Abstract

Performance is an important non-functional attribute of the software system to be considered for producing quality software. Performance analysis by estimating development effort of the database application and workload estimation during preliminary design stages is an important consideration. In this paper, it is propose a methodology for estimation of effort by considering Entity Relation model and combination of technical and environment factor (weak, strong) for
performance analysis during preliminary design stages. Estimation of effort based on the complexity of ER by considering the entities set, attributes, relationship complexity, and structural constraints. The results are validated using multiple regression technique with case studies.

References

- Yuan Zhao, and Hee Beng Kuan Tan, Wei Zhang, Software Cost Estimation through Conceptual Requirement, Third International Conference On Quality Software (QSiC’03), 2003 IEEE, pp.141
- Marcela Genero, Luis Jiménez, and Mario Piattini Measuring the Quality of Entity Relationship Diagrams,
Performance Analysis of Distributed Database during Preliminary Design stages using ER model

McGRAW HILL Publication. pp-234.
- Edward, R., Carroll: ‘Estimating Software Based on Use Case Points’, OOPSALA ‘05,
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