

Introduction to Java

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History

- The C language developed in 1972 by Dennis Ritchie had taken a decade to become the most popular language amongst programmers.
- Computer hardware went through a performance and price revolution from 1972 to 1991. Better, faster hardware was available at lesser price .
- Demand for big and complex software exponentially increased. But, with time programmers found that programming in C became tedious with its structural syntax.
- In 1979, Bjarne Stroustrup developed C++, an enhancement to the C language with included OOP fundamentals and features.

History

- Engineer Patrick Naughton had become extremely frustrated with the state of Sun's C++ and C APIs
- he was offered a chance to work on new technology and the Stealth Project was started, a secret nobody but he knew.
- Behind closed doors, a project was initiated in December of 1990, whose aim was to create a programming tool that could render obsolete the C and C++ programming languages.
- This Stealth Project was later named the Green Project when James Gosling and Mike Sheridan joined Patrick
- Over the period of time , the prospects of the project started becoming clearer to the engineers working on it.
- No longer was its aim to create a new language far

History

- Gosling began work on enhancing C++ and named it "C++ ++ -". The ++ and - meant, putting in and taking out stuff.
- He soon abandoned the name and called it Oak after the tree that stood outside his office.
- Later a new name Java is given.
- Java is an island of Indonesia where first coffee was produced (called java coffee).
- On 23 May 1995, John Gage, the director of the Science Office of the Sun Microsystems along with Marc Andreessen, co-founder and executive vice president at Netscape announced to an audience of SunWorld™ that Java technology wasn't a myth and that it was a reality and that it was going to be incorporated into Netscape Navigator.

Versions

- Initial Release (versions 1.0 and 1.1) :1996
- Java 2 (version 1.2):1998
- Kestrel (Java 1.3): 2000
- Merlin (Java 1.4):2002
- Tiger (version 1.5; Java SE 5):2004
- Mustang (version 1.6; Java SE 6):2006
- Dolphin (version 1.7; Java SE 7):2011
- Spider(Java SE 8):2014

Features of Java

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

Features of Java

The Java platform is the name given to the computing platform from Oracle that helps users to run and develop Java applications. The platform consists of two essential softwares:

- Java Runtime Environment (JRE), which is needed to run Java applications and applets;
- Java Development Kit (JDK), which is needed to develop those Java applications and applets

Features of Java

JVM (Java Virtual Machine) is an abstract machine. It is a specification that provides runtime environment in which java bytecode can be executed. The JVM performs following main tasks

- Loads code
- Verifies code
- Executes code
- Provides runtime environment