Abstract

Code clones are the codes which have same code in the system and so it is difficult to locate all the same codes in the system when any change is to be done. Researchers have proved that almost 70% of the effort done during maintenance is just because of the occurrence the clones in the system. A number of approaches had been given earlier to detect various types of clones [39]. This paper presents the systematic literature review of all the detection approaches researched so far. Along with it this paper also gives the advantages to implement them and also all the defects due to which they were not able to completely detect the clones. It also gives a novel approach to automatically detect the clones irrespective of the matter that whether the code is in same order or any statement has been inserted, deleted or modified in the code fragment.

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Index Terms

Computer Science

Algorithms
Keywords

Clones maintenance  Program dependence graph  tree-based approach  false positives  and hybrid approach