

MUTATION TESTING TOOLS FOR JAVA PROGRAMS – A SURVEY

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ABSTRACT

Mutation testing is a white-box technique that can be used in software testing to ensure programs free from syntax errors. Systems based on Java are widely used because it is independent-platform language. When testing Java programs, you should keep in mind that Java is an object programming language which combine the features of procedural languages and the features of object oriented languages. In testing software all features should be accounted for. In this paper we will present a study for the Java program different Mutation Testing Tools and focus on the following characteristics: the mutation operators supported by a tool, mutant generation methods, speedup techniques, and other comparisons specifications. This survey will be useful for software engineers who are interested in testing and in developing new testing tools or expand existing ones.

KEYWORDS: Java, Mutation Operators, Mutatin Testing Tools, Object Oriented, Survey