Multicriteria Decision Analysis Method for Evaluation of Software Architectures

Abstract

Software architectures is a critical aspect in the design and development of software. Architecture of software is a collection of design decisions that are expensive to change. Software architectures are generally designed with particular functional and non-functional requirements. Organizations often need to choose software architecture for future development from several competing candidate architectures. The various stakeholders' quality requirements need to be considered collectively to describe the quality requirements of the envisioned system and therefore build the basis for the comparison and selection criteria. Given the impact that software architecture has on a project's success, the need to choose the right architecture assumes significance. In this paper, a new architecture selection method based on multicriteria fuzzy decision making analysis has been developed and validated using a suitable case study.

Reference

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1990.


Index Terms

Computer Science

Software Engineering
Key words

Quality attributes

Software architecture

Multicriteria Decision Making