Cohesion as Software Design Decisive Measure: A Metric Approach

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 181

Number 21

Year of Publication: 2018

Authors:

Poornima U. S., Suma V.

10.5120/ijca2018917931

Abstract

The requirements for developing software belong to different domains in the current scenario keep evolving due to the instant changes and demand in the market. Hence, software design flexibility is a big challenge for the design architects to incorporate the changes as it occurs. The requirements gathered according to changes are grouped and implemented as modules which have their own responsibilities. Designing a module with complete functionality and integrating them is yet another challenge. Measuring such modules during design is therefore essential to make the final product qualitative. Further, it is worth to recall that quality of design is influenced by external quality attributes such as Cohesion, coupling, maintainability, scalability and so on. Further, cohesion concept is a qualitative indicator which decides the depth of design quality in any project. Therefore, this paper highlights on the impact of cohesion on design quality of a complex system and its measures to quantify the overall quality of software.

References


Index Terms

Computer Science Software Engineering

Keywords

Software Quality, Software Solution-domain, Design Quality, Cohesion and Coupling