Design Tool to Estimate Effort using Use Case based on Fuzzy Logic and Soft Computing Techniques

Abstract

Use case models are used in object-oriented analysis for capturing and describing the functional requirements of a system. Several methods for estimating software development effort are based on attributes of a use case model. This paper designed tool in c# language to estimate effort from XML for use case diagram based on fuzzy logic method in environment factor, and applying these tool on three project, experimental results support existing claims that use cases can be used successfully in estimating software development effort. The results indicate that the guidance provided by the use case points method can support expert knowledge in the estimation process. Experimental results show also that the design of the use case models has a strong impact on the estimates

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Index Terms

Computer Science          Fuzzy Systems

Keywords

Use Cases, Actor, Diagram, Estimation, Fuzzy logic