Evaluating Evolving Requirements Models with jUCMNav

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Abstract—The User Requirements Notation (URN) supports the elicitation, specification, and analysis of integrated goal, feature, and scenario models. The analysis of URN models focuses on one snapshot in time and does not allow the model to change over time. While several models may be created that represent different stages of a system, managing several, slightly different model copies is a space-consuming, time-consuming, and error-prone task that makes it difficult to maintain consistency across the model copies. This tool demo showcases recent additions to jUCMNav, the most popular URN modeling tool to date. These additions enable the specification and analysis of a comprehensive set of changes to a URN model over time. Changes to a model are expressed for concrete date ranges and captured in one base model, which eases system evolution. Analysis results are visualized using graphs and heatmaps.

URL for Tool—Further information about the jUCMNav tool is available at http://softwareengineering.ca/jucmnav/. The latest release of jUCMNav does not yet contain features in support for model changes over time, but a new version to be released before the MiSE workshop will. For a preview of those features, see the latest build (http://jucmnav.softwareengineering.ca/ccbuilds/artifacts/seg.jUCMNav/latest/).