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An Experimental Study on Checklist-Based and Perspective-Based Requirements Reading Techniques Using E-Review Tool

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Abstract

Software Requirements Review (SRR) is a formal review process in which several reviewers read all or parts of the Software Requirements Specification (SRS) to look for defects in the requirements. During requirements review sessions, reviewers may employ various reading techniques to ensure that the requirements have been completely and clearly specified. To review an SRS document, the review leader must organise a review session, the reviewers must physically meet and provide their review feedback during the session. In these situations, the review leader must schedule the review session based on the reviewers' availability, which can be laborious and time-consuming to arrange. Additionally, the review leader needs to manually consolidate all the outcomes of the review session, which could also require a considerable amount of effort and time. However, there has been an insufficient research to identify the effectiveness of reading techniques for requirement reviews by employing a dedicated tool support for requirements review. Using a web-based application, called e-Review, the aim of this study is to experiment the effectiveness of Checklist-based Reading (CBR) and Perspective-based Reading (PBR) techniques during requirements review session. © 2022, Penerbit Akademia Baru. All rights reserved.

Author Keywords

checklist-based reading; perspective-based reading; reading techniques; requirements error; requirements review; Requirements validation

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