

Approaches to organization of the software development

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Abstract

© Medwell Journals, 2015. During the last 40 years the software development industry has not become the engineering one. The main issue of the software development is the related risks. Great amount of the out-of-the-box software solutions accelerates the development process, however, generates a variety of solutions of the same tasks which in its turn increases the uncertainty and risks related to the software development. The main objective of work on a software design is reduction of risks; one of such approaches to organization of the software development is Extreme Programming (XP). In its turn, the common property of the software code also allows the programmers to quickly improve their skills. Besides, a common software code completely eliminates the probability of situation when one of the programmers leaves and takes a part of the code with him, killing the long-term and sometimes almost completed project. Pair work at the same computer, continuous testing, continuous design and code improvement (refactor), integration immediately after implementation of the new functionality all of these XP techniques are aimed at achieving that both the design and the software code itself is easily modifiable at any point of the project life-time both at the stage of the primary system design and years after the software commercialization. Simple design and commonly accepted coding standards will allow the new team members to puzzle out the project quickly. And continuously developing and supported unit tests will ensure secure operational performance.

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Keywords

Design, Development, Extreme programming, Information architecture, Information systems, Pair programming, Programming languages, Programming methods (techniques), Refactor, Risk mitigation, Software