Abstract

Object-Oriented (OO) design is becoming more popular in software development environment and OO design metrics are essential parts of software environment. Inheritance is one of the main features of OO programming paradigm. The inheritance metrics gives information about the inheritance tree of the system. This mechanism supports the class hierarchy design and captures the IS-A relationship between a super class and its subclass. This paper presents a new approach for inheritance metrics CIT (Class Inheritance Tree) for measuring the inheritance tree. The proposed metric is evaluated against Weyuker’s properties (established criteria for validity) and present empirical data from academic projects (developed by experienced PG students) to illustrates the usefulness of new metric. In this paper we also consider the Chidamber and Kemerer (CK) and Li’s inheritance metrics for study and presents a comparative study between existing and propose metrics and the focus is on, how propose metric is correlated with the existing ones.


An Empirical and Analytical View of New Inheritance Metric for Object-Oriented Design

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Index Terms

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Keywords

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