

Title: A New Model For Requirements to Code Traceability to Support Code Coverage Analysis

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Abstract: Requirements traceability is one of the most important and challenging tasks in the industry to ensure that software has been developed according to all user requirements. Requirements need to be specified and traced throughout the software development life cycle in order to map links between different software artifacts. This paper proposes a new model for finding traceability of functional requirements into artifacts such as methods, classes and packages. In this approach, requirements traceability links to code remains updated every time even after changes in code and requirements. This can be applied in updated coverage data and analysis to know which part of code has been tested and which has not been tested yet. Management can visualize the progress and quality of the software by knowing the traced code.