An Empirical Study of Scenario Similarity Measures

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Abstract: Syntactic similarity measures have been proposed as a technique to support scenario management and provide process guidance in scenario-based requirements analysis. Similarity measures support locating duplication and near-duplication between scenarios, searching in a collection of scenarios, identifying episodes shared among scenarios, and determining dependencies between scenarios. The effectiveness of this technique depends in part on how well syntactic similarity tracks semantic similarity as judged by human analysts. We present an study that validates syntactic similarity measures using scenarios from the Enhanced Messaging System specification.