Everything in Class & Objects

Date :

MON TUE WED THU FRI SAT SUN

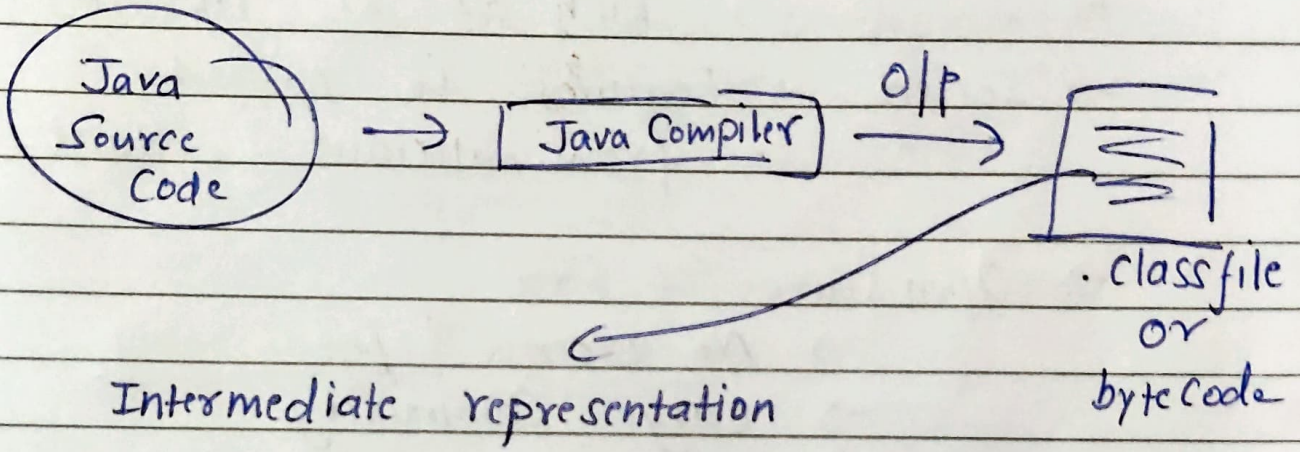
What is Java?

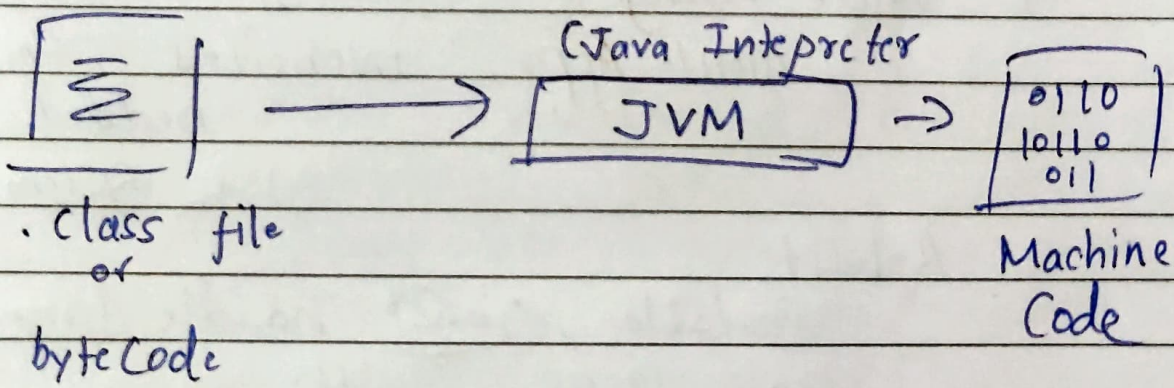
- → Platform Independent ✓
- → Purely OOP ✓
- → Strongly typed ✓
- → Secure ✓
- → Portable
- → Write Once Run Anywhere (WORA)

Type casting relation ⇒ Strongly typed

Exception Handling ⇒ Secure

Related





WORA - Java when compiled, creates a byte code (.class file), which can be run in any machine which supports JVM

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So once compiled it doesn't require re-compilation at every machine it runs, JVM converts the bytecode to be understood by the underlying hardware.

Why Java?

→ Simple → clear & concise syntax
& → Rich set of libraries

→ Secure → Features to protect from malicious attack

→ Open Source & Free
→ No License fee
→ Large Community

→ Wide Range / Versitality
Mobile Apps, Websites, Embedded System

→ Robust
Scalable, handle large scale apps with high performance & efficiency

→ Backward Compactibility

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So older Java code works on newer versions

→ JDK vs JVM vs JRE

① JDK (Java Development Kit)
→ Comprehensive s/w package for Java Dev.
→ JRE + Java Development Tools (Compilers + Debuggers) + libraries
→ Developer Use JDK to write, compile + run Java programs

② JRE (Java Runtime Environment)
→ JVM + lib
→ Runtime Environment without development tools (only for production)
→ Users who ~~not~~ want to run Java apps need JRE

③ JVM (Java Virtual Machine)
→ Integral part of the JAVA platform

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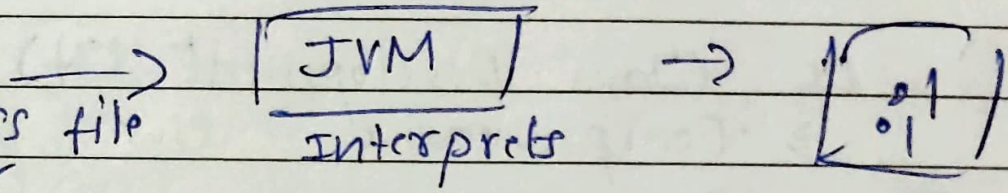
- Virtualized env to run java apps on differents types of h/w with modification



+ manages memory & re-sources