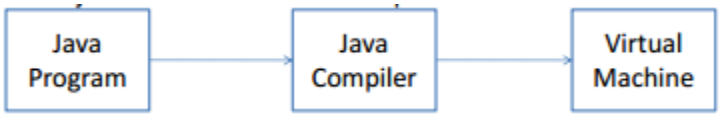
Java EE Web Development

Lesson 4 - JavaEE Environment Setup

INTRODUCTION TO JAVA FEATURES

JAVA VIRTUAL MACHINE

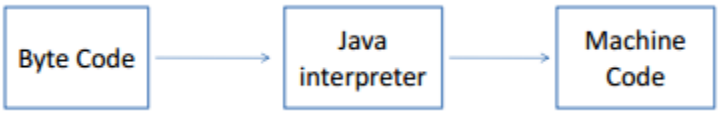
• All language compilers translate source code into machine code for specific computer.
• Java compiler produces an intermediate code known as bytecode for a machine that does not exist.
• This machine is called the **java virtual machine** and exits only inside the computer memory.
• It is a simulated computer within the computer and does all major functions of a real computer.

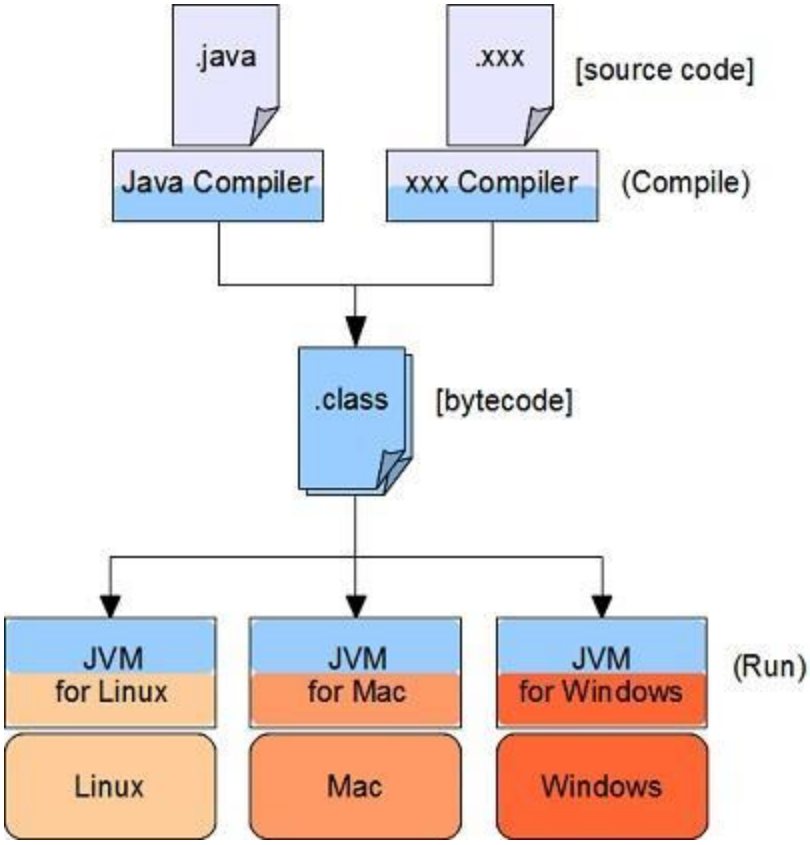


INTRODUCTION TO JAVA FEATURES

JAVA VIRTUAL MACHINE

• The virtual machine code is not machine specific.
• The machine specific code is generated by the java interpreter by acting as intermediary between the virtual and real machine.





JAVA PROGRAM STRUCTURE

```
class SampleOne
{
public static void main(String args[])
{
System.out.println(“Java is better than C++”);
}
}
```

Class Declaration

Everything must be placed inside a class

E.g.: class SampleOne

Main Line

Every java program must include the main method. Starting point for the interpreter to begin the execution of the program. Java application can have any number of classes but only one of them must include main method to initiate the execution.

Public :

main method as un protected and therefore making it accessible to all other classes.

Static :

Declare this method as one that belongs to the entire class and not a part of any objects of the class.

void :

main method does not return any value.

Output Line:

Every method must be part of an object. println method is a member of the out object,which is a static data member of System class.

Resources

Download JDK
https://www.oracle.com/java/technologies/javase/javase8-archive-downloads.html

Download Netbeans
https://netbeans.apache.org/download/nb122/nb122.html