nothing. I believe it is because 9/10 times I am a very healthy eater. Being vegetarian, steers me towards more veggies and fruits and away from junk food, which would probably cause a higher pulse than 60. With exercise, running kept my pulse high. Around 90-110.
Exercise always makes my pulse go high. Meals high in sugar and caffeine and fat makes my pulse goe high. I rarely eat meat, but when I do, it only slightly rises.
Based on the data I recorded, fried foods - such as french fries or grilled cheese or churros or fried rice - kept my pulse a little bit higher. But

once, my pulse was high even after eating oatmeal. Also based upon the data that I recorded, sandwiches or rice - kept my pulse a bit lower. But sometimes, my pulse was low after eating oatmeal or french fries or scrambled eggs.
The exercises that keep my pulse rate low are my running exercises.
I truly didn't exercise much so I can't really evaluate myself on that. Only had two "events" that I could consider close to exercising by walking. It helped my blood circulate and kept my pulse low. Heavy meals made my pulse high while lighter meals kept my pulse rate low.
Usually after every exercise, my pulse was high because I tend to incorporate cardio within my workout. Meals such as pasta and pizza from pizza hut increased my pulse afterwards, while snacks in class kept my pulse low/normal.
My pulse was very very random. Maybe I was not consistent with when I take the pulse
I did not record my pulse during my meals because I have no accurate way in doing so, or did not remember to record pulse.
No exercise I believe keeps your pulse rate low. But food wise, it seemed breakfast was the lowest points during the day. I believe that's just because it was just as I woke up and I was relaxed from sleeping. Meals that occur later in the day usually follow activity or work so my pulse was usually higher.
Basketball practice, my main source of exercise, made my pulse rate very high. Lifting weights kept my pulse at a lower rate because it is more sedentary than basketball. Those are really the only 2 exercises I completed during this period because we are in the middle of our season. With respect to different meals, larger meals made my pulse rate higher than when I ate smaller meals. When I only had a nutrigrain/breakfast bar my pulse rate would stay relatively low, but if I had a large meal, like in and out, my pulse would noticeably increase.
According to my data meals that were excessively high protein & fat meals contributed to an increase in my heart rate. And easily predicted, larger meals also seemed to contribute to the increase of my pulse rate. For exercises, basketball games and heavily cardio based exercises kept my heart rate relatively high and for exercises that required me to be somewhat sedentary, my heart rate was still high but lower than the cardio based exercises.
My pulse was pretty consistent. However, fruits and exercise cause my pulse to beat a slower rate.
In terms of exercise, yoga keeps my pulse lower than intense strength/cardio workouts. This is likely due to the less strenuous nature of yoga as well as the incorporation of slow breathing.

8. Survey open-end question: Did you change your exercises or meals to try out your rules? What did you do?

I actually stayed constant with my everyday diet and exercise. I did not change anything to make the results better. I just lived my everyday routine like I normally do.
What rules? .. Well, during the middle of this 10 week recording, I started to exercise and tried to eat healthier but other than that, my routine was the same.
I definitely did try to vary some of my meals/exercise. I did weightlifting and tap dancing instead of just running, and I tried to diversify my meals when I could. To do this I ate at different times and tried to eat different sources of protein as well as different types of carbohydrates.
I did not change my exercise or meals to try out my rules.
No I did not change my exercises or meals, I have been working out/lifting weights for 7 years and already knew what foods and exercises are helpful to me for cardiovascular health.
I tried to exercise more in attempts to increase my pulse rate. I also experimented one day with junk food to see how it would affect my pulse. My pulse increased as a result of eating sugary and high sodium foods.
I tried to see if eating small meals vs large meals would effect my pulse. It did not seem to have a major affect.
I did not change my exercises or meals, but after recording my meals I realized that my morning eating schedule is not as healthy as it should be (combining breakfast and lunch late in the afternoon), and not eating larger meals for breakfast. I think after this exercise I will change my eating habits to make sure I eat at consistent times throughout the week so I avoid late night snacks.
I did not change my exercise or meals because I wanted to see a pattern in what I ate & the results.
Yes, I tried to work out every day and stick as much as possible to the protein shake diet.
Within the first couple days of using the system I did try to exercise more but my schedule did not allow me to keep up with this. I tried eating yogurt/cereal for breakfast on a regular basis which was partially influenced by wanting to eat healthier.
I did not change my meals or exercises because I already had a routine set up before I began this program.
All my exercises are different per day to fit into a new workout regime.
I continued to do what I do everyday, but I made sure that when I exercised I had red (a lot) and when I recorded my food it was either green or yellow. The red would be very discouraging and disappointing to my health.
Although I was unable to exercise during this time trial due to illness and fear of relapsing, I tried to eat smaller portions and healthier foods to see if my heart rate would change. There was a minimal difference as I had been eating richer foods earlier in the trial period and ended the trial by eating less rich and oily foods.
I did not exercise or change my meals to try out my rules. I ate what I wanted to eat and was too busy to exercise, so I am not sure what meals keep my pulse rate low and what meals keep my pulse rate high.
When analyzing that my heart rate changed according to how much I eat and how much exercise is being done I performed a small experiment to test the accuracy of my observations. I found that my heart rate was less when I ate smaller meals in smaller portions, and higher when I ate larger meals in larger portions. These findings proved my hypothesis to be accurate.
I didn't not change my meals to try out my rules. Because i never like to exercise before therefore i never once exercised during this system process. My rules were to eat meals three times a day. But sometimes i would wake up late and would not have enough time to eat breakfast

or was too busy and had to skip a meal.
I didn't really change my exercise or eating habits. Sometimes I cannot eat meals until I am out of classes. I would prefer to eat during the normal hours and would set this as my rule, but it is difficult.
Wasn't aware we were supposed to make rules unfortunately, an option to write these down would have helped. I'm a pretty healthy person to begin with, I can say that having to write down everything I eat gives me some actual something to review besides what is just in my mind, it definitely opens your eyes to realizations about how healthy you really are if you are honest with your entries.
I did not change my exercises due to my busy schedule and the food I ate stayed the same. I just noticed that I seem to snack more during the late nights since I have to write it out.
Not really. I am already healthy.
I tried eating different things everything to play with the pulse rates. I should stabilize my exercise routine more because I don't feel like I exercise enough.
I tried eating more throughout the day at random times to see if my pulse rate fluctuated.
No. I kept my same diet and exercise amount.
I didn't make rules for myself when using this system, I just used the system to observe my eating habits to see areas that I can improve in.
I tried to eat more but then that made me get too lazy to exercise. In addition eating heavy meals would prevent me from exercising at all. In all fairness the exercises amount seemed to average out everyday eventually.
Yes I changed up my meals but not exercises to try out my rules. I feel like its difficult considering I'm always at school or work so I don't really put in time for exercise, besides walking. Also in terms of meal, since I don't have enough time, I noticed that I tend to go for fast and easy meals. I didn't make drastic changes, I changed cereal brands. Overall, it gives me a different perception on my daily lifestyle habits, and made me consider some changes I need to incorporate.
I actually realized that I not doing any exercise, so I decided to start doing some, but this was already till the end of the ten days.
I did not change my exercise routine but noticed a difference in my meal intake where I would motivate myself to eat healthier and my portions were not large but a normal healthy size.
No, I just stuck to my normal routines and schedule.
No I did not change any habits, meals, exercises or anything.
I found it very difficult to try out rules since my schedule does not allow me to consistently eat the same things at consistent times of the day. Towards the end of the assignment I attempted to see if eating healthier by adding a salad to my diet would decrease my pulse rate for the meal itself or overall. I did my best to make sure I was eating one salad a day, and was able to do so for the majority of the days. I was unable to see a change in my pulse rate after implementing this new rule however. The last few days I also tried to see if trying to keep my meals to a normal or smaller size would affect my pulse rate. I consciously tried to stick to smaller meals, but again this did not seem to lead to any decrease in pulse rate or any other sort of change.
I did not change my eating habits that much. I kept the same diet throughout out the days i recorded.
I tried to eat moderately based on what type of meal I have eaten and how much of it I consumed. Based on that, I change my portion and type of food. Exercises did not apply to me.
? No. I did the same exercise everydayÑdance.
I actually tried to make time to exercise rather than being a coach potato at home. I ate complete meals according to the food pyramid
For the most part i stuck to my daily routine, although through the tracking and records i did see that i dont usually have my first meal of the day until the afternoon. I feel like this could have an impact if i changed that eating habit. I am not much of a breakfast eater and i start my day off with eating lunch and a snack and dinner. I feel like if i ate breakfast i would not be hungry until later in the day. but growing up i have become used to not eating breakfast it sways the day if i change it. Another thing i could do is not eat out so much and try not to eat meals in the middle of the night. For example few nights i have recorded that i had food at 3am and 1am if that could be avoided the eating habits would look a bit healthier.
I did not try our any rules
This 10 day trial was not a very accurate reflection of my normal dietary habits because I am on a vegan diet for 50 days, and this happen to fall during that time.
I kept my exercises between running and weight lifting to have something consistent, but I did change my food intake. I think the food intake will affect my pulse rate more than exercise.
I started jogging instead of running to test out my theory of pulse rates. When I ran, my pulse rate was higher than that of when I jogged. When I ate lighter, my pulse was slower.
I actually tried to eat out less; my meals became more simple (a sandwich for dinner and a lot of home-made foods) and I tried not eating past eight or nine pm. I didn't have time to exercise as much as I wanted to during that 10-day period.
I did not change or do any other exercising besides dancing. But I did different types of dances when I did record exercise, and those varied in intensity.
i tried to exercise longer and tried to eat healthier meals
I tried to eat bigger meals because I realized that I was not eating enough food. I would try to eat the whole thing instead of leaving some of it behind. That way I knew I could change my options from normal to a lot. At first I didn't exercise at all because that was not my normal routine but because this was an assignment I felt the need to exercise more. That in turn made me hungrier during the day and made me feel like

eating more. So I started off with not much change to a little bit of change. I only increased my intake of food and exercise by a little. Is is just hard to completely change your schedule when you do not have the time.
I didn't do much altering my eating schedule. I'm taking 4 classes this quarter and I'm too busy to take care of meals.
To try out your rules???? Not sure what this question is asking.
Yes, I tried to eat healthier foods and exercise at various times. I noticed that if I ate after I exercised, my pulse tended to stay higher than it would if I ate before working out. I also noticed that healthier food kept my pulse a little lower.
No, I just did what I would normally do.
Yes I did change my exercises and meals to try out my rules. I tried to eat more well-balanced foods and adequate amounts of each meal during the day and tried to make them healthy. I also spaced out my hard workouts with easier less-intense workouts.
I started to go to the gym for three days a week to see the difference on my health activities during the rest of the week. I have missed to monitor some of Pulse this is due to I do not know exactly how to count it , I think I did it for couple times during meal time or after it , then I found that it is the same so I do not think it will make any different if I recorded it after meals, However, I made sure to recorded it after gym because it changes according to how much work out I do, in addition, for three days I did not have access to the internet , so I wrote it on paper day by day and then I entered them all when I got back to home.
I did try one rule. That is more exercises with a diet lower in salts help lower my pulse. This is appropriate and sensible because it fits with general trends in biology.
No I tried to retain my usual lifestyle for 10 days to see a pattern.
Yes. I ate small portions, skipped a meal, and ate fatty meals to see what different meals do.
I tried to figure out how to lower my pulse because it was high. I tried not to have as much caffeine.
I did not change my exercises because I noticed that my pulse rate did not change significantly for me to do so. I performed some type of exercise daily and ate consistent meals throughout the study so I did not have to change my lifestyle to test out my rules.
I was not able to tell that much since my pulse recordings were not consistently recorded immediately after a meal or exercise but rather an hour or two later.
I did not intentionally change my meals, but when I ate just the korean rice cakes alone, my pulse was a lot higher. The next day when I added broccoli and ate the left over rice cake, my pulse became lower.
Yes, I ate a couple meals that were considered large amounts, and my pulse remained higher than normal. Also, I drank caffeine to see what it would do and coffee increased my pulse. Other observations I made that were constant were eating immediately after working out, my pulse after the meals was still fairly high when compared to my resting heart rate.
Yes, I tried to eat a little healthier when I noticed I have not been eating so well. I am pretty health conscious so I try to eat as healthy as I can. It also seems like my pulse rate never really goes too high so that means I don't really have a problem there.
No, I didn't change my daily routine.
I didn't really try but I happen to eat less on the last couple of days because of some other personal issues. I only ate a small bakery bread on the last couple days for breakfast, and the pulses are pretty low.
After exercising, I would eat meals or snacks high in protein, such as Greek yogurt.
Although I did not change my exercise routine over the ten days since I just stuck to running for every exercise, I did try to opt for healthier options when I could. Being a college student, it was definitely a challenge for me to limit eating out or spending extra money to prepare healthier meals that included more fruits and veggies. However if I did eat out, I would try my best to keep my portions at a normal level and try to use less sauces and condiments to complement my meals. Also, I had water with all of my meals excluding breakfast.
I tested that the more amount of food I ate my heart rate would go up. What I did is a tested on eating food with high calories such as buffalo wings and i ate a lot of it. I notice that my high rate increase a little when i do. I didn't get a chance to exercise much in the 10 days so i didn't test it on exercising.
No I didn't change anything during the ten days. I did everything exactly as how I would do on a daily basis. I don't know what rules this is talking about but I did notice that I did skip meals, sometimes I would forget to enter my meals, and I didn't work out, so I'm pretty sure I gained weight which couldn't possibly be healthy.
I did not change my exercises or meals because it's been a stressful week and i barely got to exercise so i didn't have time to change anything about my exercise and i couldn't really change my meals because I haven't been to the grocery to buy food so I've just been eating mostly what ever is available and convenient for me
No, maybe if I was using the program for a longer time, like a month or so I would notice a pattern and try to change my meals.
I did end up changing my eating habits after seeing that my exercise and meals were not cancelling out. I began to cut down on the amount of food I ate on days were I did not exercise.
I tried to eat smaller portions to see how that affected my pulse. But it didn't really change it. My pulse was fairly consistent throughout the day with my meals and exercise.
No.
I realized that my pulse was high - ranging from 90 to 120 - no matter what I was eating. My busy class and work schedule don't allow me to work out. Working out is the only time that i ever see my pulse - and machine usually tells me that it's over 120. So at first I was scared that eating was causing my pulse to be as high as working out - the system kept marking it red! Then I tried to figure out why it was so high. And that's when I realized that I eat on the run. I eat breakfast while cleaning my apartment, running back and forth between the rooms in a hurry. Sometimes I eat while running to the bus. I eat lunch while running to class. And so on and so forth. So when I stopped to measure my pulse - my heart had been beating fast from all that movement! So I tried eating while sitting down and doing absolutely nothing else. My pulse

lowered! It stay in between 60 and 80 now - what an improvement! I never really realized that I was eating on the run - or that even in doing so, I was raising my pulse.
I worked out everyday or tried to, to reduce my pulse.
I changed my meals to see how light and heavy meals would effect my pulse. I had a light meals at different times of the day and heavy meals at different times of the day to see if that affected my pulse rate.
I was limited to changing my meals, since I can only eat on campus or walking distance nearby due to the fact that I do not have a car, so it was difficult to change my eating habits. However, I did change my exercises by alternating aerobic with anaerobic exercises.
No. I just continued my eating habits
No. I kept the same all the way through.
Not really. I tried yogurt a few times instead of other foods to see if that would help. But I didn't really see any change in pulse rate at that point.
I didn't change my exercises too much since I am in the middle of season and need to stick to a pretty strict schedule, but I definitely noticed the difference in my heart rate between weight lifting and actual basketball practice. I changed my meals a little bit in that one day I tried to only eat small meals, but eat several times during the day. The next I decided to have a few large meals, and see how my pulse rate changed after each respective meal.
I didn't consciously change my meals or exercises to try out rules but had a very good variety of different meals and exercise (such as fast food, home cooked, and restaurant meals). However, changing my diet from less fatty and protein filled foods to a carbohydrate-based meal resulted in a lower heart rate after the meal, which also could be because of various other variables other than the actual meal or exercise. For exercise it was obvious that exercise were I did not do too much moving around resulted in a lower heart rate.
Yes. I started eating a lot more fruits.
Not really. I am quite consistent with my meals and exercises at the moment. My current habits are the result of ample self-testing in the past.

9. Survey open-end question: How confident are you about the correctness of your rules?

I'm pretty confident that everything that I logged is correct. I however, am not confident that everything is in there. I'm sure I did other things that I did not log, simply because I eat a lot of small snacks and I exercise every now and then.
What rule are we talking about...? Recording my food intake and exercise helped me to keep focused on thinking healthy and to make smart choices.
I'm very confident about the correctness of my rules, because I have always loved to run, and I since it gets my pulse rate up during the workout, it usually keeps my resting heart rate at a steady rate. Therefore, though I tried to see a difference based on time, amount and type of meals I ate as well as different types of exercise, I did not see too much fluctuation in pulse.
I am very confident in the correctness of my rules because I have observed the trends for years before I tried this system.
This does not apply to me since I did not change my exercises or meals to try out my rules.
I am not confident in the correctness of my rules since I did not take my pulse after each food intake.
I think that the rules are very accurate. This program was very good at keep track of all the information that I entered. I think that when I would search between dates it would return all the results that I expected.
i'm pretty confident that once I change my rules my eating habits and overall health will improve. i definitely need to exercise more and eat my meals at proper times.
I think leaving my exercise & meals alone provided the most accurate information in regards to what keeps my pulse higher or lower.
Not very confident. I felt a little self-conscious by the lack of food I was entering into the system. The small amount of food and large amount of exercise, once seen on the file provided by the system, seems unhealthy.
I'm not very confident. I wasn't too consistent with my eating patterns after breakfast. There were a few snacks I had here at there that I forgot to log in. I also would randomly check my pulse rate and log that in even though I hadn't eaten a meal or exercised prior to checking my pulse rate- it was purely out of curiosity to check my pulse rate.
My workout routine and diet are absolute. I will not change it yet because I am still seeing improvements in my physique.
Very confident in my rules.
confident I was accurate and not cheating through the system.
I am not too confident in the correctness of my rules because they did not change my heart rate on a noticeable level.
In terms of the correctness of my rules, I am not very confident, because I did not perform a randomized control experiment to see what meals keep pulse rates low or high. I also did not try out different meals.
I am very confident about the correctness of my rules. The reason why I'm confident is because as stated up, after my observations I formed a hypothesis and performed a small experiment where I obtained results and compared them to my hypothesis. Because my resylts were comparable to my hypothesis, I was able to conclude that the amount/kind of food we eat does in fact affect an individuals pulse.
I am confident in the correctness of my rules to eat meals three times a day, because it recommended.
Pretty confident as a doctors recommend that you eat at least 3 times a day during the normal hours.
I'm pretty confident that what I think is healthy is healthy.. I think the system might be most effective if it paired with a public health

organization of some kind that would give the program a basis of health maybe, or a page that would link to different agencies and their beliefs on health-- this could supplement the user since the program is designed to help. It would create a confidence in what patients already know.
I am not confident with the correctness of my rules.
Pretty confident.
Not every confident, just because I am normally busy so i lean towards fast foods a lot. I try to carry fruit with me now so I can snack instead of eat big meals. I really just need to make sure i don't get lazy.
My pulse rate did not change much by eating throughout the day, so I am not too confident about my rules.
Very confident.
I feel confident that I got a better insight into my eating habits. I noticed that I eat out at fast food and restaurants a lot, which is not very healthy.
I am approximately 60% confident about my correctness of my rules.
Im fairly confident about the correctness of my rules. Considering to increase exercise and eat healthier. I noticed that I consumed a lot of fast food. I try to eat more home cooked food. However I feel like I developed a bad habit, its going to take some time to change them, but I confident that I can over time.
Not so confident, trying to add exercise to my daily schedule is rather hard and I'm not used to doing any physical activity, it is definitely a challenge.
I feel confident that my rules are correct and would try to input my meals, exercise, and pulse as accurately as I can.
I think I could have tried a more accurate method to record pulse.
Fairly confident
I am not convinced that eating healthier or staying away from larger size meals does not have an effect on pulse rate. With a longer amount of time to try out the rules, I feel like there may be a change since four or five days of eating behavior change may not be long enough to see results. Also, it seems that the external environment in which a meal is eaten affects my pulse rate. I saw more difference in my pulse rate comparing eating at home to eating on campus or in a restaurant than with any particular meal. These external factors may distort the data.
i am pretty confident.
I am confident that my rules satisfy my eating behavior. When my eating becomes too high at a certain point, I lower my consumption to stay at a moderate level.
I am good with the rule I have for my body
Fairly confident. I had certain priorities in my schedule that kind of interfered with my rules, but overall I was able to see good results from the rules set.
Honestly i am not to confident about the correctness of my rules, because for me it is very hard to follow. Im the type of person who gets hungry and eats food no matter what time of day it is. I don't have a set routine not a set timing as when i start and stop eating. Many people have a strict diet, but for me this does not exist, if i see food and its available and im hungry i will eat till i am full. Even if i were to have a set of rules set to follow i would not be able to follow the routine because i just love to eat food.
N/A
I am pretty confident about the correctness, except I feel that I may have tended to click "normal" for most of my logs.
Not that much because I did not eat the same amount and/or the same food with the same exercise. Not only that, but sometimes my exercise was before I ate.
I am very confident about the correctness of my rules.
I was pretty confident since I am fully aware of what I eat and how much exercise I do. Since I don't eat complicated meals or have the money to eat out that often, it forces me to eat simply and at home. As for the exercise, I may not be as confident because I am not always steady when it comes to planning out when I exercise since my schedule changes so often.
Fairly confident. I did not really set strict rules as far as diet. I just tried to keep portions normal and moderate as much as I could, and attended dance practice as often as possible as my means of exercise.
i believe that was the most efficient method
My rules are pretty correct. Exercising more is better for you and makes you hungrier. The more you eat the higher your pulse goes. Also, the more you exercise, the higher your pulse goes up. If I am not doing anything my pulse is usually around the 60's but if I eat or excessive, it can go anywhere from 80-100. Your body pretty much works from common sense. Also I noticed that towards the end, the more food I ate or the more I increased my exercising, the more "red" I started seeing on my page. Red signifies that I was doing "a lot."
Very confident. I might delay on a few of my entries but since I usually eat only a few items it is easy for me to recall and keep track.
Once again not sure what rules is referring to.
I am fairly confident of the correctness of my rules and I did my best to follow the rules of the assignment.
Pretty sure I did everything correctly, however I forgot to take my pulse many times.
I am pretty confident in the correctness of my rules. They were that junk foods keep my heart rate high because of the caffeine and sugar intake, whereas nice balanced fruit/veggie foods kept my heart rate normal because my body had a better rate of digesting the food. When i would exercise intense workouts would keep my heart rate high whereas less intense workouts kept my heart rate normal-high.

about 55%
I am quite confident because a) I have a biological basis to do so and b)The data shows an observable trend that proves my point.
I am fairly confident on the first 2 days of the report, Feb 29th to March 1st but the level of accuracy drops sharply after March 2nd to 3rd due to the lack of data recording and my inability to access the computer for those two days. My accuracy rises again on the 4th to 8th as I relied on a notepad on the things I have done.
Pretty confident.
My pulse was normal the past two times so I think it worked better than before.
I am confident about my rules since my pulse rate was pretty steady from the beginning. If my pulse were to be significantly higher in one day, I would try to lower it by exercising and monitoring my eating habits better. However, since it was steady, I continued to eat the way I did.
Since my pulse recordings were not immediately or consistently recorded after a meal or exercise, I think the correctness was off.
I'm not fully confident of my correctness; however, by the meals and pulse I entered, I can say somewhat confidently my rules apply.
I am fairly confident about the correctness of my rules, for it to be more efficient I would need to test out of my rules for a longer period of time because in ten days an small error can happen that can change the overall meaning of the rules.
My rules were enough for me. I look out for what I eat and try not to have many unhealthy things in a row. This would better my health.
I am pretty confident that food that takes more effort to eat (ie. More chewing, cutting, etc) causes higher pulse rate.
60%. There could be other reasons that contribute to this rule though.
After reading articles about fitness and meals, I am 90% confident about the correctness of my rules.
I was a little inconsistent with my eating habits. For instance, I would eat healthy sandwiches one meal but eat something with a higher fat content the next day. For the most part, I ate moderately sized portions and exercised every so often, so I think I am fairly confident with my rules although I believe that next time around I can enforce them more strictly.
I was not too confident since my heart rate only increase by at most 4 comparing to when i was eating a normal amount
I never viewed any rules on my profile, so I'm actually not sure what rules this is talking about. I don't think I ever saw or knew about that option.
I am pretty confident about the correctness of my rules
I did not change any of my rules.
I am hoping that my confidence is correct. I feel like I have been lowering the amount of food I eat. But other than that, proportions or explanations such as a video might help with these types of problems.
I was fairly confident only because my rules weren't complex, it was pretty simple. Eat smaller meals.
I still have the lack of willpower to follow my rules.
Yes, I am sure that eating while sitting down is a much better thing for me and my body instead of eating on the run.
I am fully confident of the correctness because I put in all the accurate information and not any fake ones to make myself feel better.
slightly confident. My results were not completely accurate since I took my pulse, on average, half an hour after eating or exercising. This may affect the results' validity. Moreover, since I kept forgetting the input data, entering data later leads to memory and accuracy issues, further affecting reliability.
I am pretty confident this helped with my pulse rate, because the more aerobic exercises I completed, the lower my pulse would be each time.
doesnt matter
I am confident in the correctness of my rules.
Relativly confident. Most of the time I checked pulse I took it for only 10 seconds and then just multiplied by 6 since it was extremely tedious to count for a full minute or I would lose count.
I feel pretty confident about the correctness of my rules, even though they were only evaluated for a few days. The pattern holds true throughout my ten day evaluation, and I know these rules hold true in general from my previous knowledge. When eating a smaller meal, your heart rate tends to stay at the sedentary rate, but after eating a large meal your heart rate tends to increase.
I am pretty confident about the correctness of my rules for what the system was capable of, however by not taking in account other variables that can increase/decrease heart rate may result in inaccurate data at some times. For example, one day my pulse may have read relatively low for a meal that was high in protein and similar to other meals that may have raised my pulse. In contrast this system does provide a very good base for the trend that occurs when analyzing the meals and exercises and their relative pulse ratings.
I am pretty confident, because I feel a little better and have more energy.
I've read a considerable amount of literature on healthy lifestyles. On top of that, my mom is a registered nutritionist so I grew up in a family that was more aware of such things than most of our peers. Additionally, being scientifically minded myself I have conducted quite a bit of self-experimentation in the past (BMI, weight, blood pressure/pulse, circumference of various body parts, etc.) so I think I have a pretty good understanding of my own habits.

10. Survey open-end question: Do you have any other suggestions on improving the Health Watch system?

I actually think that the system works very well. The only thing that I can say is that the time log should be changed to normal 12hr format because most people aren't familiar with the 24hr log in time.
Refer to question 33.
I think I would be able to better to have measurements for food such as cups or ounces just to have a more accurate idea of what “small, normal and large” are. Though I know for this assignment, the entries were meant to be a bit easier rather than recording too much detail.
I suggest changing the date and time input from a sliding bar and military time to a blank place for users to just manually type in the data. Mobile texting the data to the system would also greatly improve the usability of the system.
People must have an understanding of exercise and food nutrition. Simply using Health Watch alone without any knowledge will not be substantially beneficial since many factors go into pulse rate like eating on the go or actually sitting down to eat properly and when and how you eat.
A chart that graphs pulse based on time would be useful. Additionally, it would be useful to keep track of exercise or food intake in real time so that people can track their pulses. It would also be useful to have a calorie calculator and to provide a suggested exercise or food intake chart based on BMI so people can adjust their habits accordingly.
As stated earlier I think the photo addition would be a nice aspect that could be added to the system. This would allow an easier way to keep track of the foods eaten.
in computer terminology i'm not sure what it is called, but this system definitely has to be stronger in terms of transitioning. layout/format could also be improved so we aren't just reading lists and lists of our entries. maybe group entries by day, and be able to interchangeably move the entries between groups.
I think health watch system should provide more reminders to users on when they should record their data, since it can easily be forgotten.
Providing a space to enter weight and height. This could help to provide proper measurements of the amount of food, exercise and pulse rate that is healthy.
I think that the system is good overall. From a user perspective, it is easier to log in exercise and eating portions than it is to log in pulse rates immediately after having the meals. There were instances where I forgot to do this. I started recording my eating habits and pulse on a piece of paper and then logging them on the computer whenever I had access to a computer. Besides breakfast, I was not at my computer during my other meals. Another suggestion would be being able to log in meals in advanced for a set number of days without having to plug it in manually for each day. This will help the user stick to a certain routine and help regulate meal portions, exercise, and pulse rate.
Add calorie counter to indicate how many calories you intake per day. Also add in a search bar in case the user ever wants to look over past entries.
Make an app for mobile use that will sync automatically once connected to the internet.
Including calories would motivate more people to stay healthy rather than being reminded by the colors (red, green, and yellow) that they are or not eating healthy.
It would be easier for me to enter my meal and pulse rate at the same time rather than entering them separately since we had to enter pulse rate with every meal or exercise session. Also, the ability to view all of my entries at once would be helpful as well. A table with the meal description and heart rate columns vertically would make it easier for me to interpret or find a necessary date.
I think that the Health Watch system should be able to automatically look up meals we record to find calories, portion size, and advice on the meals. I also think that the Health Watch system should give recommendations based on the meals we eat.
I noticed that the health watch system does not include an entry/category for the drinks we consume. I think it’s rather important for this category to be included as some drinks can in fact be considered a meal/snack (shakes, meal supplements, smoothies, etc).
Yes, some of the suggestions on improving the health watch system would be on the time input. Instead of scrolling to get the time, i would have preferred to type in the numbers for the time. Also instead of saving, i would suggest the system to automatically save everything because sometimes i forgot to save. If this system was an application on a smart phone would have better access.
The Health Watch system should be more user friendly meaning it should be somehow accessible to those that are not always on the computer. It should also be more specific its gauging of "A little", "Normal", and "A lot" In addition, the Health Watch System never gives any instructions as to how to properly take your pulse. The only reason I knew how to take it was because I volunteered at a hospital. For those individuals that have had no exposure to a clinical setting then this would be a problem.
I wasn't sure about the "Rules", maybe if there was an option to write these "rules" down it would be helpful (similar to the goals list I talked about earlier)
I would suggest make it more interactive and fun for the user. Like add pictures.
go mobile. The system as it is is simple enough to be transferred to a mobile device. And it would remove the need to be at one's desk to use the app.
Make the system smartphone friendly. Seems like a lot of people have smart phones now and if they can access it easily through their phone, maybe more people will stick to better habits.
yes. There should be clear instructions on what to do with the system and what the goal is by using the system.
No.
I think that calorie counts would be very useful for this system. You would be able to see how many calories you are in taking and how much you are working off in a day.
Incorporate more features and have a better design in order to suit the user. Usability heuristics need to be analyzed.
Overall I think it’s good. However I think for exercise and meals the meanings of the color menu should be defined. One person may consider their exercise/meal as “normal”, while another may consider it ‘a little”, depending on their personal belief. Also there should be more options for meals and exercise.

maybe having somewhat of a guide to how someone's food intake should consist of. Or the system itself coming up with rules that one can apply in their lives to change their habits.
I believe that the health watch system is very helpful and can help patients with chronic illness. As I mentioned earlier I feel that the input of meals should be more detailed where patients can input their calorie count with each meals they eat in order to keep their portion of meals to be healthy.
Just the date and time, and meal description.
Make it mobile or with easy reminders. Automatic food classification. If its going to have text prediction/predetermined text make sure that its more varied than the stuff it has now. Basic things like pizza aren't there, instead it lists Digiorno frozen pizza only.
Other than implementing a mobile system and reminder function as I mentioned earlier, it would be very interesting and helpful to add a metrics feature. This could show graphs and breakdowns of how a pulse rate changed throughout the day and over time related to the amount of exercise and type of meals. This would help in being able to see certain patterns and progress over time. Adding a reward system or goal setting could also be helpful in keeping the patient continually inputting their data. The patient could be recognized for consistent entries or for improving or maintaining a certain health level. Rather than just being a list, these interactions may help motivate the patient to keep up with their entries and potentially reward healthy behavior. I would also recommend combining the pulse rate entry with the food and exercise entry. Pulse rate has to be paired with eating or exercise, so it is just more work having to reselect the day and time when making the pulse rate entry after the meal or exercise entry. Redundant and unnecessary actions should be removed for efficiency.
at first the 24 hour system confused me because I am so use to the 12 hour time. but 24 hours is more standard. i don't know if its just my computer or not but the type of meal or exercise box has an autofill function like if i start to type suggestions would come up that isn't related to food but instead a place. other than that everything is good and simple.
Adding a more efficient way of inputting time is very helpful. There should be more meal items in the drop-down menu of "Type of meal." The pulse box should be color coded with a spectrum of colors, because three colors are not enough to describe your pulse.
? Maybe if the system could give feedback of what is good or not good for the body. I'm not sure if that is possible but if it is that would be helpful.
Have a rating system of smiley, normal, and sad faces. Therefore it can appeal to a more younger crowd that can appreciate a certain cartoon look to the system. Also graphs and charts can be used to show the progress of the user's health. Also implementing a smartphone app to help the user to record the information at their convienence
One thing i could suggest on to improve the Health watch system, is to add a calorie counter for those are trying to count calories in order to burn fat or lose weight. For someone like me once again it would not matter because i do not count calories not do i care to see how many i eat in a day, i jus know that i eat a lot. I have a fast metabolism right now so for me it not hard to digest and intake food as it comes. Although for many people a calorie watch additional could be quite useful.
better reporting: There having "better" reporting for heart rate also might induce me to use the system. For example, give me records where my heart rate was over 80 (when no exercise was detected 30 minutes prior). Then I could see what I ate that made my rate go up to 80. Just little, normal, high filter criteria for reporting is not sufficient. Also, once you choose a report, how do u "Clear" it and go back to normal display...
I would suggest that the different categories (exercise, meals, pulse) have different colors so that it is easier to decipher. Also, a cell phone application would make for more accurate data entry.
Aks more questions so that its more detailed and provide the meaning of the normal, high, and low.
The only issue I had with the Health Watch system was the military time. Also, the system would be faster and more convenient on a cell phone app.
Except for the specificity issue, none.
n/a
graphs of how much you exercise versus how much you eat and other kinds of graphs would be helpful to the user
A calendar for all the entries would be nice. I know that it would be too big for a whole month but maybe just have it show for a week. You can better see your progress that way instead of a list of entries. The drop down list of foods could be improved because what you want to find is not always there. The option of putting it yourself is good but improving the list would get more users to use it. To make it more interoperable, you could offer this as an application on the ipad or other touch screen devices such as your phone. With the phone however the screens are smaller so you would need to design a better mobile webpage that makes is easier to see.
Make pulse part of the entry for food so I won't forget to input it.
I mentioned a lot of them in previous answers. The most important being mobile support, better free text system, as well as providing better overall analysis of data and data presentation including such information as nutrition.
Yes. The calender part of the system was a little difficult to use. The first thing is that the time was set in military time rather than AM/PM. This made it a little difficult to figure out the times. Also, if I was updating what I had for dinner the night before, I would often make a mistake and forget to change the date and the date would be the day I was uploading rather than the date before when I had dinner. Also, as I mentioned above, it would be better to have a list of foods to choose from rather than have a free text option.
Don't have "pulse" as a separate entry. That was annoying. Make things more fluid for user, I'm not sure how you'd do that but it felt really stop and go. Felt like too much clicking just to type/write in a food/exercise journal.
I would suggest inputting a calorie intake bar to calculate the amount of calories consumed in one day. Maybe even have specific categories like what food category it is from and average calorie intake with those categories.
May be easier way to enter the food, like egg , milk , meat , chicken . it does not have to be long words like pasta with chicken and not all the food options there are easy to understand or familiar for all people. I mean not all people will understand Pretzle wretzle , or some of the restaurant names.

Maybe more interactive. Such as have more interfaces for different demographic of users. Also, make the interface more appealing and prone to memory and excitement to help users remember their job.
It is an idea, but it will be great if the Health Watch system provided an example on the "little, normal, and large" description with the average calorie intake for a healthy adult. Also an app version of the group should be considered to increase portability and users could immediately input their data after a workout or eating.
Phone app. Pulse to Heart rate conversions. I use the heart rate monitor at the gym to gauge my heartbeat. This option would be helpful.
I think if there were separate systems for Food, Exercise, and Pulse it would be a lot better so everything is separated in their specific categories. I also suggest that if there is a drop down menu you should be able to add things because there was a lot missing.
I would suggest adding features that would measure caloric intake for a specific body type that we would have to enter in ourselves to make the system more personal. Also, providing additional information regarding the food we eat, or perhaps suggestions if we were eating too much in one food group. Also, I would suggest a feature that would allow us to view the system graphically so it is user friendly and easier to read.
I think making it a smart-phone app would be more consumer-friendly and easier to record down data since not everyone is able to get to a computer right away post-meals/exercise. Also, reminders about recording pulse after meals/exercises would be helpful to have accurate data.
Just making the pulse entry more convenient and having more specific ideas on what too much, too little, and normal means in this system.
Have the option of increasing the text size because older people may find it very difficult to read the text on the website. Another suggestion is to change the way a user can log the time, it was annoying to have to click the date every time you logged a entry. It may be easier if the time menu had a scroll menu, where the user could chose am or pm and then the hour and minute. Finally, the food menu could be broader and cover many more foods, because two foods can differ greatly with how they are made or what is eaten with them.
Yes I do. The designs could be more appealing and the list of the inputs should be more organized because when I look at it, it just looks like a long, dull list.
No, I've already said all I wanted to say about it.
Like a I mentioned before, make it visually manipulative than a list of entries. The interaction will be much more natural.
The time input function was at confusing at first because it is in army time and you need to maneuver the dial to record the hour and minutes. Also, the time input was not only confusing, but it was also inconvenient.
Perhaps there could be a section which allowed for charting, mapping of data, and statistical analysis for individuals to visually track and examine their progress. If the input could be translated into numbers and percentages, individuals might be even more motivated to change their eating and exercising habits.
My suggestion on improving health watch is to describe what is considered normal, a lot , or a litte and also to somehow make it available offline. Also if you happen to write in the type of exercise or meal box first and forgot to change the "type of entry" first it'll erase whatever you have in the type of meal or exercise box which makes it inconvenient because you have to retype it
It should be a bit more animated to keep the person's attention. For example, if a big meal was eaten it should have a warning. Probably consist of points earned when exercise is done and when healthy meals are eaten. Because if every time I entered an unhealthy meal or haven't worked out and my profile was very depressed I would want to work out just to get more points and make my profile colorful. Incorporate bright colors for positive actions and morbid colors for unhealthy actions and meals.
I didn't really mind the 24 hour time... But I feel like more people are used to the 12 hour clock so that would be more efficient to use in the system. Making an iPhone app for the Health Watch system would improve the system a million times more.
Add more food types! A burger from McDonalds isn't the same as a burger from in-n-out. Also allow users to select more than one item for a meal. Burger and fries for example. Allow users to see charts based on their pulse/meals, something interactive. Improve the User Interface and have Mobile support.
Beside a hierarchy type of list for the food, and definition of proportions of food, I think the system is pretty helpful in general.
Make it an iphone app! :)
no.
Explanations. About the sizes - little (too little), normal, large (too much). About the colors - what do red, yellow and green mean? About how to add a personalized list of foods. I don't think the system is bad really. I just think it needs to be better explained to people.
No, except just adding a section of calories to help us determine whats "a little, normal and too much"
I would suggest putting pulse into the same entry as meal or exercise. Having to input 2 entries, I kept forgetting to input one or the other. One is expected to fill out a pulse along with meal/exercise anyhow. Combining it would make it easier on the user. Also, the data could be displayed as a schedule, calendar format. The top could be labeled Sunday-Saturday and times on the left. That way, every entry would be color-coded for red, yellow, and green on this schedule. It would be easier for me to view it and visualize the days and times I had a meal/exercise.
The Health Watch system is pretty accurate, but it would be a nice touch if the system itself generated a few rules for the patient, such as suggesting a healthy snack after a workout, or lowering calorie intake.
have options where you can add pictures of what you ate. You can also make it a phone app so people can have more access if needed.
More interactive tools and features to make the user experience worthwhile and useful.
An application would help. Otherwise an intro video on how to use the program would be helpful as well
Most of the suggestions I had about the system I listed in question 33. One addition improvement I thought of could be the creation of a small device that attaches comfortably and discreetly to the user's body, and monitors the user's pulse rate over different periods of time. Perhaps it could take pulse readings every hour, and automatically send these readings to the web based system. In addition, there could be a button on

the device that, when pressed by the user, takes a pulse reading at that moment. That way, the pulse can be monitored not only randomly, but also right when the user completes a meal/exercise.
Another suggestion other than the ones already stated in previous answers is to make the system take in more information regarding heart rate increase and decrease variables, descriptions for users that show what a 'small or big"/"not a lot or a lot" meal/exercise entails, kind of like basic examples. In addition, state what a low or high pulse rate is. This would be to ensure that the user does not skew their own data by having an altered view of what is "small or big"/"not a lot or a lot". This will also help in the analyzing of the data and make the data entered more universally accurate for users.
I don't know if this is already available, but make a phone application. This will allow people to enter entries wherever they are.
I think the most important thing is to make a mobile version. Also, to have the ability (and consequently the suggestion) to link several measurements together. Also, it might be beneficial to have reminders. For instance, it would be nice to be reminded to record my weight and blood pressure every week in addition to logging meals daily.

11. Survey open-end question: Would you use this system or rather use a paper diary with similar formats for tracking? Why?

I would rather use this system because I prefer electronic based recording records. I think that electronic records are much easier better at logging information and definitely more organized.
I would rather use a paper diary to track this because this system does not give caloric value which is probably the highest advantage an electronic system would have over a paper format. However, because this system does not offer that, it is more convenient to just write it down on paper and not have to worry about inputting information later when a computer is accessible.
I would rather use a paper diary, simply because I always do not have my laptop with me. Several times, I would write down my meals/pulse during the day and then transfer it into the web system at night. It was also easier to just pull the piece of paper out of my purse wherever I was at the time, and that way I could write down everything I did as it happened instead of waiting and hoping I could remember.
I would rather use a paper diary with similar formats for tracking because it is more portable. I am not near a computer most of the weekdays and it would just be more convenient and accurate if I could just write it down when I'm on the go instead of trying to remember the data to input it into the system later at night.
It would be easier to use a paper diary since it is hard at times to get on the internet to be able to use Health Watch. Using a paper diary also works when going to the gym to track progress of strength training so I assume that it would work to track meal plans and pulse rates.
I would rather use this system because the input requires less time and I can easily organize information when I want to review.
I would prefer to use this electronic system of paper system because it is easier to use and also keep track of information. Als it is available everywhere compared to the paper diary. Also a paper diary can become lost while an electronic one will always have the record.
I think I would use this system because I am on the computer a lot. it is really easy to bookmark the webpage and upload your meals everday. Paper formulas would work well too, but since i spend lots of time on the computer i would prefer to upload it and keep a technical copy instead of paper, since it will last longer.
I would most likely use the online system but only if it enabled a better reminder system because it is very easy to lose track of a paper diary whereas the computer system will always be there.
I would use this system over a paper diary. For one it is more mobile if it is on the computer, and secondly it automatically stores it for me so that I will not loose it.
Honestly, I would rather use a paper diary with similar formats for tracking. The system is very easy to use and navigate, but I personally prefer writing for keeping logs. Also, I could carry the diary around with me and it would be easier to access and more customizable.
This system keeps a better track of my diet/exercise=. Writing it in paper takes too long.
Paper diary, because it is more visibly consistent.
I would rather use a electronic system to keep record of my health. for example I use an app on my itouch that keeps track of my daily intake of calories. I record my meals and exercise and it gives me accurate results of the calories. Since using it I have felt healthier and so I think having something that does all the work for you is easier and more convenient than paper diary.
I would enjoy using both because the system organizes it in an easier to read fashion as opposed to paper. However, paper is useful when eating out or exercising. Two records would also come in handy if the system were to crash or I were to lose the paper.
I would use this system rather than a paper diary with similar formats for tracking, because I can type faster than I write. This makes recording data faster and more efficient.
I think there are pros and cons for both the computerized health system and using a paper diary. For the computerized system the pros may include: neatness, legible, organized, etc. Cons for the computerized system would include: computer access, internet access, etc. Pros to a paper diary would be: can be done without a computer; can be done without internet access, etc. Cons of a paper diary would be: messy, not organized, not able to read, etc. Overall I would prefer the use of a computerized system over a paper diary as I always have access to the internet (either through my laptop or phone) and because I have bad hand writing.
I would use this system then paper diary because i prefer to type things out, and i am a lot faster at typing then writing.
I would rather use this system because it is better than a paper diary. It is accessible anywhere you have a computer and internet. Paper diaries cannot be taken everywhere and are inconvenient.
I would use the online version vs. a paper diary because it is less of something to carry around with me. I don't have to keep track of something physically when the program is online since I regularly use computers and the internet, the online system is much more convenient.
I would not use either systems because I am a very lazy person and writing everything I eat and do is a hindrance.
A system, because it's easier to track your progress and has automated features.

i would rather use paper diary because it is easier to maneuver and edit. I can also personalize it so that i would actually want to use it.
This system is more useful than a paper diary because it will put your entries in order based on the entry times. Also, it categorizes the entries into "a little", "normal", and "too much" automatically. It is easier to list the entries based on any preferred order using the system (make a list based on meal, time, amount..etc)
I wouldn't use this system because I do not like the customized list of meals provided.
I think that I would rather use this system because it is more organized than on a paper diary. I think that information could be lost easier on paper than online.
Paper diary is faster and can be imported into a custom excel worksheet which can be programmed to be faster and easier to use.
If I had to record my daily exercise/meals/pulse then I would use Health Watch rather than a paper diary. It's more convenient and more organized, I wouldn't have to carry it around, and can access from anywhere.
In my perspective, Paper dairy would be better because it is more mobile and can me more personalized.
I would use this system because using a paper diary is not as organized and you cannot edit as easily when you input your meals, pulse, and exercise. Using this system you can easily access and track what you do daily and how you can keep up your health.
The system because it actually has the categories already laid out, while in a diary I would have to rewrite things like meals and exercises.
A paper diary nobody would ever use unless it was an absolute medical necessity. If one had to choose I would say that this system would beat using paper because it is quicker and nobody has to deal with messy handwriting or writing in general.
Even though I feel like a paper diary would be more convenient at times, I would prefer to use this system. For similar assignments for other classes where we had to track our activities for an extended period of time and analyze the data, I have always preferred to use an electronic record even when paper was an option. The first reason for this is that paper is much easier to misplace or loose. I am much more likely to forget a notebook somewhere than somehow loose an electronic file. Electronic copies are also more legible. I find that sometimes my handwriting can be messy and I am not able to read what I wrote. I also do not need to worry about spilling something on an electric copy and other ways of accidentally destroying part of the record. Although there are advantages and disadvantages of both types of records, I prefer the electronic system. The web system also allows for access from different devices including my laptop, phone, and computer at work.
the only down side to using an electronic recording is having to be at a computer to record. you might be out at a restaurant and forget to record your data. however this could be fixed by a smart phone application assuming the people recording have smart phones.
Using the keyboard may be easier to read and input, however, it is more convenient to have paper and pen on hand. You can quickly write your information with a piece of paper and pen. Above all, a smartphone is very useful to input data immediately, but typing is a daunting task.
I would rather use the system then to write it down on paper because you can lose the paper and you can always forget. But in both cases you can forget
This system, because recently everything has turned to technology. Systems like these help to organize records better and keep records more appealing than just a paper.
I would prefer to use this system. it was way more organized and simpler to use than a paper diary. It keeps all the data organized and in a nice format. you can sort the data by categories and you can not do that with a paper diary it all just a big mess. You can easily type what you need to and delete if you don't need it, the time stays on track and it is basically simple to use.
Use this system, it has reporting, can be saved, archived easily (rather than photo copying diary)
I would rather use this system rather than a paper diary. Paper diaries could be easy to lose and not as well organized.
I would this system rather than paper because my handwriting is awful and is easier to lose it.
I would rather use an electronic system such as the Health Watch than a paper diary. It is faster and I could easily go back and edit or delete any of my entries. On a paper diary, I would have to manually look for the entry and then erase it by hand.
Maybe a paper diary because I am better at writing things down; especially if I have it with me all the time and I don't always have the internet access I need to update Health watch.
It is much more convenient to use health watch, just because using a paper diary would take a long time.
yes, the electronic method is much easier to keep track of and is located in one place
I would rather use this system because it is more convenient. We live in a computerized world and I feel that tracking online has more benefits then tracking on paper. For one it is more legible and there are less spelling errors. Accessibility would increase because you would log in anywhere with internet instead of always carrying a diary around. Many people have smartphones that can easily access this. Everything is more organized and clear, there are colors that indicate certain things. With a diary, you would have to do the color coding yourself and that takes too much time.
I'd rather use a paper diary. I don't need to remember to log in and entry of data will be easier.
NO electronic electronic electronic. Paper is so old and I would never want to use paper.
I would rather use this system because a paper diary would require carrying something around and it would not be as organized. Once certain changes are made to this system, it will be much easier and it will be much easier to use the system than the paper diary. Also, it seems that it would be much faster to upload it onto this system rather than entering the data into a paper diary.
No, I'd rather not have to log in and have internet to take note of what I'm doing.
Yes I would use this system rather than a paper diary because I can access it from anywhere rather than keeping the diary handy. I can access from my home, phone, or even any computer.
This is system , because it is faster and easier to do during working on the computer doing my homework.

No.I'd rather use this system. Paper diary is prone to error. People may forget doing it and easily to lose papers. Also it is hard to keep track and record and duplicate records if necessary.
I would prefer the paper diary with similar formats mainly because I can control my own format in a way I can recognize and its portability.
Paper. Much easier.
Paper diary because I am able to keep it with me. A lot of the time I entered the information the next day or very late was because most of the time I do not keep my computer with me. So even though I would keep track I kept forgetting to log it. If I had a paper diary it's easier to keep with me at all times and track as it happens. Plus people don't have to worry about figuring out what buttons mean and can be more confident in their input.
I would use this system rather than a paper diary because I am on the internet often and it is easily accessible. A paper diary may get too cluttered since my handwriting isn't the neatest. Also, it may not be consistent in terms of formatting and organization.
If this became an app for a smart-phone, I would rather use this system. However, if it continued to stay on the computer, I might have to consider using a paper diary because of its portability.
I would use the system more than paper diary. I feel that the system would be more organized and legible.
I would rather use a system like this because you can access it at anytime in many different locations. Whereas, with paper you may forget it or lose it and all your results would be gone. This information is stored for you to retrieve at anytime. Also, It helps to keep it very organized. Finally, a user's privacy will be better protected with a web system then paper because a paper record could be stolen or lost.
I would use this system because now days, it is easier to get to a computer than carrying around a note book to write the stuff down. It is more convenient and I would not have to worry about losing what I wrote down.
Yes, if it were refined a little bit more for easier use. Writing in a paper diary is troublesome and it could be misplaced.
Maybe a paper so I can note down my pulses right after my meals, because sometimes I'm not beside my computer, cannot access this website.
I would use this sytem rather than a paper diary because I can log on with my smart phone rather than having to carry a separate booklet to record things in.
This system would probably be best as paper records could often times become lost or illegible. Especially if this system was equipped with statistical features, it would be beneficial for most people to use this program especially if they are interested in tracking their own daily progress.
I would rather use this system rather than a paper diary because for one I can lose or misplaced the diary and as a result I'll lose all my information. Also this system was very easy to use and to input what you eat.
Since this system doesn't have any animation and it just consists of entering info without a consequence I would rather use a paper diary because I didn't always have internet access. So I would have every entry on point if it was through paper. In my case, I like writing more than using a laptop just because it is faster for me and I don't have to log on to any website.
I would honestly use a paper diary with similar formats for tracking over this system because it is just so inconvenient to have to log onto the computer every time you do an activity and need to keep track of it. If there was an iPhone app for this system, I'd choose the system over paper diary.
I used a paper diary to keep track of my meals and pulse. Often it was hard to keep track because I was not near a computer when I ate, so I would write it down and enter it later sometimes I would forget so I had to add one or two days worth together.
I would use both. The paper diary would be helpful in recording when computer systems are not available. The electronic system would then help with the color coordinating. If there was an app that was exactly like the online system, I would definitely choose that for its convenience.
I would prefer system online. Less clutter. because it is easy to access old entries and look at your overall progress through a computer.
paper diary seems to be faster. The website does not offer anything new. There are no analysis that I can;t do myself.
Yes. Paper kills tress and deforestation is a seriously problem in our world. Plus this is sooo much easier. And it is also easier to review.
No, I'd rather use this system on the computer because it's more accessible and easier to remind yourself. Using paper diary systems would probably cause many individuals to lose their information.
I would personally rather use paper calendar, as in the planners. It does not require me to have internet. I could easily pull out a booklet and write this information down than waiting to go home to input data. It would make my data more reliable. Furthermore, having to login to a system and learning the system can be annoying and time-consuming. The data is also hard to read in such a long list.
I would honestly use a paper diary system because I do not have my laptop on me all the time. In fact, I sort of used a paper diary system during this trial where I wrote everything down, then inputed the data into the system when I had time.
paper might be easier
I would rather use a paper diary with a premade layout for tracking. Although this system is portable and can be accessed anywhere. A diary is more easier and self explanatory and requires full user interaction.
This format is nice, its simple, easy to use just not as accessible as a paper diary. Then again you could forget the paper diary at home and not use it either, so both require a bit or dedication in order to use. But in the end, this program is more useful. Plus, in the future the program could be updated to create graphs and charts to show intake vs. pulse.
I honestly think that I would rather use a paper diary than this particular Health Watch system because it would be easier for me to keep track of my specific food intake and exercise regimen. Also, a paper diary is something that I could take with me and fill out as I complete eat exercise/meal so that I wouldn't forget it all by the end of the day.
I would use this system rather than a paper record for multiple reasons such as because the information in the database is less tedious than writing and the database is more efficient and quicker to use as well. Also, paper records cannot group certain pieces of information like a database does (for example can filter out all the colors of the text boxes) and the data can be retrieved from more universally from numerous

places instead of having the record in one place on paper. Finally it is very easy to keep track of and this method is extremely great when it comes to analyzing the data after it is already entered.
Yes, because I type faster than I write, so it is less time consuming.
I prefer electronic systems, but that may because I'm quite a technically oriented person. I also like the ability for future applications of the data (graphs, etc.) that can be accomplished much more easily with electronic systems.

12. Survey open-end question: What are the advantages and disadvantages of using such a web system?

The advantages can include being very organized and very easy to use. The disadvantages are that if they are not maintained, then the logs can easily be lost or corrupted.
An advantage is that the information won't be lost, improved features could help to better analyze food and exercise history. However, some disadvantages include limitation to using it only when a computer is accessible, internet needs to be available for input, and the list format doesn't make it any better to view than a list on a paper.
The advantages of a web system include the fact that I could copy and paste if I had eaten the same meal more than once such as breakfast, and the fact that is better in terms of privacy since it is guarded by a password. However it is a disadvantage because, as mentioned, someone might not have easy access to the web system at all times of the day.
The advantages of using such a web system is that everything is kept in one place instead of loose papers and increases privacy since it is password and username protected. The disadvantages of using such a web system is the need for internet or a computer and the bigger time consumption.
I cannot truthfully think of any advantages of using a web system unless the point is to be able to share that information with health professionals. The disadvantages are that it is a tad hard to be able to get on the internet to access such a web system and at times I was prone to forgetting .
The advantage is that such a web system is easy to use. The disadvantage is that this system is only accessible when I have internet connection.
The advantage is that the information is always stored. It cannot be lost so this helps with keeping track in a long term situation. Also since it is connected to the web it is assecible from any device that can connect to the internet. Disadvantages to this system is if a user does not have internet access then they have no way of entering their information. Also the security of such a system is always going to be a factor. Users may be worried that someone will be able to access their information about their meals and exercise. This could make some users uncomfortable.
some disadvantages are info not being properly saved, forgetting passwords, having difficulty understanding how to use such a system, computer crashing or internet not working, and easability issues. advantages is that if properly saved and understood how to used, the information won't get lost, and it could be easily transferred/sent to a second hand party (if the system has that function) like a doctor.
The advantages to a web system are more efficient recordings and a neater diary, but the disadvantages could be extreme generalization in regards to meals and time of day for convenience purposes
The advantages of using a web system are that it stores a collection of data for you, you can access it from almost anywhere in this day and age, you can edit it easily, you can see it all on one screen, rather than on multiple pages. The disadvantages of a web system is confidentiality; the data is not safe from hackers and the fact that the data is stuck in electronic devices-in some techniques people put health watch type diaries on their refrigerators or somewhere, that they can see every morning to remind themselves.
Advantages of the web system is that it's very organized and quick to log in data. In addition, you can add data days after the event took place and it will still keep the data in chronological order. It is also color coded so you can see how large or small your meals were. In addition, it would be easier to transfer the data to an excel file for analysis. A disadvantage is that users may not have access to a computer or internet. Maybe the program could be something the user can download to the computer so that they won't need internet access. They could keep the program on their desktop menu for easy access. Also, since the program is on the computer, people may forget to log in their information since they are not on their computer all the time.
Advantages: keeps the entries organized and should be able to calculate overall health or at least calories spent and taken. Disadvantages: web systems could malfunction. Could lose all entries ever entered.
Advantage: cataloged food database Disadvantages: cumbersome, time consuming, limited database, visually unappealing
Advantages include simple and fast recording, but the disadvantage is trying to stay updated and go on the actual website of the system to record your information. The computer is a big distraction to lead you to search other sites that you might forget to record your health.
Advantages include systematic organization of the material needed, easy to find terms, meals, or anything else, ability to keep all records in one system, and the ability to access the information from anywhere that supports the program. Disadvantages include possible hacking of personal information leading to privacy breach, system computer malfunction or failure, and ability of needing internet access to update/access the program. The system could also be costly and hard to understand.
The advantages of using such a web system are that it is fast, efficient, it automatically records whether the pulse rate is normal, too high, or too low, the information cannot get lost if it is backed up and recorded on several servers, and it does not take a lot of time and effort to record meals, exercise, or pulse. The disadvantages of using such a web system are that not everyone has access to a computer or the Internet 24/7, and there are privacy issues in that people can hack another person's information.
The advantages of using a web system is: you wouldn't have to carry a paper diary everywhere you go, neatness, legible, and organized. Disadvantages of a computerized system include must have internet access, data never gets lost (compared to a diary which can get lost resulting in the loss of all data) and must have some form of technology (laptop, ipad, phone, etc) to access the internet.
The advantages of this web system is that everything is neat. Everything is visible and color coordinated to see the difference. Also its easier to use when typing in the food intake and pulse rate. The disadvantage of this system is that it requires internet access, which is sometimes inconvenient.
The disadvantages to the system are: 1. The security behind the system is in question 2. The redundancy of having to continually log in 3. The reminder of having to go online to input information The advantages to the system are: 1. Being able to access it at any computer with

internet 2. Keeping a digital record of your habits 3. It is easy to learn 4. It is simple
Advantages- you don't have to worry about physically carrying it, well organized, easy to browse old data/skim through data. disadvantages- if it is on an internet database and the internet is down you cannot access it. A lot of chronic care patients are old and technologically handicapped just because it has not grown up with them, it may be hard to understand for older people, a help bubble option might be useful for these types of patients.
The advantages of using this system is its fast and easy to use. Very simple and straight- forward. The disadvantages of using this system is its not always available for the user and they might forget the information that they have to put down. There isn't internet everywhere a person go to open up this website and use it. Also, information might get lost and might be expensive.
The web system requires an internet connection and you are not always at your desk.
I think the disadvantage would be that it may not be easy to access. For me, my internet was messing up so I had to log in and log out of the system multiple times. some of the one I listed got deleted and I would have to re enter it in.
The advantages of using a web system is that it provides features that paper diaries can't provide. It allows you to order your entries based on your preference. It is visually pleasing and easy to comprehend. Also, if you make a mistake, like forgetting to input the time, the system will remind you. The disadvantages of the system is that you have to input your data which can get tedious.
It does not provide any sort of reminders and requires internet access.
Advantages is that it is faster than writing on paper and the information is easier to store since it it on a file online. It is also better organized. Disadvantages are that you need internet access, a computer to access the system, some people may not know how to use the system, and could forget information like user name and password which makes it difficult to use.
Web system is convenient and mobile. But is hard to use and takes a long time.
The advantage of using a web system is that we can access it from anywhere, its more organized. A disadvantage is that some participants may not have the basic computer schools, so they would not likely know how to operate such a system. Also as discussed in lecture, more people don’t like change, so one would not consider the use.
My not enter data correctly due to the delay in recording the information.
The advantages of using the web system are that you can easily organize your intake daily and how you can improve your intake by looking at your chart. The disadvantages of using the web system is that it is computer access only and although technology is continuing to advance there are times when you are for example exercising and do not have access to a computer it is hard to keep track of how long you have been exercising and in this case a paper diary would be an advantage.
It's consistent because the system is already laid out and clear. The format is always the same. It's still not the most intuitive system.
The advantage is that it can be accessed from virtually anywhere and that it can be done quickly. The disadvantage is that using this is a bit clunky right now and has a long way to go before it can be considered a serious application.
Some of the advantages of a web system are that it can be accessed from multiple locations and any device with Internet access. This means health-care professionals can look at the data without the patient needing to come to the office or worry about transferring the data. It is much harder to loose and legibly is not a problem. Data can be safeguarded with a username and password. Recording the data in an electronic record makes it much easier to analyze and create graphs and tables to visualize the data and turn it into useful information. It becomes much easier to compare data between two individuals or find trends in groups of individual data. Some disadvantages include the need for Internet access in order to record data, server crashes could make the web system unavailable for an extended period of time, and the potential difficulty users may face trying to learn how to use the system. Many of the older patients who would commonly use the web system are not familiar with these new technologies and would need training and reminders on how to input their data. This could be frustrating for them and make them not want to cooperate and use the system.
advantages is that you can view all of your data pretty easily all in one place and its easy to write in if you are in contact with a computer. downside is even having a computer with you when you do your activities.
Advantage: Using this web system allows you to keep track of your day-to-day activities and meals. As you keep on inputting the data, you notice a trend or routine with your life, and you have a choice to change what you are doing, or keep on going. Keeping the system on a computer makes everything legible as well. Disadvantage: Inputting the data is very tedious, especially when you are a healthy person. When inputting time, I find it hard to know what time it is on a 24-hour clock. You also need an internet connection to be able to input everything.
Well disadvantage is that there is no reminder to put entries into the system and advantage is that is saves everything you put into the system
Advantages will be accessibility, usability, workflow and overall organization. Loss of records is not a problem. The legibility of records is better because everything is done on computers. There are many advantages of using systems such as these because today technology use is growing extremely fast. It is also easier to coordinate care needed. Active follow-ups can ensure the best outcomes. Patients can be train to manage their illnesses. Disadvantages mainly dealing with problems of privacy. Everything is on the internet or in a system so the threat of information theft technologically can pose as a problem. Data glut is a problem if it is used amongst different users
Advantages: information stays organized and precise. Easy to you use and can be categorized in different ways and topics. time stays accurate and can be accessed from any where at anytime as long as you have the link for the system. Disadvantages: time consuming after a while it becomes a hassle. sometimes the scroll does not work properly, and the pulse rate should be added into the box as the meal and exercise not a separate box so it can coordinate clearly with the meal or exercise.
Advantages: it has reporting, can be saved, archived easily (rather than photo copying diary) Disadvantages: No mobile access (a diary i can carry with me into a restaurant or dinner party)
Advantages are that it keeps the log organized, and safe. However, a disadvantage of a web system, is the privacy issues that come with it. A web system can be hacked into and personal information of the user can be taken.
It can be access in different places through phone or computer. Its easy to use and motivates you to exercise as much as possible.

Advantages: Faster, user friendly, compatible. Disadvantages: Inconvenient, not portable.
Advantages would be that it can be more specific, reliable, and faster to record your information. The disadvantages is that it is easily forgettable, if someone doesn't have internet access, and not knowing how to use the system. It depends on how well the web system is designed and whether it is easily accessible.
Times where it would have been ideal to record my findings, I was not able to. Sometimes when I wanted to record things, I wouldn't always be in a place that had internet access, so that made it difficult to keep track on the website. In this case, I had to write my findings down and wait until I got home to input my data.
although the web system keeps everything organized, the system could crash of fail
I web system can protect your privacy because you need an ID and a password. With the web system you can use more applications than a pen and paper can. The system can be interoperable between many people, as in multiple people can see it at a time. A patients family member can check up on you or their doctor. There is a standard that everyone can follow with this system and it could create less work with "clicking the mouse" instead of writing everything else. Information is easier to handle because it can be transferred, saved, or printed out. Disadvantages are you can't physically log on all the time to record your info. Also people might be computer challenged and can't log in there own information such as older folks. If the system were shut down information would be lost. It could take longer for some people to do than writing it out. People would have to be trained in using the system and evaluations would have to be done to give the system beneficial updates. This system could cost a lot of money to run or buy. Patients might even have to pay to have access to it.
advantages: data input is more organized and dates are on track. disadvantages: its easy to forget and the input form is very not user friendly.
Integration across multiple platforms as well as data visualization are extremely big advantages of a web based system. The problem is without mobile support is access to a computer near or around the time of consumption of food or exercise taken. This leads to times where I am logging data from the past or even past days because it is the first chance I had to log such data.
The advantages of using a web system is you can upload your data quickly and the system would keep all the data organized. The disadvantages of this web system were that internet was necessary to upload data and I did not always have internet so I had to upload data at a later time sometimes.
Easier access to those who need to keep track of what the user is doing. Disadvantage would be actually using the web system, I feel you could really just do the same thing with a text file.
Advantages are that it keeps everything simple, and in one area, able to access from anywhere or anything as long as it has web access, it is convenient to see and already keeps track rather than scribbling everything down, it is automated so I can type legibly. Disadvantages are that you need internet and must always log on to access the information everyday.
The advantages are saving time , keeping history of the entry data for days that can be accessed any time needed. Confidential , only me can access it or the Dr that I choose to show it to , The disadvantages : not all the people know how to use computer and technology especially elder people. Also it is hard to remember to enter the data , sometimes we forget to enter the data or do not have access to internet. Also one of the things should be in consideration is that not all the older people know how to calculate their pulse. I think they would need some one to teach them first.
Depends on the users. If the users is more comfortable with technology then a web system offers so many more conveniences. Also, electronic system offers so many more advantage in term of transfer,mobility and such. But those who are not good with technology might not like it so much.
Advantages include - less work for the user to input their data (no need to label specific data and organize it in a table) - Very well organized and has summary view of all the data inputted, which may be easier to see the pattern. Disadvantages include - User needs access to a computer - The form fill will not always cover the data input the user was seeking
Need access to phone or internet to use. Phone app would be nice.
Advantages: It's neat and easy to read. Disadvantages: It can be confusing, it's inconvenient, the non-free text options are limited so you cannot usually find what you actually ate.
The advantage of using the web system is that is it easily accessible, organized, and neat. Using an online system would make it easier to calculate numbers, create graphs, or input data. However the disadvantages would be not being allowed to use your own formatting.
Advantages would be that it already organizes the data for you once you enter it into the system and it's easy to read and analyze the data for any patterns. Disadvantages, as mentioned above, are portability issues and not being able to record the data right away.
Some advantages would be convenience, more organized, and easier to search for history. Disadvantages would be for a person who does not know how to use a computer. As well, when you eat a meal, some people may forget to plug in what they ate that day, unless they have a smart phone or a computer in nearby areas.
The advantages of using such a web system is all your records are saved and you don't have to worry about misplacing them, also it is very well organized and is legible to read. Also, it can be accessed at all times of the day in different locations. The disadvantage with this situation is having access to a computer and Internet, without this the program would not be able to work. Also, privacy issues could be a problem because it would be fairly easy for someone discover another individuals health account if they figured out the password. Other disadvantages are some people may forget to take their pulse or record what they have eaten for a couple of days. Finally, for older patients it may be hard to read the small dialogue on the web system, there needs to be a way to enlarge the text.
The advantages are that they can be saved into the database and not be lost. Also, it makes it easier to read and there will be no confusion of what you put down before. The bad things could be the complexity for those who do not know how to use a computer that well. Also, someone can hack the data and get someone's private info.
It can be accessed anywhere as opposed to a paper diary where you have to carry it around. The only problem would be that you need to have access to internet to enter information.
Advantages: you don't need to keep a paper record, able to access the data anywhere as long as you have internet. It keeps a record for you. If the system allows, there's also many different kinds of calculations you can do. You can also filter to see the entries. Data are easy to manipulate. Disadvantages: Not immediately accessible. May be slower than writing on paper because writing is natural to human, especially

elder people who doesn't use technology a lot. Easy to forget to log on the website and note down the data.
Having such a system via web allows not only the individual, but also his or her doctor to access and evaluate their health lifestyle at any time and anywhere with web access. Also, being able to record on a computer system allows legibility and enables quick searching and editing. However, the fact that this is a web system may actually be a disadvantage: online access may not be available at all times and having to log on every time to make an entry compared to quickly writing in a paper-based journal may be a hassle.
A web system is a good way to save inputted data and get computerized feedback (i.e. color-coding) in order to assess how well your eating and exercise habits are and how they impact pulse rates. Unfortunately though, it is not always possible to be in the proximity of the internet, making it difficult to constantly input data after every meal or exercise or pulse reading. Also, if there is a system failure, that could account for a loss of data or postpone the opportunity to input data.
The advantages of a web based system is that anyone who have your password and username and know what you're eating and can keep track on what you're eating. The disadvantage of a web system is that you don't always have internet with you and sometimes you might forget what you ate.
The advantages are that it wouldn't be lost as easy as losing a paper since it is online. When its online you can have all your entries in one profile. You can also keep your entries as long as you remember your password and username. The disadvantages are that internet access and/or computer access may not always be available so it is easier to forget to enter your info or you might not remember by the time you do have access. Also it is a bit harder if you have to follow a format that was set for you instead of setting one that works for you.
The advantages of using such a web system is all the information is stored in one place and is technically safe from damage. The disadvantages of using such a web system is that not everyone has access to the web 24/7 and patients may forget to enter their information
Advantages: It is easy to see, share and compare entries. In the future there may be a chart system that lets you plot your pulse data. Disadvantage: You need access to a computer and internet to update.
Advantages would have to be that it helps pressures you to take time out of your day, and sit down and record, pay attention to the meals that you have had that day. Disadvantages would include the inconvenience of not having a computer every where you go.
The advantages are that it more organized and all in one place. The disadvantage is that it is not always easy to input the data when you don't have internet access readily available to you.
n/a. The feature set i still too small to tell. Right now, it is at a disadvantage to paper based systems or other online sites out there.
The advantages are no paper, accessible from many different places and easy to organize. The disadvantages are safety and security and if you are not near the internet - like on a mountain hike - then you can't use it.
The advantages of this web system is that you are able to know how much you are consuming something. This is a great way for one to see and judge whether the things they were eating were healthy. I did not come across any disadvantages.
The advantage of a web system is that you can organize the data in a way that would be easier to analyze. I could sort out and simply see all the food entries. It is easier to pull up data and I don't have to bring extra materials with me. The data is clear and legible. In addition, the information is saved and won't be lost. Having a login keeps the information confidential. However, the web system is out-of-the-way to use. Users may forget their password and have to look it up. Learning how to use it can be difficult. Also, the user must have financial stability to be able to afford it.
Advantages of using a web system include the system telling the patient right away if their pulse was low/medium/high. Disadvantages include not having access to a web-based system 24/7. This forces us to write down our meals/pulse/exercises in a notebook or (like me) in my phone.
it can store a lot of information. Sometimes people might forget to log in because no access to the internet.
It can get confusing and also requires a computer to input. Sometimes the system restricts you to do something a certain way instead of a way that you might want to do.
Web system is easier to use and values can be used in future results and test very simply
One advantage of this web system is that information is much easier to record than doing it by hand, and the information is much better organized. Since it is more organized, the information is easily retrieved by the users or health care professionals who need to analyze the information. The data inputs are coded by color, and can easily be grouped together like we did when we formed our "rules". This system is also advantageous because it allows multiple users to have access to the information over a short period of time. In addition, people who are large distances apart can view the data at the same time. This allows effective collaboration of health care professionals and of the users of the program. It also limits the need for in office visits with professionals and doctors. Also, a large advantage to the program is that it is web based, so it can be accessed from several different computers instead of just one computer; the user can input data from work or even from an internet cafe. A disadvantage of this system is that is not easily accessible on the move. A computer and internet access are necessary for the information to be recorded, though these things are both relatively accessible in the society that we live in. It would be much more accessible if a mobile application was developed, and people could record their data as soon as they collect it. Instead, with the current system, users must remember their data until they have access to a computer, which can cause many difficulties such as loss of data and user frustration. Also, the menu that exists for the food choices is difficult to use because it is not as specific as it could be. Users might become frustrated with the fact that they cannot record the food they way they would like, and they might discontinue use of the system.
The advantages of a web system are that they provide accessibility, both remotely and simultaneously, it provides and enhanced scope of the data and the data retrieval, and increases interoperability. In addition, a web system is less tedious & redundant when it comes to data entry compared to paper, making it more efficient. Finally, it's easier for users to keep track of their data, it provides increased convenience for users both to use and analyze data, results in more positive outcomes, has fewer errors than paper records, and increases organization. The disadvantages of a web system is the potential difficulty of the system to the users who may not know much about newer technology, can have privacy issues, and can have catastrophic failures in which data can potentially be lost or unable to be retrieved.
The advantages is that it is like a database with all the entries, it is very organized, and information is very easy to retrieve. The disadvantages are there might not always be a computer around to input entries.
Access to a computer/internet connection is necessary. Again, a mobile version would be much better.

13. Survey open-end question: What are the advantages and disadvantages of using a similar paper diary?

The advantages of using a paper diary is that you can write out anything that you want to compared to a web system where it has set things for you to choose from. The disadvantages is that it can easily be lost because there is only one copy. Another disadvantage depends on the person's penmanship. Legibility can be the problem there.
An advantage is that it is convenient and can potentially be carried everywhere she goes. However, disadvantages would include illegible handwriting, no sharing of this information, potential for this information to be lost.
Advantages of a paper diary include that it can be filled out at any time during the day, and is not confined to one sitting. However disadvantages may include that the paper diary could get lost or ruined.
The advantages of using a similar paper diary is that it is more portable, accurate, easy, and promotes consistency. The disadvantages is that you could lose your diary and there is less privacy since anyone who finds your paper diary can read it.
The advantage would be that you could carry a paper diary with you at all times so you could immediately write down your information. The disadvantage is that you could loose a paper diary much more easily than compared to a web system.
The advantage to having a paper diary is that I can write in it whenever I want to. The disadvantage is that is takes more time, can be disorganized, and it is difficult to monitor progress.
The advantage of a paper system is that it can be taken with you wherever you are. Also you have the feeling of security because only you have it in your hand. There are not copies anywhere that the user has not put them. A disadvantage would be the ease of access. If a person forgot the paper diary at home they would have to remember what they ate and what the portions were and would have to remember to enter it when they got home. This is a big disadvantage.
the advantages of paper diary is that there is no password or login info needed, it is very user friendly (simply use pen and paper to write down), there is no need to contact a user help if problems occur, and it is easily accessible (no need for computer or internet!). the disadvantages is that paper could easily be lost or destroyed, and there would be difficulty in sharing this info with a second hand party- retype and email? scan and mail a copy? this could be time consuming.
The advantages of using a similar paper diary are that it is more personal and takes more thought, whereas the disadvantages are that it is easily lost and not necessarily as accessible or efficient
The advantages of using a paper diary is that you can physically put the paper somewhere to remind yourself of your diet or to fill out the diary. Another advantage is that no one can see it unless you allow them to see you diary. The disadvantages are that it would be hard to edit without erasing or crossing out and that it could turn into a long collection of pages filled without with your health behavior. Another disadvantage is that you may loose a page or all of the diary.
An advantage of the paper diary is that it is portable and easy to access. It is more customizable in that the user can take it anywhere. It is also simple and would need less instruction than the online system. A disadvantage is that a user may lose their paper diary or misplace it whereas the online health tracker will always be available.
Advantages: never lose record of it. It's more personal. Disadvantages: if user ever wants to look up their own entries they have to flip through many pages until they find what they need.
Advantage: consistent chart, easy to use, no need to remember an account Disadvantage: legibility, not as easy to compare amounts
Advantages is that you are more likely to remember to record your information, but the disadvantage is the amount of work you have to put into it. It will take more of your time on paper to write it all out and it can even get lost.
Advantages include portability without the use of internet, the improbable, but not impossible, breach of private information since it is not on a program that can be hacked. Disadvantages include the use of a physical object that cannot indefinitely keep track of information in one place (would have to use multiple notebook on a long term basis) and the possibility of the information becoming unorganized and scrambled since the patient must enter the data with his or her own handwriting, which may be difficult to read.
The advantages of using a similar paper diary are that an individual can hide and protect the information better since it is not available online, and the individual can record the data anytime. The disadvantages of using a similar paper diary are that it takes more time, it does not automatically record whether the pulse rate is normal, too high, or too low, it could get lost and there would be no back-up files, and the information recorded might not be legible.
The advantages of using a paper diary are: no need of internet access, no need of technology (computer, phone, ipad), and very convenient (can pull out and record into ur diary at any time rather than find a computer to use). The disadvantage of a paper diary is: can be illegible, can be unorganized, can get lost (therefore all data is gone), and must carry your diary around at all times.
The advantages of using similar paper diary is that its easy to access and you would not have to save everything every time. The disadvantages are it takes longer to hand write everything. And since its a paper diary one can easily misplace or lose the information.
Paper diaries can get lost or damaged. In addition, you cannot take it anywhere to record.
advantages- you can add whatever data you think is necessary without the restriction of organization. disadvantage- could get lost, would have to carry it around as well as a writing utensil. Personal handwriting may be illegible (some chronic patients have Parkinson's disease which can make their writing really shaky). Personal entry may lack all the necessary data if it is all freehand and there is no format or organization given.
The advantages of using a paper diary is its easily accessible. Its also cheap and quick. The disadvantages of using a paper diary is it might get lost. And if the user is trying to find a specific date or event, it might take them a while to find it.
You have to deal with paper and handwriting. Things are not automated so you have to read the notes and monitor everything on your own.
With the advantages of the paper diary, I was able to bring it every where with me and whenever I ate or had to take my pulse, it was ready at hand. Plus, I like to color coat stuff with highlighters to personalize it. A dis advantage would be that I loose it and all my records will be gone.
The advantages of using a paper diary is that you can format the entries in any way you prefer. The diary can be personal and catered to the individual. Disadvantages of a paper system include its lack of flexibility, more likely to be misplaced, may be difficult to read and can lead to

more mistakes being made.
With paper diary you don't need internet access but the patients information will not be readily available online for a health care provider to access it.
Advantages of using paper diary is that you don't need internet you can just write in it whenever you want. Disadvantage is that it can get disorganized being written on paper, it could be messy and illegible. It would be harder visually to see trends or color coordinate, would take a lot more time to fill out.
Having a paper diary is easier to use and faster. But cannot be carried everywhere.
The advantage of using a similar paper diary would be that all users would know how to conduct such an evaluation. Both young and the older generations would know how to use it. A disadvantage would be that a paper diary might not be organized. Nowadays because of technology people have a hard timing writing. So paper diary could be hard to read. Also another disadvantage would be that one could lose or misplace their paper diary, which in some cases lead to a privacy concern if it get into the wrong hands.
It may not be understandable, and it can be easily be misplaced or lost.
When using a paper diary there is not a format that can easily organize what time, how much, and what you are eating, exercising like the web system, which is a disadvantage. An advantage of paper diary is that you can carry you diary everywhere you go and can easily input what meal, exercise, and pulse right away where as you could not if you had to do the web system which in an advantage for the paper diary.
You could always have the paper diary with you, which makes it easier to log right away instead of waiting to have access to a computer.
The advantage is that you don't need a computer or smartphone to be able to log your details, and you can do it right after you eat. The disadvantage is that it can't be done as easily or as quickly. Also when something is handwritten it can leave a lot of room for errors.
One of the major advantages of a paper diary is its simplicity since it's a relatively easy concept for people to understand. It does not require the internet or any sort of electronic gadget to record data, so as long as the patient has the diary with them they can make an entry at any time of the day wherever they happen to be at that moment. Disadvantages of the paper diary are that that is the only copy, so loosing or damaging it means all the data is gone. The information is not secure, so anyone potentially could look at the information if they have access to the diary. Consistent format is difficult for health-care professionals to maintain, which also makes analysis of the data especially difficult. Being able to analyze large numbers of individual's data to see trends and patterns also becomes difficult. Lastly, transfer and communication of the data is much less convenient than a web system.
advantages would be that it might be portable like if you use a small booklet you carry around with you. disadvantage is if you have long term recording it might be hard to analyze since you will have to look through everything and it wouldn't be easy to sort out.
Advantages: Paper Diaries are convenient and makes recording fast and easy to write. You can write your data virtually anywhere and anytime. Disadvantage: Paper diaries might contain illegible material and take a lot of storage space. In some cases, you can lose your paper diary.
Disadvantage are that you can lose tha paper, and you can forget. And for advantagesÑyou can write it down wherever you are and not have a computer to have to do it. Because many times I did forget to write down what I ate because I don't carry my laptop with me everywhere.
Loss of records, lack of coordination of care, lack of active follow ups, and patients are inadequately trained to manage their illness, legibility, accessibility, interoperability(if used with other systems), and workflow are disadvantages to the paper diary. There is no interactions between other patients therefore the patient is fairly alone if not educated adequately. Privacy is kept when using paper diary and also data glut is not a problem with paper diary.
advantages: You can always carry it around with you or keep it in your car and whenever you need to write something you can write it and record the data. disadvantages: it all goes in one order so you don't have a computer to organize and separate it in to specific categories.
advantages: a diary i can carry with me into a restaurant or dinner party disadvantages: no reporting functionality, cannot easily save diary(other than scanning or photocopying)
With a paper diary, the information would not easily be accessible to others, which could be a negative or a positive. For example, doctors would not have easy access to view the information, but it keeps the patients information safe from those that should not be viewing it.
You can lose it, have to remember to take it with you, and can be hard to read previous entries.
Advantages: Portable. Disadvantages: Slow, tedious, manually search for entries.
Advantages would be that it can be carried around everywhere, you are free to write as specifically as you want, and everyone can do it. Disadvantages would be that if it were to get lost, there would be no way of retrieving all that data once again and also some people would think it's more of a burden to write than to type.
Using a paper diary, you may be prone to writing down mistakes or wrong information, and handwriting is not always legible. I have found that with health watch, I was able to edit very easily. Also, my data was kept in chronological order by date and time, which kept everything very organized.
a paper diary is easier to carry around rather than a a laptop, but is also easy to lose
Disadvantages are include the passive nature of using paper. It cannot tell you if you did something wrong or forgot something. It is not as legible as typing on the computer. Visually the computer can help you with certain icons and there is more interaction by the user with a web system. It is more time consuming to write everything out. You cannot check the time you logged in your info with a diary. With the web you can check your entry time. Paper is not as accessible as the web. If the diary is lost all the info is lost. Advantages include a more personal use of pen and paper. If you write something down you are more likely to remember it. You do not have to worry about malfunctions or usability issues with paper. You have more control over what you put down. Universally everyone is used to documenting things on paper so it is normal and the standard.
advantages: easy to input, less likely to forget disadvantages: less organized. might be harder to recall what I wrote
you always have it with you and you can log the data right then and there when you eat or do anything. But you have no history of data, no analysis of historic data and no way to manipulate or manage it. In the digital era I see no reason for paper diary, it would just be impractical

and also another things to carry around with me which I wouldn't want to do.
The advantages of using a similar paper diary are that I could easily record what I ate, exercise, and pulse at any time. The disadvantage is that it would not be as organized and it would be difficult to compare one person's data to another because they may organize it differently.
Advantages are that its much easier to use (the system itself is already easy). Disadvantages would be that it would be hard to send to a doctor or family member if they're caring for the user.
The advantages of a paper diary is that you don't need electronics or technology to access this kind of information, and the disadvantages include that you need to write legibly and have every part filled out and keep the dates in order.
The advantages: it is easier to use than the computer complicated system especially to the elder people that do not know how to use computers. It is easy to remember it because it is physically with the patients all the time, so they would not forget any day. The disadvantage: could be lost any time or get burn, not easy to access the history data ,Not confidential since any one can access and see it .
Advantages: A sense of personal connections that might compel people to update their diary/record more often. Potentially cheaper but cost might change to issue standardize notebooks for everyone. Disadvantages: clumsiness, hard to keep track, hard to duplicate, privacy issues.
Advantages include - User organizes their data in a way they feel comfortable - Portability (just need pen and paper) Disadvantages include - User needs to organize their own data input method - User needs to count their own calorie intake as there are no form fill options from the web system. - Summary view of data inputted varies greatly due to the way the data has been organized. For example, if user put down one data per page, the user will not have an overview of all the data they have inputted, making comparison and analyzes difficult.
Paper diaries are much easier to access. You just pull out paper and write it down.
Advantages: Accurate because you can write as you go and write exactly what you eat, convenient to bring with you, can keep it with you at all times Disadvantages: If you don't have nice writing it may be hard to keep track of. If you lose it you lose all your info
The advantages of using a paper diary is that you could format it according to your own preference, and not the providers template. A disadvantage would be that you do not have to wait until you get onto the web in order to record data. A person may easily forget what they ate by the time they got to a computer. Another disadvantage would but the inconsistency and a lot of loose paper that could be cluttered and not organized.
Advantages of a paper diary would be that it is portable and can be kept in a purse or backpack and the user can record down data immediately. However, the disadvantage would be that it would not be as organized, data could be lost and misreported.
Advantages of a paper diary is that you can have it conveniently with you at all times. Disadvantage would be looking up history data, finding previous entries would take longer, and legibility may be an issue.
The advantage of a paper diary is you do not need Internet access or a computer to have to input information. The disadvantages are the legibility of your writing and losing your diary. This could pose both privacy problems and a loss of all your health data you recorded.
The good thing is that if you do not have internet, you can put the info down. Also, it easy user friendly for almost everyone. The bad thing is that it is easy to lose and reading it could be difficult if your handwriting is bad.
same as above question
Advantages: Can note down your daily health anytime anywhere, doesn't require internet. More friendly to elder people. Disadvantages: data cannot be reorganized to display in a meaningful way. Text is linear, cannot be filtered out, maybe hard to do a search on a specific term.
Having a paper diary allows fast access. However, it may easily be lost whereas having a web system secures the information by being connected to the Internet.
A paper diary is portable and easily accessible. It does not require a password and allows the user to organize it the way they might find it the easiest and most effective. However, paper diaries can get lost or be misplaced. They are susceptible to water damage. It is also possible that entries can be illegible and therefore useless if the individual chooses to refer back to a specific entry. Also, it would be difficult and tedious to enter the information into a computer to do statistical analyses in comparison to a web-based system in which the information would already be readily transportable.
the advantage is that you dont actually need internet, yet you would always need a pen and the diary around. Also it'll take longer for you to write down your information rather then keeping track of it online. Another disadvantage is that if you lose your diary then you will lose all your information and also other people can read whats in your diary without a password.
The advantages of a paper diary are that you can always fill it out no matter where you are. It won't have any technical difficulties such as the systems online. People can be more detailed with what they ate and exercises. The disadvantages are that the paper diary can be easily lost. If misplaced all the information that was written down would be lost. Also people's handwriting can be messy and not organized so it can be a messy paper diary. The paper diary will also not provide motivation since they are just writing down info.
The advantages of using a similar paper diary is that it is more convenient and you can just write the activity being done onto the paper diary right away opposed to having to wait for internet access to write down the activities. The disadvantages of using a similar paper diary is the higher chances of loosing the paper or the paper mistakenly getting thrown out.
Advantage: You can update your diary from anywhere. Disadvantage: You need to find the caloric values for all the food you eat yourself.
Advantages of using a paper diary would be the convenience. It is a lot smaller and lighter than carrying a computer and you can take it out whenever you eat a meal, exercise or have to write down your pulse rate. The disadvantage would probably have to be the color coding and the visuals that the online system provides.
Paper diary would ALWAYS be readily available. But the disadvantage is that I feel slowly you might get lazy about it and not write everything out because it would be very time consuming unless you made a pre-made chart with the subjects: pulse, exercise, and meals.
writes faster than typing. The immediacy of paper. I don't have to wait to type on a computer.
The advantages of a paper diary are that you can take it literally anywhere, and no one can see it unless you show it to them - or lose it. The disadvantages are that you are wasting sooo much paper, and sometimes it is hard to find particular information in your paper journal, and if your forget it there is no way for you to access that information.

The advantages of using paper diary is that you are able to take it anywhere at any time but the disadvantage is that it becomes a hassle to carry information and the information could eventually get lost.
The advantage is that paper diary is that it is quick and easy. You don't have to learn another program to monitor your health. It is direct and cheap. The disadvantage of paper diary is that it would be hard to analyze the data. The writing may be unclear or disorganized. Also, if the patient loses the paper diary, all the data and personal information is lost.
Advantages include writing down the activity as soon as it is completed, as well as a paper diary being portable and easy to carry. Disadvantages include keeping the data in a notebook that is easily capable of being lost/stolen, whereas if the data is inputed in a laptop, it can be accessed from any computer.
Paper you have to carry around with you. You can also lose it which means you lose all information.
More customizable, can incorporate pictures, symbols. Disadvantages are legibility, can get lost/ruined, have to carry around everywhere.
Easy to use and carry around. Always available.
An advantage of using a paper diary is that it is relatively portable and data can be recorded as soon as it is collected. For instance, the user would be able to bring the paper diary with them (perhaps in a purse or a backpack) to restaurants and various workout facilities. This allows for accuracy of data as well as user satisfaction. In addition, users are able to record exactly what they ate/what exercise they completed, rather than having to choose from a drop down menu like they do in the web based system. A large disadvantage to the program is that it is quite disorganized and loss of information can occur if the paper diary is lost or damaged. Unlike the web based system which automatically saves information that is very difficult to destroy, information in a paper diary can likely be lost or stolen. In addition, the issue of legibility arises if the data is to be shared with health care professionals for analysis. Incorrect data interpretation can occur if the information is not easily read.
The advantage of a paper diary are that there is no technology required that may be unknown or hard to learn, all the data is in the same place specific to the person keeping the paper diary, and has an increased safety and confidentiality compared to that of web systems which can be hacked. Disadvantages to paper records are logistical issues, such as unable to share with multiple users, incomplete records or data, legibility problems, and can frequently be disorganized. In addition, paper diaries are inefficient for data entry and very redundant, and harder to analyze data compared to that of web systems.
The advantage is that a paper diary is more accessible and you can have it wherever you go. The disadvantage is that information is hard to retrieve.
See question #39.

14. Survey open-end question: In your opinion, what are the challenges for chronic care patients to monitor their health every day?

Depending on the diseases the chronic care patient has, it might be difficult for them to remember their daily activities. I would be easier for someone else to watch them and log their actions instead.
Chronic care patients may not have access to these computers or even they might not know how to use a computer. Monitoring their health every day is definitely a tedious process and requires a lot of discipline and conscious effort to input every food intake and exercise.
I believe the challenges chronic care patients face in monitoring their health every day, include that it is very tedious to constantly record their lives. Additionally, the person may feel pressure to only record activities that fit the "rules" and therefore may not accurately record everything.
The challenges for chronic care patients to monitor their health every day are probably the fact that most of these patients are very sick, weak, and tired, so they can forget or become too exhausted to record their data. Alzheimer patients would not be able to record or monitor their health by themselves. Most of the chronic care patients would need a care taker to help them monitor their health.
The challenges are that you must always be on top of monitoring yourself and I see that one could forget to write down their data. It is also very tedious if you have to write down absolutely everything like a chronic care patient would have to.
Committing to writing down every activity is difficult. The motivation to do so wanes and if one does not see immediate or tangible benefits, it is hard to keep inputting data into the system.
The challenges are getting used to using such a system. Having the problem of having to enter in all the information after every meal. Chronic health care patients must already be frustrated with having such a condition that allows certain food and not others. This would make it more annoying to have to go keep track of every food eaten. The system needs to make it easier for patients to keep track of such records.
challenges is not only do they have to take their daily medicine/daily exercise routines/specific foods to eat, etc, but finding a way to monitor their intake requires extra time that they have to remember to do. although monitoring will become second nature, the challenge is finding a user-friendly way for them to monitor their health. some web based systems may be overly complicated, while others may be too simplistic that it could possibly not monitor their health well enough.
Chornic care patients may not necessarily remember to record their every action along with their pulse rate, and many are not able to reach such systems that may be only limited to the computer.
The main challenges for chronic care patients to monitor their health every day is remembering to fill in the information and fully entering the information without having a bias.
Monitoring health through a system such as Health watch can be tedious, especially for chronic care patients who must do this every single day for a long period of time. After using this system for only 10 days, I found it challenging to consistently track my habits because I would occasionally forget to take my pulse right after eating and would have to estimate my pulse rate at that particular time. I understand the burden of monitoring health to a certain extent and think that it is good and necessary for chronic care patients.
Chronic care patients would probably have a harder time remembering to monitor their health everyday. Logging in entries can become tedious and sometimes chronic care patients may feel unmotivated to do it. Some one else should be monitoring their health for them and keeping logs of it.
Primary challenge is creating the habit of using a method to monitor their health every day.

They have to be around a computer based system everyday so that they can input their health records. If they aren't then they will forget to monitor their health. They also might not be honest with their records which eventually might lead them to worse health.
It is a tedious task and sometimes patients may not be up to keeping track of everything they do, whether it is due to lack of willingness or lack of energy, but it can be difficult to remember especially if the patient is older in age.
The challenges for chronic care patients to monitor their health everyday include: the fact that the patient might not be feeling well and is unable to record information, the patient might forget to record something, and the patient might be too busy to record something. The chronic care patient might have Alzheimer's disease or osteoporosis, so it might be difficult to remember what he or she ate or it may be difficult to write or type respectfully.
In my opinion the challenges in chronic care patients to constantly monitor their health is to actually get them to do so. As we find with almost everything, once u first start something you put all your energy and time in it, however as time flies and the more u get into it the less time and energy u put into it. For this reason, it would be a challenge for chronic care patients to monitor their help every day.
It depends on the severity and what kind of the sickness the chronic care patients has. If the chronic care patients are too sick to monitor their own health they need a person to constantly watch and care for them. Also the communication process is a challenge too if the chronic care patient has more than one care taker.
Chronic care patients need to be able to access and remember that they need to input their information. Many times people will forget. Patients with chronic conditions have an important role in the management of their conditions, as they are often the ones administering the treatments in everyday life. If another person is involved in the care of a chronic care patients, they must be able to access health histories and records of everyday habits. This will make it easier to the secondary party to understand this.
Chronic care patients might have other daily routines related to their illness already that consume a lot of their time, they may not want to add another activity to their day is they don't get enough benefit out of it. They may not like the tedious entry system since it is a constant reminder of their illness, patient support is a crucial part to the implementation.
The challenges for chronic care patients is it becomes tedious and they will forget to write down what they did or event that took place. Also, the tool that they need to monitor their health everybody not be accessible at the current time. Other challenges is it might be expensive.
I kept forgetting to record my pulse after meals or exercises but was easily able to recall what I ate or exercised. I feel like a chronic care patient may initially have trouble performing tasks that a normal person would need to perform.
Some chronic patients are in severe conditions where they may be bed ridden. They would need assistance every day. From my experience, for chronic patients that are bed ridden, they can't monitor their own help because it is bad enough they have to deal with their disability. Normally health professionals like certified nurse assistants help them. Since it is only recording basic things like food intake, computerized input would be the easiest because it is not messy. Since the patient is a chronic care patient, the record will be safe for a long time in the system.
Some challenges for chronic care patients monitoring their health everyday include: remembering the times they need to check up on themselves, inputting their data in accurately, using a system correctly, and educating themselves on the severity of their health issues.
Remembering to record what they ate, the accuracy of the information provided by the patient may not be very accurate.
Most chronic care patients are extremely sick so it is difficult for them to have to go on a computer system and monitor their health on a system like this. They usually need assistance and can probably easily forget things that took place in the day or past information of their health. They typically need help with this type of thing.
The amount of computer time needed. Inconceivable situations that incessantly delays monitoring which may lead to forgotten logs or missing information.
There are a lot of challenges that chronic care patients deal with. Chronic care patients have to literally record their every move. They always need to monitor their health; they can't forget or even miss one thing. It's very tedious, and a lot of work. I believe it's a struggle and a battle that they face on a day-to-day basis. They have to think before they eat. They have to make sure they take their medication on time, and can never miss one. It's very difficult. Overall it takes up a lot of time during one's day, it's a part of their lifestyle.
Not easily being able to access the system. It may be hard to actually make rules for their lives specially if they are older.
Some challenges a chronic care patient would have is the availability to input each meal, exercise, and pulse. Being a healthy adult myself, I had difficulty remembering to find time to take my pulse and taking out time to input my meal intake. Being an ill patient I feel that it would be difficult for the patient to keep track of what their pulse time, meal intake, etc. everyday. They would need someone to help such as a nurse or assistant to help keep track what their daily intake is.
Just forgetting to input what is recorded. I forgot to do pulse sometimes, and I didn't input the data right after the meal, but usually at night or the day after.
It would be having to constantly remember to update their logs, as well as the work put in to fill out any paperwork, forms, electronic data, etc. The best thing would be a system that is completely automatic and with little to no room for errors.
The main challenge I can see for a chronic care patient to monitor their health every day is remembering to record the data. Even when it is an established routine, it can be difficult for a patient to monitor their health amongst the other responsibilities throughout their day. It is easy to forget to record a meal or activity or measure the necessary data. Especially when meals and activities are not at set times each day, it is difficult to set reminders. For example in doing this assignment I tried to set alarms for the times I anticipated I would be eating meals, but this was rarely accurate so it did not help much. Also, because chronic care patients are doing these records so often, it likely becomes easy for them to miss or ignore a few entries. When they are recording several times a day, one every now and then is easy to justify and leave out if for whatever reason the entry is inconvenient to make. Maintaining discipline and keeping persistent with entry would be hard to keep up especially when there is no definite end to the recording.
challenges are that there will be eventually so much recorded data they need an efficient and easy to use recording system. also a challenge would be having a system that will actually analyze their recordings and tell them what trend they are falling into.
In my opinion, recording your information is very tedious and time-consuming. I am sure chronic care patients must write or record even more data than we had to. Finding the time to record everything is very challenging for working adults as well. There is always a possibility to skip your findings.

They may forget to take medication or to eat the proper food that is required for their body.
How to distinguish between the differences in their health when all they may think is that their health is bad. They may not be trained to understand their illness and how to manage it, because they are inadequately educated.
They aren't able to accurately write what they ate or the exercise they performed for some patients might have caregivers who would not record the same data as they would do on their own. If someone else is recording for you it wont be the same phrase or words you would do. Every day could be a completely different say some days could be worse and some could be better depending on the patients condition.
First is the mental mind set: Need to believe I'm the "master" of my own health, rather than a passive victim approach Their physical impairment might prevent them from taking care of themselves. Many of them have numerous health care providers(many physicians who prescribe various medications). Often this can get confusing.
In my opinion, the challenges for chronic care patients to monitor their health is that they probably are not well enough to constantly be entering information into the computer. There is probably more information besides exercise, diet, and pulse that they would need to be entering into the system such as time of day that medication was taken, when their last doctors appointment was, etc. Therefore they would need system to constantly remind them to monitor their health.
They are not reminded to go log in to the website, might not have time to exercise, and could forget what they ate or pulse that day when they did exercise.
The challenges for chronic care patients to monitor their health every day would definitely have to be to remember to input the data of their daily routine. It was the biggest problem I had using this system. There were so many things going on in my life that it slipped my mind sometimes.
The challenges would be remembering to even monitor their health. To remind yourself how often you must take medications is not always easy and can be forgotten. Also, using the systems available is not always feasible for everyone or not designed properly for the comfort of the patient. It also gets repetitive and cumbersome to monitor your health every single day.
I think forgetting to keep track is one of the most common things that make it hard to monitor health. I know I had to really try to remember to log on to health watch everyday and input my data. I'm sure it can get very hard to cope with having a chronic disease, and it can be tiresome to have to keep track of all the things you do.
being consistent with what you eat is a challenge
They have to be aware of what they did everyday which is very difficult. Sometimes you forget what you have done or managing your illness is too overwhelming. A caregiver would be really helpful for a chronic care patient because then one person doesn't have to handle everything themselves. In fact it might even be required to have assistance because the person is already sick and therefore less able to work. They also suffer emotionally because they cannot do the things that normal healthy people do. Managing different medications is also difficult if there are many. Another challenge is that they cannot physically log in the info themselves because they are too sick. These types of patients would need a lot of help. They can need help with personal chores, medications, transportation, and companionship. To ask them to manage their own health is a big task.
Some situations it is hard to note down. Some chronic diseases might also cause patients difficult to input. ie. forgetting to input with Alzheimer patients or not able to use laptop with other diseases.
I think until we have a automated system which can track and monitor at home health the huge challenge is just the logging of data in a efficient manor. This includes such challenges such as logging data in a efficient manor, remembering to log all your data and making sure the data logged is accurate. Also it is possible that certain chronic care patients don't have the ability to log this information them selves. This could be due to a inability to use the current technology or possible due to there condition such as memory due to Alzheimer or due to a physical disability that prevents interaction with technology.
The challenges for chronic care patients to monitor health care everyday is that although it only takes a couple of minutes, it is very difficult to remember to record everything you ate and take your pulse after every meal. Also, describing some meals and judging the quantity of meal may be difficult. If this is a system that doctors can see, patients may not put of some data online of what they ate such as ice cream everyday because they may be embarrassed but their diets and lack of exercise.
The challenges would be to maintain their treatment; to make sure what they're doing becomes a habit to them and not a chore.
Challenges include having to input values into the system that are correct and succinct. Sometimes information is altered or forgotten and wrong data could be inputted. Also a patient should be able to fill out everything themselves, if someone else fills it out they must know exactly what the person had to eat and must monitor that everyday.
I think It is hard to keep entering all the things they eat because sometimes they forget things or even the whole day they forget to enter the data , I think may be because I do not have a real chronic disease I used to forget . Also, it feels not good that every time they eat something they keep thinking how this will affect their health should they eat it or not . On other word, they do not have the freedom to eat what they want to eat any time I want
They may be too tired or they may have to take too many medicines and under strict requirements to effectively write them down in the electronic record.
The greatest challenge patients find when monitoring their health every day is the patient's diligence and time. Monitoring health every day without outside help may strain the patient's patience for the monitoring process. Also depending on the monitoring process, if the process takes too long, time conscious patients will not devote their time to such processes. At last it is important to emphasize the importance of the monitoring system to increase more patients interacting with the monitoring system.
The system and having to record everything can get mundane and at times annoying.
They don’t always remember. Sometimes (like I know my grandpa has diabetes and does this) they don’t like to admit there is something wrong and that they may not be able to eat things or do things they used to so they don’t want to be treated like there is something wrong. People don’t always like to be honest because they are afraid they will be judged for the results.
A chronic care patient may have difficulty remembering their daily intake, therefore the results may be inconsistent. Also, they may not be able to access a computer daily. It would probably be better if they had a caretaker record their data for them.

Consistency is a challenge because if the patient forgets to record any data regarding his/her health, it can make it difficult for the doctor to assess any problems that may arise in the patient's health.
Some challenges would be describing the health of the patient. Some descriptions can be ambiguous and deciphering what their health is from their description can become an issue. As well, if a chronic care patient has multiple issues, monitoring all their health can get confusing and using a system to keep track may become easier or it can become more difficult if the system is not integrated well with the patients health.
The challenges for chronic patients to monitor their health everyday would be that they may forget to enter their information. Also, they may need a caretaker to enter their information to the internet and take their pulse. Other challenges could be that they may not know what is considered normal and not normal for their eating habits.
The challenges would to be to remember to input the information in a timely manner and not forget it. Also, if they cannot get to a computer, they might try to remember what they ate, but can forget so it could affect the person's health.
depending on their status, they may be too weak to enter information on a computer.
I guess first is that they remember to jot their daily activities done? And they may forget one or two things from their meal but are important contributors to their health.
Many chronic care patients may not consistently or accurately record their meals and/or exercises in their health diaries. Even as a non-chronic care patient, I found it difficult to keep a consistent monitoring schedule with my health. Also, having to log onto computer to create their health diary entries may be a hassle.
Depending on the patients situation, it can be difficult if the patient is suffering from a neurological or mental health disorder. They may forget how to use the functions of the system or generally forget that the system even exists. Also depending on the age of the patient, an older person may not know how to use the system due to difficulties in adapting to modern technologies while a younger patient may not know how to read or use a computer yet. For foreign patients, they may not understand English (if the program does not offer other language options, that is) so that may become a hindrance in utilizing the program. These factors may even apply if monitoring involves paper methods. Additionally, patients may enter in data but in the end they may not know what it means in health and medical related terms. Therefore, it is important for these factors to be considered and patients should undergo comprehensive education regarding how to correctly monitor their health. If the patient is unable to monitor their health individually, it might be difficult to have someone else do it for them. For instance, the individual might not have family members to take care of them or the money to afford having a nurse or caregiver around.
The challenges that a chronic care patient might have is if they actually have access to internet shortly after their meal or exercise, so that they can input in their data correctly before they forget.
Perhaps some chronic care patients are not computer friendly and would rather use a paper diary. Also, most of the time chronic care patients tend to be old so they are not very big on computers and will probably forget to monitor their health.
In my opinion, the challenges for chronic care patients to monitor their health every day is remembering to keep a record of everything they do.
Some might forget, a system maybe too complex for non technical people, many may just lack the motivation to do so.
There are many challenges. These include the forgetting to record your meals, your pulse, your exercise for the day. Even worse, forgetting to record these three things arise problems when trying to remember, resulting in recall bias. Other challenges might include the classification or portions of food if definitions are not included.
I am not trying to make generalizations about any population but when I think of chronic patients , the type of patient I think of is a diabetes patient. Diabetes is a chronic disease that predominately affects the minority population. Due to low income status (among other things) these patients do not have access to the computer or internet so a paper diary would be used more than a system like this. Some might find it difficult that it is not available in languages other than English. And also, having to constantly take their pulse might be difficult throughout the day.
convenience. knowledge of what to do.
In my opinion, one challenge for chronic care patients to monitor their health every day is to remember. Having to watch what they eat is not something that they are used to doing. I think this is actually the biggest challenge. It is so easy to get caught up in the business of your day and not remember to write things down as they happen. Then it is impossible to remember or do it later on. This is a challenge that even I faced.
The challenges for chronic care patients to monitor their health every day may be simply forgetting to input their information or easily change the information to make themselves feel healthier and better.
The challenges for chronic care patients to monitor their health every day is forgetting to input data, taking the time to measure their health as directed (in this case, pulse after meal/exercise). The patient must also have access to the internet. In addition, the patient must have learned how to use the system and be able to recall how to use the system. This could be difficult in an elderly person who has not been exposed to much technology in his/her lifetime and is required to learn how to use the system.
For chronic care patients, monitoring their own health may be a challenge because they may not know certain vocabulary to describe their condition/symptoms that are useful to the doctor. Also, it could get a bit repetitive for chronic care patients to input symptoms such as the amount of coughing they have or their own blood pressure/pulse rate.
Usually they are not as educated or have money so they do not have computer or internet access. It is sometimes forget-full to log everything. Sometimes it is also hard to calculate how much you ate.
Remembering to do something all the time, being accurate, being concise, keeping the same rules all the way through.
It is tedious to have to record their health information every day. In the end it turns out to be helpful but doing it every day seemed like a hassle. You would have to be taught how to use the system if they are apart of the older "non tech" generation. As well as have to be reminded to use it everyday in the beginning since it would be a brand new program to them.
In my opinion, I think that chronic care patients would become frustrated if they had to use this Health Watch system to monitor their health every day. It is annoying to constantly have to take measurements of your pulse and consistently have to enter data onto a website. If they website were easily accessible say from an ipad or from a mobile phone, the chronic care patient might be more interested. In addition, the program is not quite user friendly, and that would be a large complication.

In my opinion the challenges for chronic care patients to monitor their health are to learn the new technology that is coming out in the world/medical field that may be unfamiliar, basic everyday activities such as physical activity, and motivation to keep track of their health as they have to fight a chronic disease. Patients may become fatigued or exhausted based on what their chronic care condition is so less work is always better.
I think challenges for chronic care patients are motivating and reminding them to enter there entries.
Motivation it likely the number one barrier. After that, simply remembering to do it.

15. Survey open-end question: In your opinion, what would a chronic care patient think of the system? Why?

I think that chronic care patients would appreciate this system so at least they can monitor their diet and see what they can improve. For example, a person with high blood pressure or high cholesterol can monitor what they eat and how much they exercise and see a possible drastic improvement in their health.
A chronic care patient would think of this system as tedious and unnecessary. He or she would probably use paper to record all this information, ruling out the problems of internet/computer accessibility and having to know how to use a computer.
If I were a chronic care patient, I would like the system to begin with, just to give a perspective on daily habits and routines. It would also help pinpoint areas for improvement. However, while some people may grow accustomed to constantly recording their activities, others may feel very constricted and feel like their life is taken over by the task of recording their activities.
I think a chronic care patient would not like the system because of how difficult it is to use compared to a paper diary. They would be more likely to be consistent about recording their data if it is easy and right in front of them. On the other hand, a chronic care patient would probably also find the system useful because the data could be sent straight to the doctor instead of having to scan a copy of the paper diary or give it to the doctor in person.
I think they would like the system since it is easy to use and easy to learn, but I still think that some would prefer to use a paper diary like I do. Putting aside the issue that it is very tedious, the system does work and see that it has great potential to be beneficial.
Chronic care patients would think that such a system is a good start in providing the necessary monitoring for their condition. However, this system needs to offer more functions that encompass more areas of self care such as monitoring medicine intake, offering foods suggestions, and more feedback as to how the patient can improve their own conditions by changing their habits.
I think patients would like using the system initially but after using it for sometime they would become frustrated of having to enter information constantly. It is a time consuming process that no one would want to do voluntarily. A better way would be if patients had a mobile application on their smart phones that allow them to take a picture of what they are eating and it translates that picture into a record keeping system. This would be faster since they would not have to enter date/time. And the program could offer suggestions of what food the picture is taken of.
i think a chronic care patient would think that this system is useful and helpful,but definitely would need upgrading in order to successfully and easily monitor their health every day. chronic care patients already deal with a lot on their plates besides their health (family, basic daily activities), that a monitoring system can't be too complicated that it defeats the purpose of being a "user friendly" monitoring system.
A chronic care patient would most likely enjoy using this system if its reminder process and accessibility were more in tact and convenient for the patients themselves since it provides an organized record of their daily habits.
In my opinion, chronic care patient would find the system tedious and tiring. The patients would not be excited to fill in the information and may lead to them filling in only partial information. Chronic care patients would feel this way because the system takes a lot of steps, in which you have to move the levels, rather than clicking the level or time. And without daily reminders I think chronic care patients would forget to fill in the information.
I think the chronic care patients would find this system tedious because they would have to manually log in information each day. I also think another suggestion could be manually inputting food that users eat and then check marking from that list so that they wouldn't have to keep typing out the same foods each day. For example, when I was using the system, for breakfast I would eat "yogurt/cereal" practically each day at the same time. Each time I logged on the system I had to type that out whereas I think it would have been easier to check mark that that is what I had for breakfast. Also, I think there should be a column for "breakfast, lunch dinner" so that it can correlate with pulse rate since pulse rate was lower in the morning and higher at night. This visual would make it easier to make sense of the data.
Chronic care patients would probably think that it's too complicated to keep their health in check. If it's an absolute necessity like if it were a life or death situation to constantly monitor the user's health then I'm sure they would do it. But if it makes barely a difference to their lifestyle, I doubt the user would be consistent in logging entries.
Virtually useless. Does not make it easy to use and for older patients unfamiliar with data entry will be impossibly difficult to use.
If it was recommended by their doctor as very important for their health then I believe it would be helpful for these patients. I think if people can visually see and recognize what they are eating or doing everyday with their health it will change their attitude and perspective.
Chronic care patients may see the system as tedious and monotonous to use but perhaps eventually the patient will understand that keeping an electronic record, easily accessible anywhere equipped with the program, is beneficial in the long run. It is more organized and easy to read when in electronic format as opposed to paper format.
I think a chronic care patient would not like the system very much, because it does not offer advice or recommendations. It is also very vague in terms of what constitutes as a normal, too low, or too high meal. I do not think a chronic care patient would believe that he or she is benefiting from this system unless a doctor or physician interprets the data by discussing the meals, the pulse rates, and the types of exercise with the patient and how the patient can be helped.
In my opinion a chronic care patient would not like this system very much. The reason for this is chronic care patients would have to use the system for a very long time (if no their entire lives). For this reason, these patients would not like the fact that they would constantly have to repeat exercise they do, eat, and heart rate. The repetitive side of this system would make it very inconvenient for chronic care patients
I believe a chronic care patient would think of this system as easy to use, but then again it depends on what type illness and the severity of the illness. For example if a patient has Alzheimer, it would be hard for the patient to constantly update the information whether they forgot to

input the information. Or if a chronic care patient is too sick/too weak to input the information it would be hard to use.
Chronic care patients will find it easier to maintain a log of their health and it will allow them to better monitor it. Since they themselves must take care of their health, it is useful to have anything that could make the process easier. But it might be difficult for a chronic patient to consistently input information if a better method or more accessible method is developed. Such as a phone application that they can easily access.
Not so sure that they would like the system because it doesn't seem to offer any reasoning behind what it asks. No solutions/help is offered, maybe a forum between users and health professionals might make the system more effective so that patients with similar issues could talk with each other for support.
A chronic patient would think this system as inefficient and not very effective. This system does not show all information that is needed for the user such as sugar/ sodium content, ingredients, the exact amount of food that is consumed, the exact amount of exercise they completed, and also an accurate pulse rate.
The system would definitely help them with their daily tasks of monitoring their pulse rate, because they already need to perform those tasks but not it's automated or at least facilitates the process.
I think that a chronic care patient would like how easy the system works and the color menu. But like I mention before, it's a little difficult to do it on the computer especially in there condition, maybe it will be easier with a portable monitor of some sort.
I feel like a chronic care patient will think the system is useful in displaying and organizing their data. It will help the patient keep their information in order while allowing them easy access to their information. It is a good way to see what meals and exercises keep their pulse rate low/high. As long as the patient can stay consistent with inputting their data, I think they will find this system very useful.
He or she would think the system can help to improve their monitoring of their diet, but not necessarily improve their health.
I think they would not enjoy having to log on and having to do this system every day. I don't have chronic disease and I was even annoyed with having to sign on and do this everyday. People who are sick have more important things to do like take medicine or go to doctor's appointments and such instead of tracking their eating habits. I don't think they would like using the system.
I believe he would suggest the same issues that I raised because the usability heuristics of this system is simply not met. Other than that it is an excellent project to pursue.
I think a chronic care patient would find the system somewhat helpful. Because it provides a record of their health, in terms of meals and exercise so they can always go back and input their data. However, I think if there were a graph or a chart illustration it would help and benefit the patient more. By using Health Watch it literally is like a paper diary, but on a web system. Since it is a web system, I think it would be better to illustrate the data over a period of time to show what meals or exercise, or what days were significant in terms of meals/exercise/pulse. I believe people are more visual. So by using a simple chart or graph it would health the patient interpret their data and help them become more aware of their health by realizing what trigger certain pulse rates to be low/high by visualization.
Most chronic care patients may be older in age, and using a online program like this may be too complex for them.
In my opinion, I believe that a chronic care patient can accept this system and feel that it could be essential help to their health improve for the better. It can motivate their current daily health and improve by tracking what the patient is eating, how they are exercising, and their pulse.
Maybe a little tedious, especially since choosing a date and time isn't as easy as I think it should be.
A chronic care patient might see the system as useful. Perhaps the method they use is not as quick or easy as this system. They might also think that it would be good to use. Alternately, a chronic care patient might also think that the system the way it is now is too early in its stage and too odd to use. However in my opinion the feeling would be mostly positive I think.
A chronic care patient would be relatively neutral with this system. The health-care professional would need to clearly explain and make sure the patient understands the importance of the system and logging their meals, exercise, and pulse rate. Without a clear understanding it would be very easy for the patient to become frustrated with needing to log their information so often and the inconvenience it brings will only add to that potentially leading to them rejecting the entire system. It is hard for a patient to find motivation to continue to maintain this sort of action and care without a good reason and seeing results. Adding something like metrics to visualize how their actions affect their health would be one way to help engage them with the process. Just seeing a list of their entries by itself without analysis or usage from health-care professionals of some sort is not very motivating.
i think it could be ok for them. it may be simple for them since they just record what they eat exercise and pulse. but i wonder what they would think in terms of a long term purpose of filling it out i guess it could show if they have a lot of "a lot" or "a little" in either their activities or exercise. but that's about it.
A chronic care patient may find this easier to use than a normal system they use everyday because there are less items you would have to write down. However, the lack of data does not help a chronic care patient. There needs to be even more data that should be inputted to help adjust the chronic care patient's routine, such as environmental factors.
I think the system would help them because not only can they keep track of themselves but family can log on to their account and check and also their doctor could. The only problem is that they could forget to enter a lot of the food intake they may do on a daily basis.
The systems helps create a scale of judgment too. The patient will feel more in control and have a better outlook and understanding of their illness. The patient will be prepared, interactive, and proactive all because the proper and directed resources from the community and health system are implemented. There is self-managemet support, a food delivery system design, decision support, and clinical information systems all used together for the patients education and convenience.
for a chronic care patient i think that the system would be a hassle to use, unless someone was inputting the data in it for them. I feel like they would already have so much going on in their life that doing that would just be adding a burden to them. Unless someone was recording it in a system for them it would be pretty useless. Chronic care patients wouldn't be able to use the system effectively nor efficiently due to the condition that they are already deemed with making life even more complicated.
They might think of this system as a system "attempting" to help me but not really helping me :)

In my opinion, a system like this would not work for a chronic care patient. A chronic care patient would need a system that is more specific to their daily activities. Just saying that they ate a normal amount of food or a large portion is not enough if what they are eating puts them at risk.
its easy to use and widely accessible. However, would want more of description of how detail it should be. Maybe have someone that can answer their questions through a link on the website. Have frequent reminders so they remember to do it.
I think a chronic care patient would think this system is very tedious. However, it is very beneficial because they would be able to record their daily routine and keep track of their health. It is a great way to monitor an individual's health and lifestyle.
They would probably think it's a unspecific, easy-to-use, simple system. They would think it does show them what they are eating and their exercise patterns, but it does not go into depth about their health. It would also be difficult to maintain and update the system since it is easily forgettable and doesn't have a function to remind the patient to record after every meal.
the fact that it is easy to use may be appealing to patients. It was very easy to input times, dates, pulse rates, exercise level, etc. And I could very well imagine this system being used to even keep track of when medications are taken and the amount being taken. Being able to record things easily the moment you do them is helpful, especially in case you forget something, like forgetting whether or not you took medicine, or remembering that you need to do certain amount of exercise.
i think they would find it useful to them on their diet.
I think they would like the system because it is easy to use. It helps in managing your diet and if you go over your weekly activities with your doctor. It is much better than documenting things on paper. I don't have a chronic condition but I believe the system made me more aware of what I was doing in terms of my health and therefore made me take more of an initiative. Overall I liked the system because it was accessible, clear, and straight forward. Tweeks could be made here or there to improve the system but overall it got the job done in recording our meals, exercise, and pulse. It is a good starting point for chronic care patients and I feel that most of them would not have a huge problem in using it. The numerous benefits would outweigh the negatives which is why they would use it.
It really depends on what problem the patients are dealing with. If they cannot make use of it, their nurses or caretaker can do it for them to keep track.
I think the system needs to be greatly improved. This system doesn't proved the information you want nor does it allow the analysis of the data that is needed to make it a very beneficial system. Possibly with future versions of this system that allows for more accurate recording of all three categories. Once again the lack of mobile support is a huge barrier with this system because it requires patients to sit down at a computer to log there information instead of though any device such as your cellphone. This makes the current system impractical because to perfectly record your data you need to almost need to keep a paper diary of your food which you record into this system at a later point in time. This is not good because why use this system if you are already taking a paper recording. This system is a start, i can see it improving to such a point in which a chronic care patient can easily use it, especially with the integration of devices that allow for the automatic logging of data (possible scanning receipts of food using your mobile device to automatically add that data into your chart).
I think a chronic care patient would like the system because it helps them keep track of everything they eat. Reviewing their meals and seeing how it affects their pulse would encourage them to eat healthier and change their exercise schedules and increase physical exercise.
I think if their only concern was just getting a visual of how they were doing, they wouldn't like it because they could do the same thing with a notepad. If its something they're sharing though, seems like it would be easier to share if it were online and available for whoever they deem is necessary to see it, see it.
A chronic care patient would like this system because it has everything documented and the patient can access that info and see what exactly they had eaten or done during that time. It is a great way to keep track of those records for the patient.
It depends on who will use it , I do not think older people will like it , since they do not have experience in computer so typing will be hard for them . in addition it is so frustrated not only for older people but for me as well when I type my food and it is not on the list , I felt I am abnormal person who eats wired things . I am not sure may be I am missing part of the tips of how to use the system may be that is why most of my meals I cannot find them . For younger people, I think they will like it, it is straight forward system and easy to use. Except it is hard to remember to do it 3 times a day.
Some of them who are under moderately strict lifestyle may like it and use it more often as a form of health responsibilities. But as previously said, there are also those who may not like it so much and hold a different view.
The opinions from chronic care patients on the system will depend heavily on computer accessibility. Households without computers will find the system useless, along with patients unfamiliar on basic computer usage. However, patients that have computers and are familiar to computer usage will find this system easy to use as it is self-explanatory.
Depending on their level of technical ability, it could be useful but tedious.
I don’t think they would like it for the same reasons I listed above. It can be confusing, it’s inconvenient, it’s a burden.
A chronic care patient would greatly benefit from the system because they may forget what they have consumed a few days prior, and if it was written down with the system, they could easily trace to the days they needed. The system could help them notice trends and patterns based on their diet and exercise. The system could help them figure out if their diet and exercise specially effected their health and how they could change it to improve their lifestyle.
I think they would think that it’s helpful; however, dealing with a chronic illness is burdensome as is, so adding something that they themselves must monitor would be an additional stressor in their life. Developing a self-recording system or a device that can automatically record their pulse after meals or exercise would lessen the burden on the patients.
A chronic care patient may find it quite simple; however, if they want to edit certain entries it can get difficult. The military time may confuse some people and some portions of the entries are inconvenient, like pulse.
Chronic care patients would think of this system as okay, it does not tell them a whole lot about their health because the specifics are kept to a minimum. Also, they would need something to remind them of what they are doing. Finally, an online tutorial could be helpful because it would be difficult for chronic care patients to navigate the system on their own.
They would think this system is fairly easy to use, if they know how to use the computer, because it is convenient and inputting the data is not difficult. The only difficulty is to remember to do it.

i think they would enjoy it because they can see clearly everything they've been doing.
Doesn't provide much feedback about their health, they entered the data, so what? The system is not interactive, it is mainly used for patients to get into the habit of recording their daily meals and pulses, but the system won't tell them what they should do and not do. It can't suggest the patients of how to improve their health. The patients have to look at their entries and make conclusions themselves, which are sometimes not that accurate.
I think that they would like the system because it is not only more efficient than having a paper diary, but also maybe faster and easier to use than recording in a paper diary.
The patient might find the system useful if they need to give extra attention to their diet and exercise habits and pulse rates. However, I don't think that this system would always be effective for a chronic care patient because they might need to input more advanced information such as blood pressure or glucose levels. It really just depends on the patients situation. I think that as long as there are multiple options on the web system, the patient can choose from a list what type of health information they want to input so that each profile reflects the patient's individual medical case and history.
The chronic care patient would think its very easy to use since the system was design in a way that makes it easy and simple to use. One down side to the system is that they will be confuse as to put in how much they ate since a lot, a little, and normal is very ambiguous. Also a chronic care patient might find the system not as detail as they want because so
In my opinion, they would probably think it is a waste of time since most of them have negative thinking such as "well I'm already sick, what difference would it make. I know this through experience with my grandpa, he didn't wanna be seen by a nurse and didn't care, since he was already sick he knew there was no solution. So I would think that it would take a lot of patience for chronic care patients because it might be difficult for them and they can decide not to do it, in order to avoid the stress of having to deal with it.
In my opinion, a chronic care patient would/could find this system useful if they don't mind having to log onto the computer to log every activity they do. Like I said before, it would be much better if there was an iPhone app or something.
In it's current state the chronic care patient may not like the system, it isn't pleasing to the eye and doesn't have any features to compare/contrast your health/pulse by days, months, weeks.
They might be frustrated with a system like this because of the inconvenience. As a person with a chronic disease, there is enough that an individual has to worry about.
I think that it would be very difficult because the lack of accessibility to internet for many people from disadvantaged backgrounds in areas that are impoverished who suffer from chronic diseases, they would feel overwhelmed and stressed first by having to input data throughout the whole day, take pulse after meals and exercise, and then find a computer near by to input all of this. I think they would feel frustrated because of that and might therefore feel less inclined to log in.
I think they will find it a hindrance to use because the interface is not friendly.
In my opinion, I think a chronic care patient would like the system - especially if they are a young person. It has a "coolness" factor with which it can market itself to younger people. It is also relatively simple and easy to use. It can be accessed from anywhere. So I definitely think people would like to use the system.
I think a chronic care patient would enjoy this type of system because if the person is struggling with the things they are consuming, then they'd be able to see how much of something they are taking in every day. Also, as motivation, people would want to write the amount of exercise they've done and have it as a record.
A chronic care patient might think this system is tedious. It is difficult to enter every meal into a system,especially when people like me tend to snack throughout the day or have more than three meals a day. To have to constantly use anything and go out of one's way to enter data can be quite tiresome. However, if successful, the system will be quite useful to analyze the data and patient's habits.
I believe a chronic care patient should be in the care of a doctor in person... It's true that the system will record their health every day, but what if the patient is very young or very old? This would be difficult for them, so I believe they would opt out of using the system.
It is easy to use. THey might not understand why they are tracking what they eat or activities they do.
I think a chronic care patient would be satisfied with this system. There might be a better way to layout the system or more interactive features that would make the user happier.
I think they would think it was tedious at first until they see the results of their work. It is usefully once you get started and then you can begin to change your habbits to create your own little experiments to see if you health conditions changes based on things you do and change in your own life.
I don't think a chronic care patient would care for this system at all. First, it is not as user friendly as a health care program should be, and they would become frustrated. In addition, they would become annoyed with the fact that they were constantly required to take their own pulse after every meal and exercise. In order for this to be avoided, a device should be created, attaching discreetly and comfortably to the patient's body, that automatically records the patient's pulse and sends the information to the web based system to be recorded.
I think chronic care patients would use this system, especially over paper diaries, because this system helps a chronic care patient efficiently and effectively manage their health data, it requires little physical activity, and provides a much better scope of correlating data and analysis's of factors contributing to the patients given chronic care disorder.
I think the chronic care patient would think it is easy to use. However, I think they would think it is really annoying to use because they always have to log on and enter everything. I also think they would prefer to use this system rather than a paper diary if they are computer literate. Older people usually aren't that computer literate so they would probably prefer the good old fashion pen and paper.
If I were a chronic care patient, I would want something more comprehensive than a simple logging system. I would want something that tracks my "progress".

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