Analysis of Object Oriented Metrics on a Java Application

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Abstract

Object oriented metrics have become more important in software development environment. They are used to measure software quality and to estimate the cost, to enhance reliability, maintainability and effort of software projects. Object oriented metrics estimate the complexity of OO programs. This paper highlights all the object oriented metrics which are proposed in the last two decades such as CK metrics, Moose Metrics, QMOOD Metrics, GQM, MOOSE, LI Metrics, Chen Metrics, Lorenz Kidd Metrics, Reuse Metrics and EMOOSE. The need for such metrics is particularly acute when an organization is adopting a new technology for which established practices have yet to be improved. This research addresses these desires through the development and implementation of a suite of metrics for OO design. The equations and measurement calculation methods for all mentioned OO metrics are clearly defined. In this research paper a java program is taken as a model with OOP concepts such as inheritance, polymorphism, and abstraction. The above mentioned Object oriented metrics are applied on this java program and the results of each metrics are tabulated clearly. The objective of the
research is to select the correct object oriented metrics for their models and application for software developers.

References


Index Terms

Computer Science    Software Engineering
Keywords

Object oriented metrics, Classes, Methods, Inheritance.