Abstract

Non-Functional requirements serve as criteria for the selection and prioritization of software requirements. The objective of this paper is to propose an efficient method for the prioritization of non functional requirements. In this paper we use $L^{-1}$, $R^{-1}$ inverse function arithmetic principle and graded mean integration for the elicitation of decision maker's weight for the qualitative and quantitative softgoal interdependency graph to model the non-functional requirements. Finally the utilization of proposed method is demonstrated with the help of an example.

References

- Gruia-Catalin Roman, A taxonomy of current issues in requirements engineering, IEEE
On Fuzzy Qualitative and Quantitative Softgoal Interdependency Graph

Computer 18 (4) (1985) 14–23
- L. A. Zadeh, Fuzzy set, Information and Control 8 (1965) 338–353
- Ming-Xun Zhu Xin-Xing Luo, Xiao-Hong chen, Desheng Dash Wu A non-functional requirements tradeoff model in Trustworthy software Elsevier.
On Fuzzy Qualitative and Quantitative Softgoal Interdependency Graph

- X. B. Illa, X. Franch, J. A. Pastor, Formalising ERP selection criteria, in: Proceedings of the 10th international workshop on software specification and design (IWSSD'00), Shelter Island, San Diego, California, 2000, pp. 115–123.

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Softgoal Interdependency graph (SIG)  Non-functional requirements (NFR)
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