Abstract

Testability has always been an elusive concept and its correct measurement or evaluation a difficult exercise. Most of the studies measure testability or more precisely the attributes that have impact on testability but at the source code level. Though, testability measurement at the source code level is a good indicator of effort estimation, it leads to the late arrival of information in the development process. A decision to change the design in order to improve testability after coding has started may be very expensive and error-prone. While estimating testability early in the development process may greatly reduce the overall cost. This paper provides a roadmap to industry personnel and researchers to assess, and preferably, quantify software testability in design phase. A prescriptive framework has been proposed in order to integrate testability within the development life cycle. It may be used to benchmark software products according to their testability.

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Index Terms

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Software Engineering

Key words

Software Testability

Testability Estimation Framework

Software Design

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