VoVo: a hybrid requirements prioritization technique in scrum-agile environment

ABSTRACT

Requirements prioritization is a crucial process in Requirements Engineering. However, selecting an appropriate technique in Scrum-Agile environment which can satisfy a quality factor such as scalability, effectiveness and efficiency can be difficult. Moreover, it becomes much more difficult if the stakeholders are distributed in different places and most of stakeholders tend to neglect this activity. This paper will proposed VoVo technique, a hybrid requirements prioritization technique which combined cumulative voting and Volere techniques. VoVo offers a structurally guided prioritization technique which can encourage user participation in prioritization process and also can mitigating the scalability issues especially in geographically distributed project. This hybrid technique is using two tiers prioritization process where in the first tier, the prioritization will be done by stakeholders while in the second tier requirementss will be prioritized by an experts usually a scrum master or project manager. The implemented VoVo has been evaluated through evaluation survey which addressed directly to scrum practitioners. Its suitability and effectiveness in managing and prioritizing requirements in Sprint Backlog will be measured based on testing and evaluation survey feedbacks. Hence, we conclude that VoVo technique is suitable to be used for managing and prioritizing requirements in Scrum project.

Keyword: Requirements prioritization; Prioritization technique; Requirements analysis; Scrum-agile