

C.SYAMRAJ

MCA 2nd semester.

Introduction to java

Java programming language history is very interesting to know. Now we will see how it become a one of the popular programming language in the world.

INTRODUCTION:

- * Sun microsystems in 1990 planed to do a project to develop software for consumer electronic devices that are controlled by a remote.

- * in January 1991 project manager James Gosling and his team members 'patrick Naughton', 'mike sheridian', 'chris wrath', and 'Ed frank' amet to discuss about this project. This project is called as "Green Project" or " green Team".

- * the main aim of this project is to control the electronic devices such as set top boxes, televisions,etc...

- * James Gosling identified that by using the 'C'and 'C++' programming languages to develop the project. But these ('C'and 'C++') languages are "system dependent languages". So he decided to develop a new language which has completely "system independent".
 - [] system dependent :: system dependent means the applications that run under only one operating system(OS) in one series of computers (one operating environment).
 - [] system independent :: system independent means the applications that can run indifferent operating environments.

- EX: applications written in Java are a prime example. This can run in many operating systems.

- * first it was called as "green talk" by 'James Gosling' and file extension was. •gt.

* This new developing language was named as 'OAK' or 'OAK Project'.

** Why 'OAK'? : OAK is a symbol of strength and chosen as a national tree of many major countries like USA ,France, Germany,romania etc...

* in 1995 OAK(tree name) was renamed as Java because it was already registered by OAK Technologies.So again they are decided to give a new name for this project. Later they named it as "Java".

* Java is used in internet programming ,mobile devices, games ,e-business solutions etc..

* After 1995 Java becomes the base for the internet development.

Why they named it as JAVA :

* the team gathered to choose a new name the suggested words were "dynamic", "Revolutionary", "Silk", "jolt" , "DNA" etc...

* according to James Gosling "Java" was one of the top choices along with "Silk" since Java was so unique, most of the team members preferred "Java" than other names. Because of the following reason

== During the development of this project team members are consumed more coffee was supplied from a place called "Java Island".It has export to entire the world hence they fixed the name as "Java".

* symbol of Java programming language is a cup and saucer with vapours.

:: Green Project → OAK Project → JAVA

* Oracle corporation is the current owner of the official implementation of Java SE platform in January 27, 2010

JAVA has Three Editions as follow.

-J2ME → Micro Edition

-J2SE → Standard Edition

-J2EE → Enterprise

* Java Versions :

Java has released many versions till now the current stable release of Java is Java SE 10

1.JDK (Alpha and Beta)- 1995

2.JDK 1.0 → 23-Jan-1996

3.JDK 1.1 → 19-Feb-1997

4.J2SE 1.2 → 8-Dec-1998

5.J2SE 1.3 → 8-may-2000

6.J2SE 1.4 → 6-Feb-2002

7.J2SE 5.0 → 30-Sept-2004

8.J2SE 6 → 11-Dec-2006

9.J2SE 7 → 28-July-2011

10.J2SE 8 → 18-Mar-2014

11.J2SE 9 → 21-Sept-2018

12.J2SE 10 → 20-Mar-2018

** both JDK(java development kit) and JVM (java virtual machine) are implemented by James Gosling.

JDK(Java Development Kit)::

Java development kit(JDK) is a software development environment used for developing Java applications and applets. It includes the Java Runtime environment(JRE) and interpreter/Loader(Java), compiler (Java C), archiver (jar), a documentation generator (Javadoc) and other tools needed in Java development.

JVM(Java Virtual Machine)::

* JVM is a very important part of both JDK and JRE ,because it is contained or in_built in both. Whatever program you Run JVM is responsible for executing Java program line by line hence it is also treated as "interpreter".

* And it has generate byte code for each and every line of the java program which is not understand by the programmers.