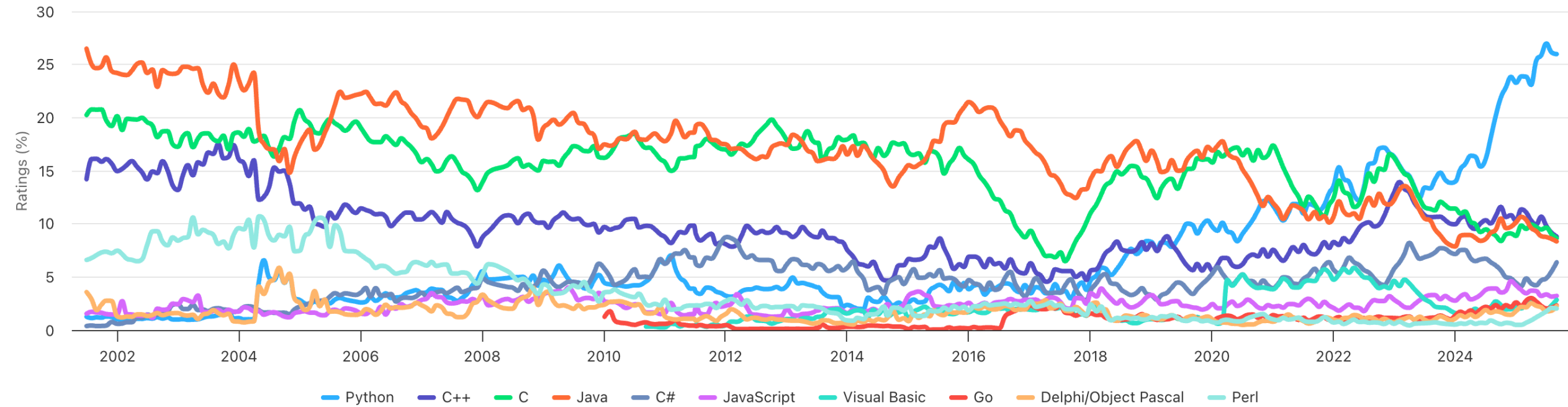# Java Enterprise Application Development

Lecture 1
Introduction to Java

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Popularity of Java

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

Brief History

- 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
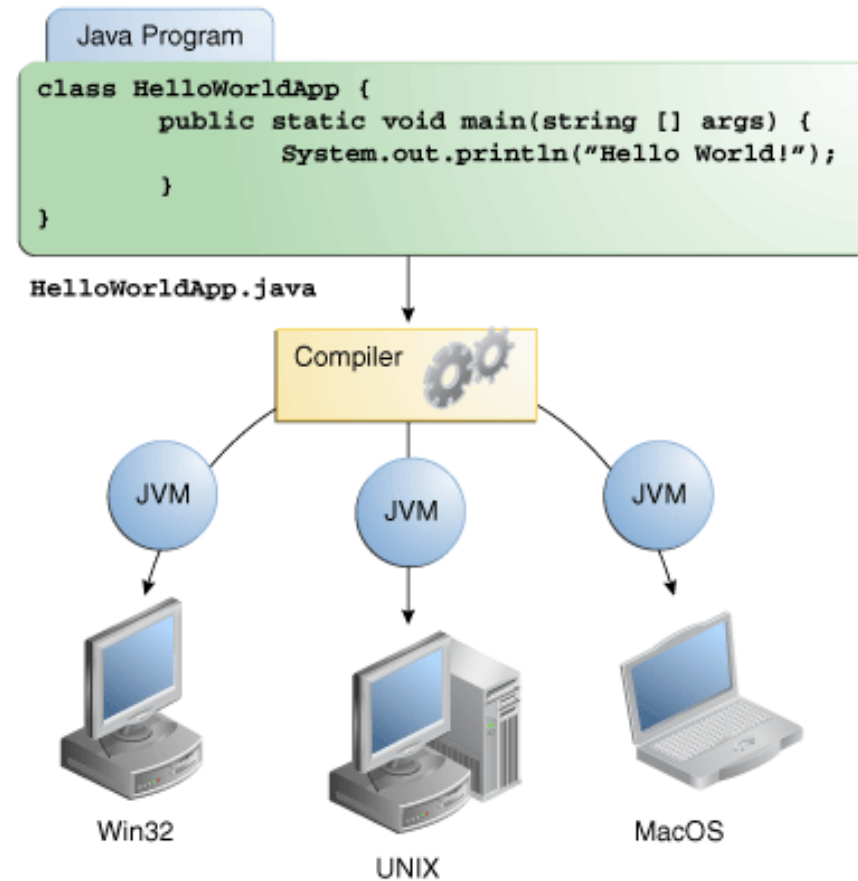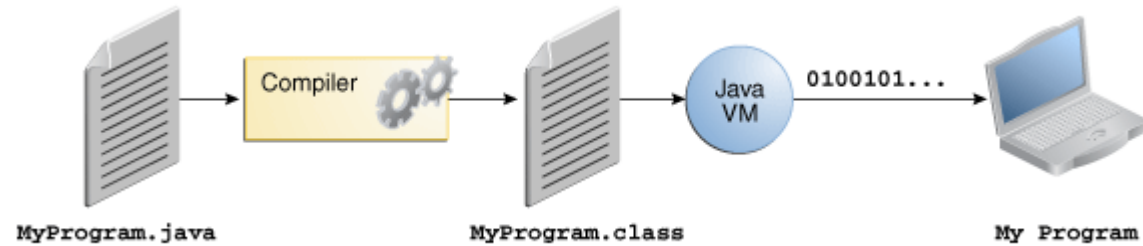
Brief History (cont.)

- 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

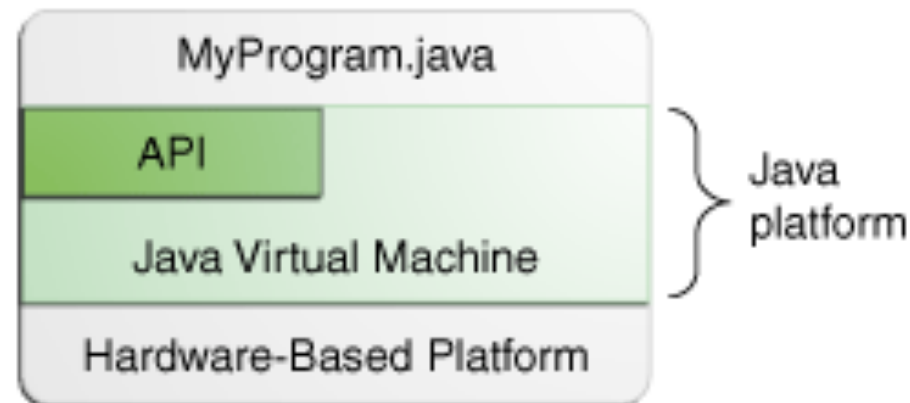- Latest version: JDK 24 (latest), JDK 21 (latest LTS)

The Java Programming Language

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

The Java Platform

- 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

- 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