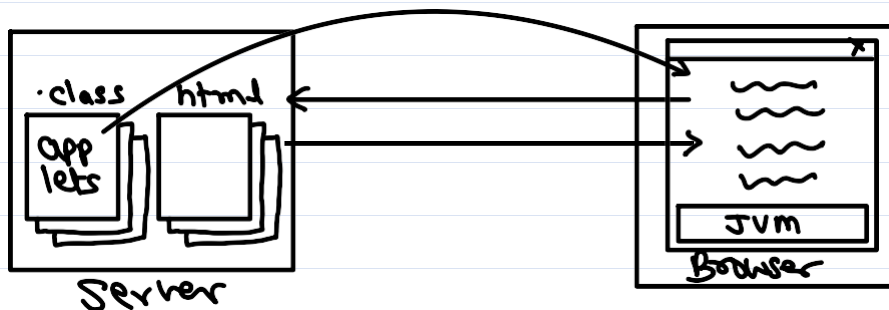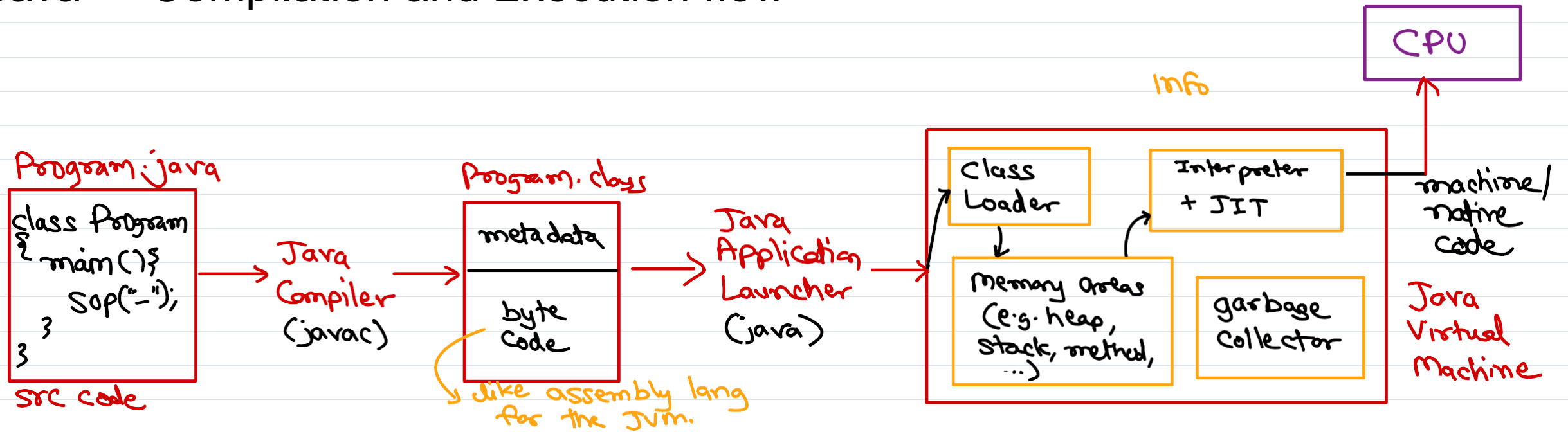Java - 1991 - James Gosling & Team
                        - Green Team
                - Sun Micro System

Java - Embedded Systems
    - "Compile Once Run Everywhere"
    - First product : *7
                Universal Remote Control.

Internet - Late 80's - web pages - sharing info.
        - 1990 - www
        - 1995 - Java applets - interactive

Java — Compilation and Execution flow

CPU

Program.java

```
class Program
{
    main(){
        SoP("-");
    }
}
```

src code

→ Java Compiler (javac) →

Program.class

metadata
byte code

↳ like assembly lang for the JVM.

→ Java Application Launcher (java) →

Info

Class Loader

Memory areas (e.g. heap, stack, method, ...)

Interpreter + JIT

garbage Collector

machine/native Code

Java Virtual Machine

JDK vs JRE vs JVM

SDK = Software Development Kit
  = Compiler/linker/debugger + libraries + documentation + IDE (optional)
    (dev tools)

JDK = Java's SDK = dev tools + libraries + java docs
                   (javac, java)   (rt.jar)

JDK

javac,
java, jdb, ...
(to develop
apps)

JRE

java ...
(to execute)

libraries, ...
rt.jar

JVM

Class Loader

Interpreter + JIT

Memory areas
(e.g. heap,
stack, method,
...)

garbage collector