Abstract

Java is a popular object oriented programming language suitable for writing Java programs. Sometimes programmers spend most of the time to increase the execution time of the program, but simultaneously its effect on code size. Therefore the code becomes more complex and unreliable, so this leads to reduce the efficiency of code. Today so many compilers are exist like c, javac, c++, cobol, etc. We studied the code optimization techniques for Java compiler separately and that time we come across some new code optimization strategies which is the smart way to do the coding in Java. In this paper we applied some new Java code optimization techniques on existing code. We verify the code optimization, performance using our executor. These code optimization strategies indirectly help to reduce the work of garbage collection, data structure and also work on loop optimization. So the results which we found after doing experimentations are quite satisfactory as compared to original results. So these techniques are help to improve the code quality.

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Smart Coding using New Code Optimization Techniques in Java to Reduce Runtime Overhead of Java Compiler

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Index Terms

Computer Science Software Engineering

Keywords

Code optimization, code efficiency, execution time, code quality, readability. Garbage Collection, Loop optimization, Data Structure.