Abstract

Software architecture evaluation plays an important role in the validation of quality models of software systems. This paper is based on the research carried out where the Architecture Trade-off Analysis Method (ATAM) was used. ATAM was chosen and used because it provides insight into the way quality attributes are mapped onto architecture and also shows the trade-offs existing between the identified quality and others. The evaluation was based on the developed Software Architecture Scenario-Based Performance Quality Model (SASPUM). The paper presents the results of the analysis with ATAM by providing the set of scenarios and their prioritization from brainstorming, the utility tree, the risks discovered and non-risk documented; the sensitivity points and trade-off points found. The evaluation supports the fact that performance can be identified as a software quality attribute, which is part of the execution model of software system determined by the architecture of the software system, and that is suitable for software architectural evaluation.

References
Software Performance Quality Evaluation of MINPHIS Architecture using ATAM


Index Terms

Computer Science  Software Engineering

Keywords

Software Quality  Atam  Software Architecture  Minphis  Saspum