# PRESENTATION ON CORE JAVA

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#### WHAT IS JAVA?

- ❖ Java is Object Oriented Programming language as well as Plateform.
- ❖ Java was developed by a team led by James Gosling at Sun Microsystems.
- ❖ Java is a first programming language which provide the concept of writing programs that can be executed using the web.

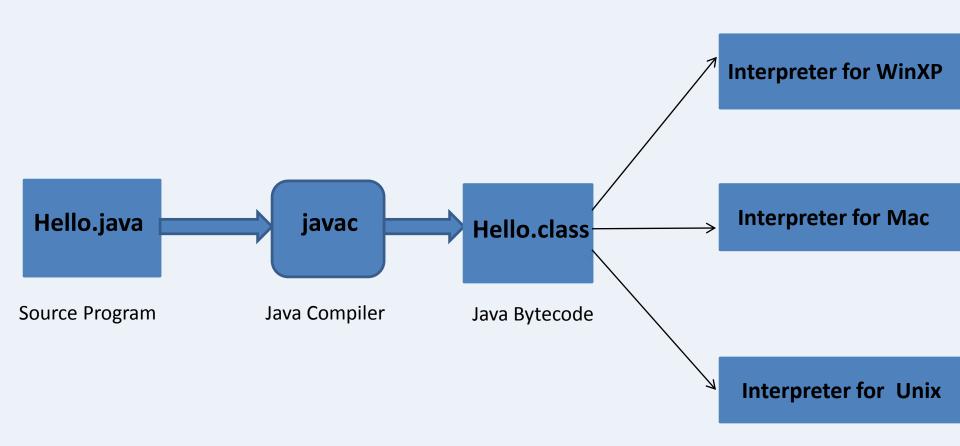
#### WHERE IS JAVA USED?

- According to the Sun, 3 billion devices run java.
- There are many devices where Java is currently used.
- Desktop Applications Acrobat reader, Media player, Antiviruses etc.
- \* Web Applications irctc.co.in , javatpoint.com etc.
- Enterprise Application Banking Application, Business Application.
- Mobile.
- Embedded System.
- Games.
- \* Robotics.

#### **FEATURES OF JAVA**

- Java is Simple.
- Java is Object Oriented
- Java is Distributed
- Java is Architecture Neutral
- Java is Robust
- Java is Interpreted and Compiled
- Java is Secure
- Java is Portable
- Java is Multi-Threaded

#### JAVA PROGRAM TRANSLATION



#### JAVA VIRTUAL MACHINE

- ❖ Java virtual machine is the like usual computer which translate high level language into machine language.
- ❖ Just like that Java virtual machine also translate Bytecode into machine language.
- JVM are available for many hardware and software Plateform.

#### WHAT IS OOP?

- Object-oriented programming is a method of implementation.
- A language in which everything represent in the form of Object is called Object Oriented Programming Language.
- It not only makes the program less complex but also makes the software reuse feasible and possible.
- Java is not truly Object Oriented Programing Language

#### CONCEPTS OF OOP

- Object
- Class
- Encapsulation
- Inheritance
- Polymorphism
- Abstraction

#### **JAVA SYSTEM OVERVIEW**

Java Application

Java Programming Language

Java Native Interface

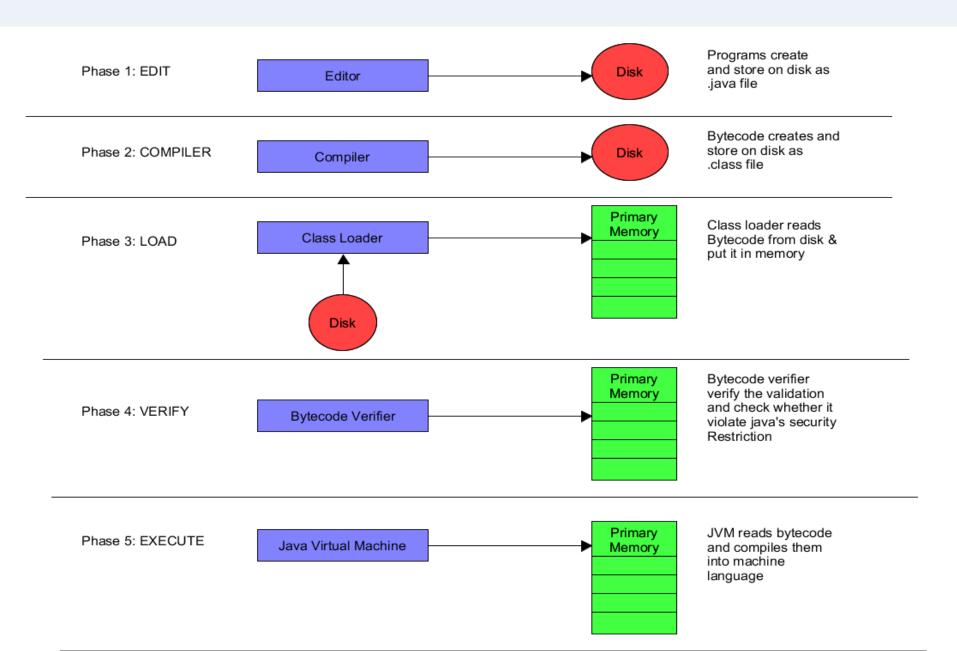
Java Class Library

Java Virtual Machine

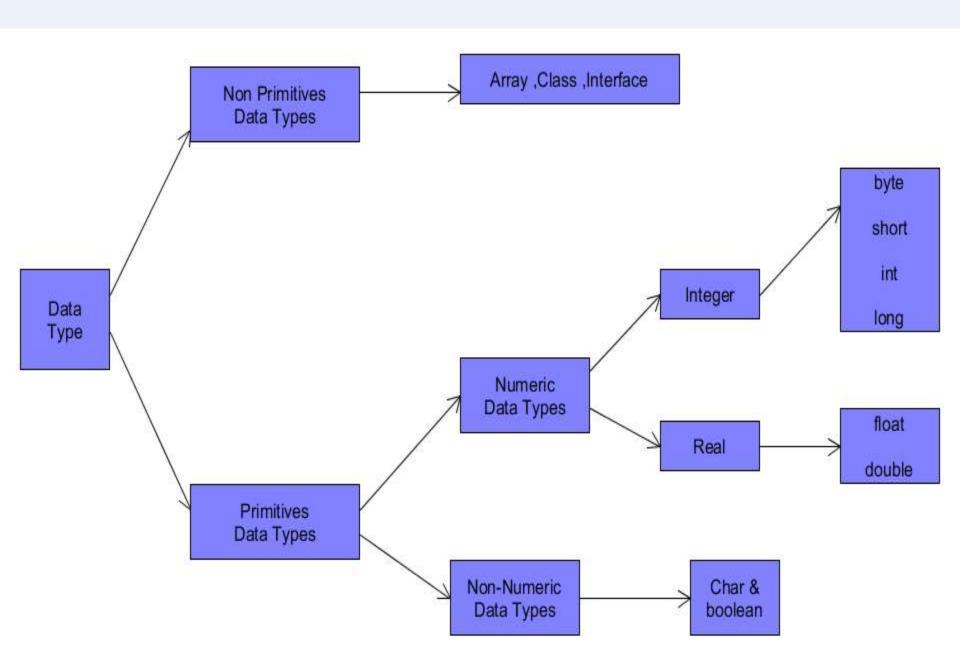
Class Verifier Execution Loader

Operating System

#### JAVA PROGRAM-DEVELOPMENT PHASES



#### **DATA TYPES IN JAVA**



#### **GARBAGE COLLECTION**

- Garbage collection is the mechanism that De allocate the memory of an object when it is no longer referenced by a variable.
- ❖ In C++, the memory of an Object is released by use of delete operator.

❖ Java virtual machine determines when to free up the memory of an object.

#### **ADVANTAGES OF JAVA**

- Java is simple language.
- Java does not support POINTERS.
- Java is first language in which programs can be executed using web.
- \* Write Once Run Anywhere (WORA).

#### **DISADVANTAGES OF JAVA**

- Slow Performance.
- No support for Low level programming.
- Poor features in Java.
- ❖ No control over Garbage Collection.

#### **PROJECT**

#### INTRANET MAILING SYSTEM

- Users can send information and query to each other.
- Provides the facility to maintain profile and inbox of each employee separately.
- Develop a communication interface for the organization.

### THANK YOU

## Any Query ?