A Supporting Tool for Requirements Prioritization Process in Agile Software Development

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Abstract

Requirements engineering is a crucial phase of software engineering, and requirements
prioritization is an essential stage of requirements engineering particularly in agile software development. Requirements prioritization goals at eliciting which requirements of
software need to be covered in a particular release. The key point is which requirement will be
selected in the next iteration and which one will be delayed to other iterations for minimizing
risk during development and meeting stakeholdersô needs. There are many existing techniques
for requirement prioritization, but most of these techniques do not cover continuous growth,
change of requirements, and requirements dependencies. The prioritization techniques need to be
more continuous, scalable, implemented easily and integrated with software development life
cycle. This paper introduces a supporting tool for a proposed framework to prioritize requirements in agile software development. This framework tries to find solutions for the
challenges facing this prioritization process such as how to make this prioritization continuous
and scalable and how to deal with rapidly requirement changes and its dependencies. The
proposed framework is validated in a real case study using its supporting tool, and the results are
promising.

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