Program Complexity Finder: A Tool for Finding Program Complexity in Terms of Cognitive Weight based on Complexity Measurement Algorithm

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Authors:
Samrat Kumar Dey, Tamim Al Mahmud

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Abstract

Complexity Measurement of any piece of programming problems is a key issue for Distributing Equivalent Problems among examinees. Basic Control Structure or BCS Plays an Important role to design a program and hence measuring complexity value of any piece of programming problems. Using of Cognitive weight concept of any BCS are purely based on the thinking Capacity of Human Brain. In this Research Basic control structure has been established in such a way to reduce the limitation of existing Measures. According to these cognitive data, a new software tool based on java SE language and MySQL Database has been established by using own developed algorithm. This software is structured and developed based on the outcome of research data which is capable of determining the complexity value of several programming languages. It will facilitate the instructors distributing the programming problems among the students by maintaining equivalent level of difficulty. Thus, the automatic complexity measurement application will ensure the students to obtain programming problems with equal difficulty level for evaluation.
References


of Database,” Unpublished.

Index Terms

Computer Science

Algorithms

Keywords

complexity measurement; basic control structure; cognitive weight; equal distribution; software complexity;