Abstract

Component Based Software Engineering (CBSE) is an environment which uses software components as main building block during designing and creation of a software system. A Component is a software entity with independent identity which has a perceptible reusable interface. This property motivates the programmer to design and develop Software using Component Based Software Development (CBSD) and further Software Metrics for these systems. In this paper, new early stage component based software metrics are designed for CBSD namely Component Composition Metrics (CCM) & Component Ratio Metrics (CRM) to determine the Effort using Likert 3-point rating in terms of time, cost, quality, operability, changeability, adaptability etc. for a software system. CCM and CRM are designed and analyzed using knot model of component based software life cycle.

References

New Component Composition Metrics for Component based Software Development


**Index Terms**

Computer Science

Software Engineering

**Keywords**

Component  CBSD  KNOT Model  CCM  CRM  Effort