



SNS COLLEGE OF TECHNOLOGY

(AN AUTONOMOUS INSTITUTION)

COIMBATORE – 35

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



UNIT I- INTRODUCTION TO OOP

Object Oriented Programming concepts

Evolution of java

Java Architecture

Data Types

Variables and Operators

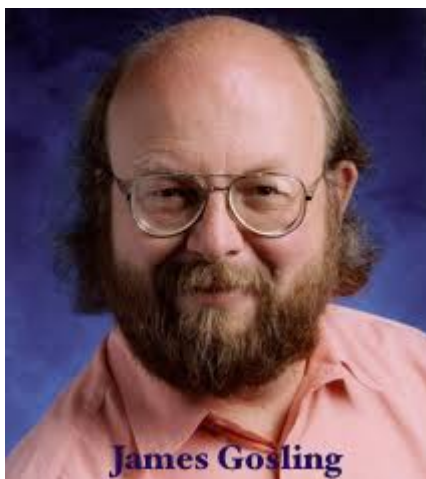
Environment setup

Command Line Arguments, Comments

History of Java

The history of Java is very interesting. Java was originally designed for interactive television, but it was too advanced technology for the digital cable television industry at the time. The history of Java starts with the Green Team. Java team members (also known as Green Team), initiated this project to develop a language for digital devices such as set-top boxes, televisions, etc. However, it was best suited for internet programming. Later, Java technology was incorporated by Netscape.

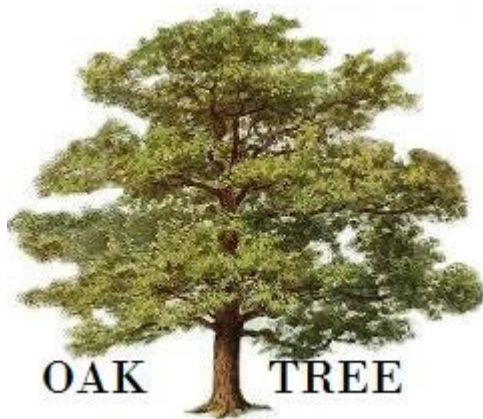
The principles for creating Java programming were "Simple, Robust, Portable, Platform-independent, Secured, High Performance, Multithreaded, Architecture Neutral, Object-Oriented, Interpreted, and Dynamic". [Java](#) was developed by James Gosling, who is known as the father of Java, in 1995. James Gosling and his team members started the project in the early '90s.



Currently, Java is used in internet programming, mobile devices, games, e-business solutions, etc. Following are given significant points that describe the history of Java.

- 1) **James Gosling**, **Mike Sheridan**, and **Patrick Naughton** initiated the Java language project in June 1991. The small team of sun engineers called **Green Team**.
- 2) Initially it was designed for small, embedded systems in electronic appliances like set-top boxes.
- 3) Firstly, it was called "**Greentalk**" by James Gosling, and the file extension was .gt.
- 4) After that, it was called **Oak** and was developed as a part of the Green project.

Why Java was named as "Oak"?



- 5) **Why Oak?** Oak is a symbol of strength and chosen as a national tree of many countries like the U.S.A., France, Germany, Romania, etc.
- 6) In 1995, Oak was renamed as "**Java**" because it was already a trademark by Oak Technologies.

Why Java Programming named "Java"?

7) Why had they chose the name Java for Java language? The team gathered to choose a new name. The suggested words were "dynamic", "revolutionary", "Silk", "jolt", "DNA", etc. They wanted something that reflected the essence of the technology: revolutionary, dynamic, lively, cool, unique, and easy to spell, and fun to say.

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.

- 8) Java is an island in Indonesia where the first coffee was produced (called Java coffee). It is a kind of espresso bean. Java name was chosen by James Gosling while having a cup of coffee nearby his office.
- 9) Notice that Java is just a name, not an acronym.

10) Initially developed by James Gosling at [Sun Microsystems](#) (which is now a subsidiary of Oracle Corporation) and released in 1995.

11) In 1995, Time magazine called **Java one of the Ten Best Products of 1995**.

12) JDK 1.0 was released on January 23, 1996. After the first release of Java, there have been many additional features added to the language. Now Java is being used in Windows applications, Web applications, enterprise applications, mobile applications, cards, etc. Each new version adds new features in Java.

Java Version History

Java Version	Release Date	Major Features/Updates
Java SE 1.0	January 1996	Initial release, basic object-oriented language
Java SE 1.1	February 1997	Inner classes, JDBC, RMI, reflection
Java SE 1.2	December 1998	Swing, Collections framework, Java IDL, JIT
Java SE 1.3	May 2000	HotSpot JVM, JavaSound, JNDI
Java SE 1.4	February 2002	Regular expressions, NIO, assert keyword
Java SE 5.0	September 2004	Generics, metadata, enums, autoboxing, varargs
Java SE 6	December 2006	Scripting language support, JDBC 4.0, compiler API
Java SE 7	July 2011	Fork/Join framework, NIO.2, try-with-resources, switch with strings
Java SE 8	March 2014	Lambdas, streams, default methods, Optional, new date and time API
Java SE 9	September 2017	Module system (Project Jigsaw), JShell (REPL), new HTTP Client API
Java SE 10	March 2018	Local-variable type inference (var keyword)
Java SE 11	September 2018	New HTTP client, String methods, File methods
Java SE 12	March 2019	Switch expressions (preview), microbenchmark suite
Java SE 13	September 2019	Text blocks (preview), dynamic CDS archives
Java SE 14	March 2020	Switch expressions (standard), records (preview)
Java SE 15	September 2020	Sealed classes (preview), records, hidden classes
Java SE 16	March 2021	Records (standard), Pattern Matching for instanceof
Java SE 17	September 2021	LTS version, sealed classes, new JavaDoc API

Java Version	Release Date	Major Features/Updates
Java SE 18	March 2022	Simple Web Server, UTF-8 by default
Java SE 19	September 2022	Virtual threads (preview), structured concurrency (preview)
Java SE 20	March 2023	Scoped values, structured concurrency (preview)

Evolution of java – video link

<https://www.youtube.com/watch?v=Y-ubmaLsd5E>