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. Therefor the code become 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 compare to original results. so these techniques are help to improve the code quality.

References


4. Kevin Williams1, Albert Noll2, Andreas Gal3 and David Gregg1, (2008), "Optimization Strategies for a Java Virtual Machine Interpreter on the Cell Broadband Engine" 1 Trinity College Dublin, Dublin, Ireland, 2 ETH Zurich, Zurich, Switzerland. 3 University of California, Irvine, CA, USA.

5. Huib van den Brink, (2008), "The current and future optimizations performed by the Java HotSpot Compiler", Institute of Information and Computing Sciences, Utrecht University P.O. Box 80.089, 3508 TB Utrecht, The Netherlands.

6. Pawan Nagar1, Nitasha Soni2, (2012), "Optimizing Program-States using Exception-Handling Constructor in Java", 1 M.Tech. Scholar, CSE Department, Lingaya’s University, Haryana, India 2 Lecturer, CSE Department, Lingaya’s University, Haryana, India, International Journal of Engineering Science & Advanced Technology.

7. Hiroshi Inoue and Toshio Nakatani, (2012), "Identifying the Sources of Cache Misses in Java Programs Without Relying on Hardware Counters", © ACM, 2012. This is the author’s version of the work.

8. Peter Sestoft, (2010), "Numeric performance in C, C# and Java", IT University of Copenhagen, Denmark, Version 0.9.1 of 2010-02-19.


Index Terms

Computer Science, Software Engineering

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