Java™

ORACLE

KIRANJIT
MTECH
ANDROID & IPHONE APPS

Point of Discussion

- What & Why ?

  Java is a programming language and has a platform

- Application?

  1.Standalone

  2.Web

  3.Enterprise

  4.Mobile

Point of Discussion

- History ?

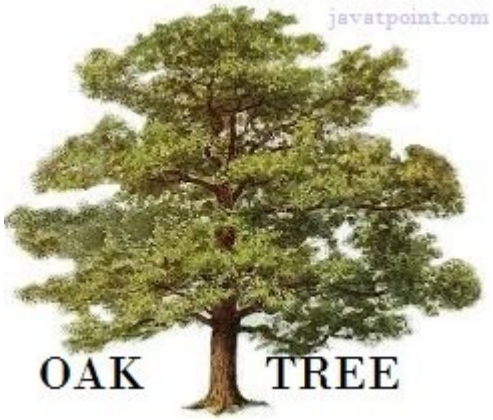
  Green Team

  Oak

    Java(1995)

      jdk 1.0/1.1/1.2/1.3/1.4

        J2SE 5.0/Java SE 6/7



Point of Discussion

Features of Java

- Simple
- Object-Oriented
- Platform independent
- Secured
- Robust
- Architecture neutral
- Portable
- Dynamic
- Interpreted
- High Performance
- Multithreaded
- Distributed

Point of Discussion

Oops.....

- Process Oriented Model :- code acts on data (object)
- Object Oriented Model :- by controlling data we can access code

1.Object

2.Class

3.Inheritance

4.Polymorphism

5.Abstraction

6.Encapsulation

Point of Discussion

- Class :-blueprint / template that describes the behaviour and states of an object.

- Object :-instance of a class (created using new)

  object will have its own state, and access to all of the behaviors defined by its class.

- Analogy :-

  Method = Behaviour

  State = Instance Variable

- ? is Instance variable:

  Each object (instance of a class) will have its own unique set of instance variables as defined in the class.

Example of object & class

- Dog has many states:color,name & breed.
- Dog has also many behaviour:
  sleeping, barking, wagging



So the method declared inside class describes the behaviour.

And the class describes the behaviour & states.

States are instance variable.

Point of Discussion

- JVM?
- JRE?
- JDK?
- JIT ?

Note:

JVM + LIB. = JRE

JRE + DEV TOOLS = JDK

java has its own 1.API and 2.runtime environment

Point of Discussion

- ENVIRONMENT SETUP
  - HELLO WORLD
- ECLIPSE VS NOTEPAD

NO QUESTION PLZZZZ...

?

Gr8t now I have question

- What is the base class of all classes?

By default all classes (if not extending) are extended by Object class.
Suppose

class Car

The compiler implicitly add

class Car extends Object

Note:-if a class is extended then its base class is its super class. eg. class Car extends Vehicle

so base class of Car is Vehicle & base class of Vehicle is object class.

- Object class provides some basic methods which are common for every class like toString, finalize, notify, wait, etc.

So Conclusion

- The java.lang.Object class is the root of the class hierarchy.
- Every class has Object as a superclass. All objects, including arrays, implement the methods of this class.