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Hybrid agile development phases: The practice in software projects as performed by software engineering team
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Abstract

The combination of scrum and waterfall is one of the software engineering teams that preferred hybrid agile models. The purpose of combining the two models is to leverage the advantages of each also to tailor the hybrid agile model to the needs of the project. However, to what extent are the phases, stages, and features of scrum and waterfall implemented in a software project remains unclear. Additionally, which phase will employ scrum, and when will waterfall be deemed optimal is also the arising question. This research adopted a qualitative study, and interviews are used as a data collection instrument. The interview is conducted based on an interview protocol, and thematic analysis is utilized to extract the themes from the interviews. This study investigates how the scrum and waterfall models are utilized in a software project, and three themes were identified in answering the research question. The findings indicate five development phases in a hybrid agile project and that waterfall is the preferable model in planning, while development is on scrum, and project testing and deployment could be either waterfall or scrum. © 2023 Institute of Advanced Engineering and Science. All rights reserved.

Author Keywords

Agile; Hybrid agile; Scrum; Software engineering team; Software project; Waterfall model

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