Improving Software Requirement Elicitation using Q-Use Case

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Abstract

Requirement elicitation has been one of the most challenging aspects of software development. Not only complete requirements are difficult to gather at the beginning of a project, they tend to change and widen along with the duration of the project. In addition the largest number of defects that remain in delivered software is attributable to defective requirements. They are also very costly to correct, which can be as much as several orders of magnitude more than
those introduced in the earlier stages of software development. A use case describes how someone or something would interact with proposed system. Use cases are commonly used as a tool during requirements engineering [3]. This paper presents a systematic approach to eliciting quality requirements based on use cases, with emphasis on building the right product. The approach extends traditional use cases to also cover Q-Use Case, and is potentially useful for checking against the 4 C’s – Correctness, Completeness, Clarity and Consistency in order to strengthen requirement elicitation and to achieve high quality in software development.

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