

Presentation on core java

Content on java

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

What is java?

- Java is a general – purpose , 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 :-acrobat reader,Media player,antiviruse etc.
- Enterprise application :-
banking application,Business application.
- Mobile.
- Embedded system.
- Games.
- Robotics.

java Features

- Compiled and interpreted
- 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 requires that the functions with no arguments must be declared with empty parenthesis and not with the `void` keyword as done in `c`.
- Java adds new operators such as `instanceof` and `>>`.
- Java adds labelled `break` and `continue` statement.
- Java adds many features required for object-oriented programming.

JAVA SYSTEM OVERVIEW

Java Application

Java Programming Language

Java Native
Interface

Java Class Library

Java Virtual Machine

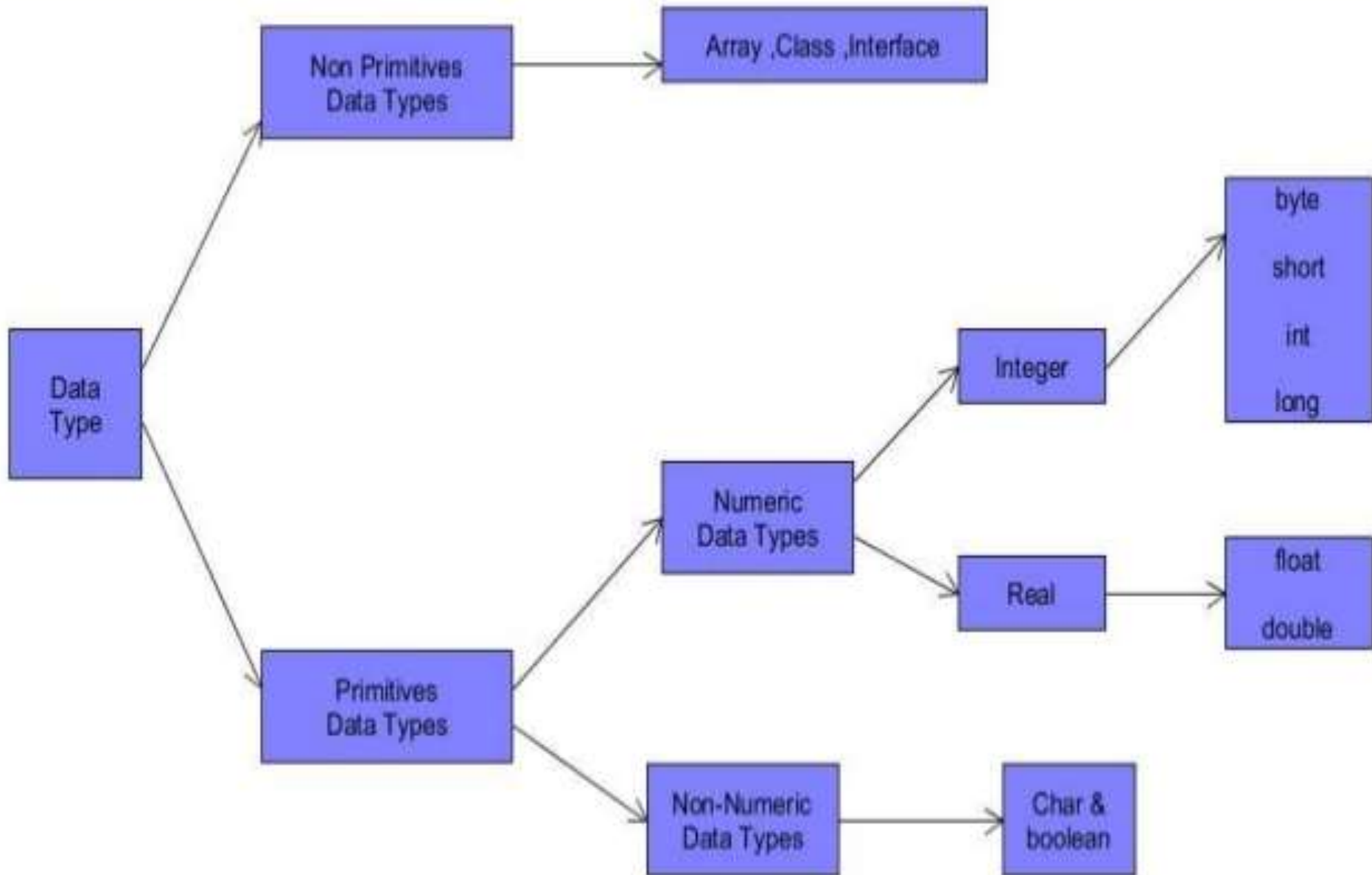
Class
Loader

Verifier

Execution

Operating System

DATA TYPES IN JAVA



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(WORA).

Disadvantage on java

- Slow performance.
- No support for low level programming.
- Poor features in java.
- 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 platform.

Simple java program

```
Class SampleOne
```

```
{
```

```
Public static void main(string args [])
```

```
{
```

```
System .out.println("java is better than c++);
```

```
}
```

```
}
```