Bikash Shaw. How the Java Virtual Machine (JVM) Works // CodeProject community, 25 Nov 2008.

The text focuses on the internal representation of Java Virtual machine and its basic operation principles.

It draws our attention to difference between executable code machine languages and interpreter machine languages.

The facts that Java Virtual Machine exists only in memory of computer and translate byte code into system calls are stressed.

It should be noted about Java Virtual Machine emulates every major function of a real computer.

It is reported about 32 bits wide registers of the Java Virtual Machine that are similar to the registers in our computer.

It is given a detailed information about operand stack based of last-in first-out methodology and primitive data type operands.

Much attention is given to the execution environment, include mechanism of method calling, dynamic linking and throwing exceptions.

It gives a detailed analysis of memory allocation and garbage collection mechanisms in Java Virtual Machine and C.

A mention is made about constant pool, encoding its items and specific format of information associating.

It is noted about java’s method area and its similarity to other programming languages compile code areas.

It is spoken in detail about byte code instruction set and java class file disassembling.

The article is of the great help to C and Java developers.