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Hybrid Agile Model, the Synergy of Waterfall Model and Scrum in a Software Project

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Abstract

Hybrid agile is one of the recent software engineering process model used by a software engineering team in a software development project. A hybrid agile model is used by software engineering team to meet the requirements of a software project. However, what does the hybrid agile model used by a software engineering team look like? A qualitative study was conducted to answer this question, and a series of interviews were chosen as a data collection instrument. The interview participants are practitioners involved in software projects using hybrid agile. The recorded interviews are transcribed and analysed using thematic analysis. The finding shows that the software engineering team uses the Waterfall model in the planning, design, deployment and maintenance phases, while scrum in the development and testing phases. The results have led to the hybrid agile model presented in this study, which leverages the strengths of each model to ensure the completion of a software project. Future iterations of this study will assess a project's software quality, comparing the proposed model with plan-driven and scrum. © 2024 IEEE.

Author Keywords

hybrid agile model; Scrum; software development team; Waterfall model

Index Keywords

Agile models, Engineering teams, Hybrid agile model, Process-models, Scra, Software development projects, Software development teams, Software engineering process, Software project, Waterfall model; Computer aided software engineering

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