

Enhancing Software Quality in Agile Software Development through Customer Feedback & Reviews Analysis

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Declaration

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I hereby confirm that the above candidate has carried out research for the master's degree dissertation under my supervision.

Signature of the Supervisor:

Date:

Acknowledgment

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Abstract

The agile software development process is one of the best software development process models which includes an iterative procedure according to agile practices. Kanban, Scrum, XP, and Hybrid frameworks provide based environments for continuing the agile process. Requirements gathering and analysis phase get the major priority within each framework according to the software feasibility. The research focused on the Scrum framework's requirements gathering and analysis process along with related problems that the software team members faced. The research objective is to provide a better solution to overcome the requirements analysis problems by using a decision support system.

Most of the software teams fail to identify the enhancements from the released software version's feedback and review analysis. The proposed novelty system aids software team members to identify the failures and related enhancements that need to be improved at the next level.

The decision support system is constructed by using three separate components and each analysis helps to identify the failures and enhancements. The decision support system accurately analysis the user requirements in each phase with high accuracy. The results of the analysis provide new insight into the software engineering research area. Research phenomenon makes a coherent interrelation between software quality assurance and quality engineering.

Keywords — Agile software development; Customer feedback and reviews; Product backlog; Scrum framework; Requirements analysis

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