Abstract

In spite of large acceptance of object-oriented paradigm, many programmers don’t have a firm grip on the design principles and the intimate mechanisms of object-orientation and this result into to a lot of poor designed large scale OO systems. Coupling in the software is one of the most vibrant internal quality attribute to measure the design performance. In this paper, we
propose Message Received Coupling (MRC) and Degree of Coupling (DC) metrics for the automatic detection of a set of design problems along with an algorithm to apply these metrics to redesign an object-oriented source code, if necessary. We also design a Method Calling Graph (MCG) that helps in calculating the value of proposed metrics. The revised set of metrics helps the developers to decide whether a design needs to be changed or left in its original form.

Reference


Index Terms

Computer Science

Software Engineering
Key words

Object oriented metrics  Coupling  Design

optimization