

Analysis of Lack of Cohesion in Methods (LCOM): A Case Study

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Abstract—As the need for software has increased, the maintainability of software has become an important issue and the need for the qualitative study of source codes has arisen. For this reason, we used software quality metrics to measure software quality. Moreover, for object-oriented software development projects, cohesion is an important factor. The main purpose of cohesion is to provide the rule that each class should serve a single purpose. Every class should have a single responsibility. In this study, types of Lack of Cohesion in Methods (LCOM) metrics were examined and compared using a sample Java code. As a result, it was observed that the LCOM5 metric gave the best result.

Keywords—*software quality, software quality metrics, cohesion, lack of cohesion, LCOM*