

# **Java Enterprise Application Development**

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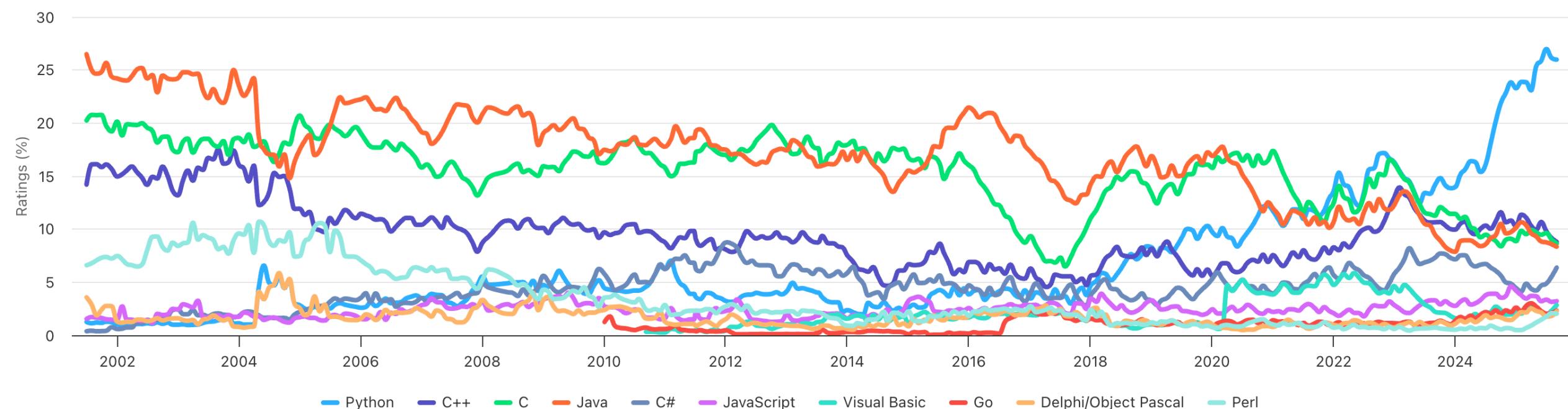
*Lecture 1  
Introduction to Java*

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15 September 2025**

# Popularity of Java

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- More than 17 million developers
- TIOBE programming community index (September 2025)



# Brief History

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- James Gosling, Mike Sheridan, and Patrick Naughton initiated the project in June 1991
- Initially called Oak after an oak tree that stood outside Gosling's office
- Finally renamed Java, from Java coffee
- Designed with a C/C++-style syntax
- Java 1.0 released by Sun in 1996
  - “Write Once, Run Anywhere” (WORA)
- Soon incorporated by major web browsers



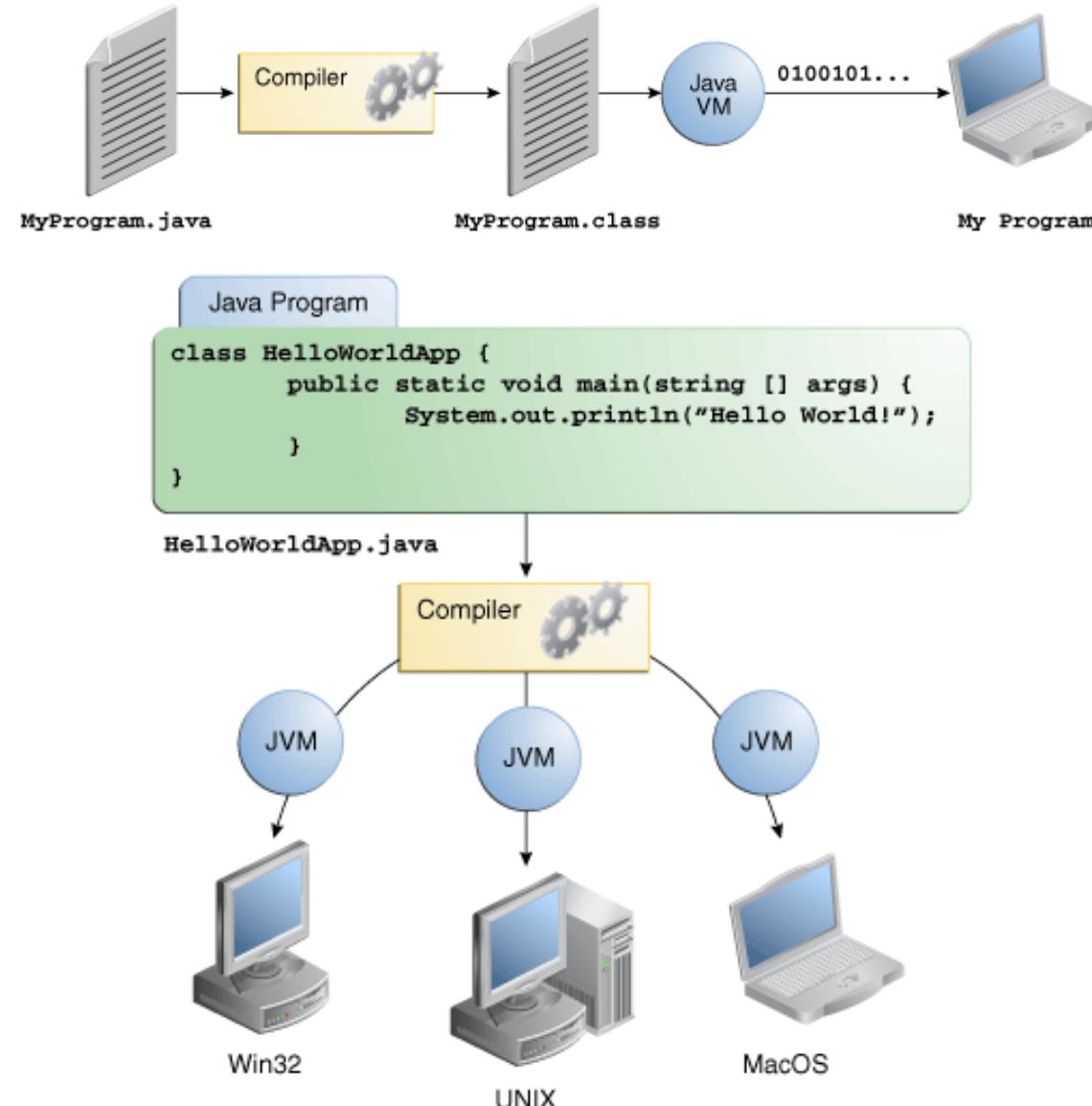
# Brief History (cont.)

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- Java 2 (initially released in 1998/1999)
  - Multiple configurations for different types of platforms
    - J2SE, desktop version
    - J2EE, for enterprise applications
    - J2ME, optimized for mobile applications
- Renamed as Java SE/Java EE/Java ME in 2006
- Latest version: JDK 24 (latest), JDK 21 (latest LTS)

# The Java Programming Language

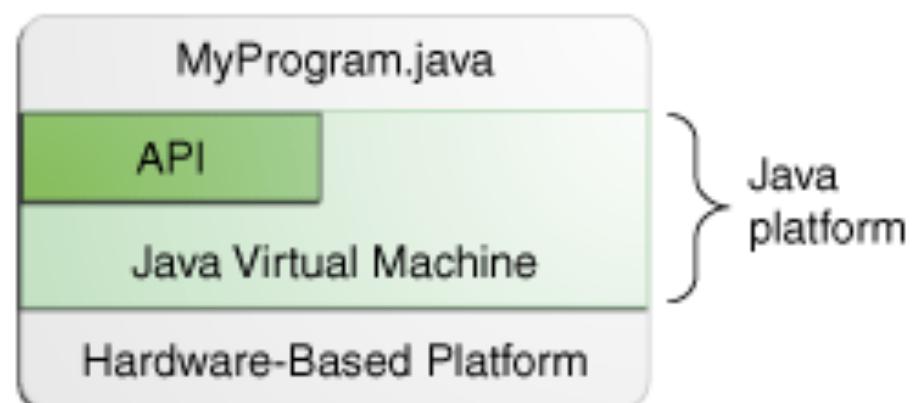
- Characteristics
  - Simple
  - Object oriented
  - Distributed
  - Multithreaded
  - Dynamic
  - Architecture neutral
  - Portable
  - High performance
  - Robust
  - Secure



# The Java Platform

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- A software-only platform that runs on top of other hardware-based platforms
- Two components
  - Java Virtual Machine (JVM)
  - Java Application Programming Interface (API)



# Java Platforms

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- Java SE (Standard Edition)
  - For general-purpose use on desktop PCs, servers and similar devices
- Java EE (Enterprise Edition)
  - Extending Java SE, useful for multi-tier client-server enterprise applications
- Java ME (Micro Edition)
  - Specifies several different sets of libraries (known as profiles) for devices with limited storage, display, and power capacities