Abstract

Object-oriented software metrics are the traditional quality assessment metrics that are aimed to ensure the goodness of the software. Almost all benefits of the OO programming have been addressed through software metrics except the factor that measures the types of cohesion incorporated in software modules. Software is measured as qualitative with the incurrence of high cohesion with low coupling. Hence, in our previous works, we have proposed certain cohesion metrics for assessing the functional and sequential level of cohesion in the software. As a continuation, in this work, a novel Communicational Cohesion Metric (CCOM) is proposed to evaluate the level of communicational cohesion of the software. The theoretical validation of the proposed CCOM is performed and compared with the traditional LCOM metric for elucidating the need for CCOM.

References

1. Kalantari, Samira, Masoomeh Alizadeh, and Homayoun Motameni. 2015. Evaluation of
reliability of object-oriented systems based on Cohesion and Coupling Fuzzy computing. Journal of Advances in Computer Research.


Index Terms

Computer Science Communication
Keywords

Software metrics, LCOM, Cohesion, Coupling, CCOM