Presentation on Core Java

Content on java

- What is java?
- Where is java used?
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- Java virtual machine
- Java system overview
- Java program-development phase
- Advantage of java
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What is java?

- Java is a high level, object-oriented programming language developed by sun Microsoft of USA in 1991.
- Originally called Oak by james gosling, one of the inventors of the language.
- ➤ Java is a first programming language which provide the concept of writing programs that can be executed using the web.

where is java used?

- Desktop application :- Media player,antiviruse etc.
- Enterprise application :banking application, Business application.
- Mobile.
- > Embedded system.
- > Games.
- > Robotics.

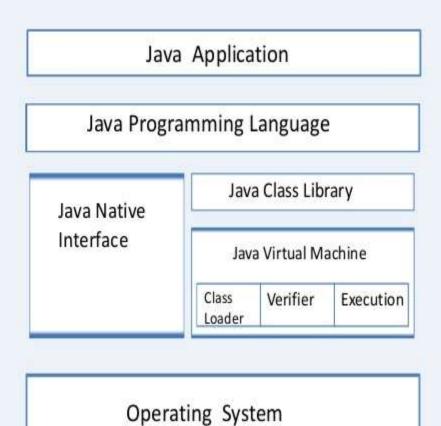
java Features

- Compiled and interpreted
- Multithreading
- Platform-independent and portable
- Object-oriented
- Robust and secure
- Distributed
- Familiar
- Simple and small
- High performance

How java differs from c and c++

- ➤ Java does not include the C unique statement keywords sizeof, and typedef.
- > Java does not contain the data types struct and union.
- Java does not support an explicit pointer type.
- ➤ Java does not have a preprocessor and therefore we cannot use #define,#include statement.

JAVA SYSTEM OVERVIEW



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 programming language.

Concept of oop

- ➤ Object
- > Class
- > Encapsulation
- > Inheritance
- > Polymorphism
- ➤ Abstraction

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.

Disadvantage on java

- Multiple inheritance can not support.
- > No support for low level programming.
- ➤ No control over Garbage collection.

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.