

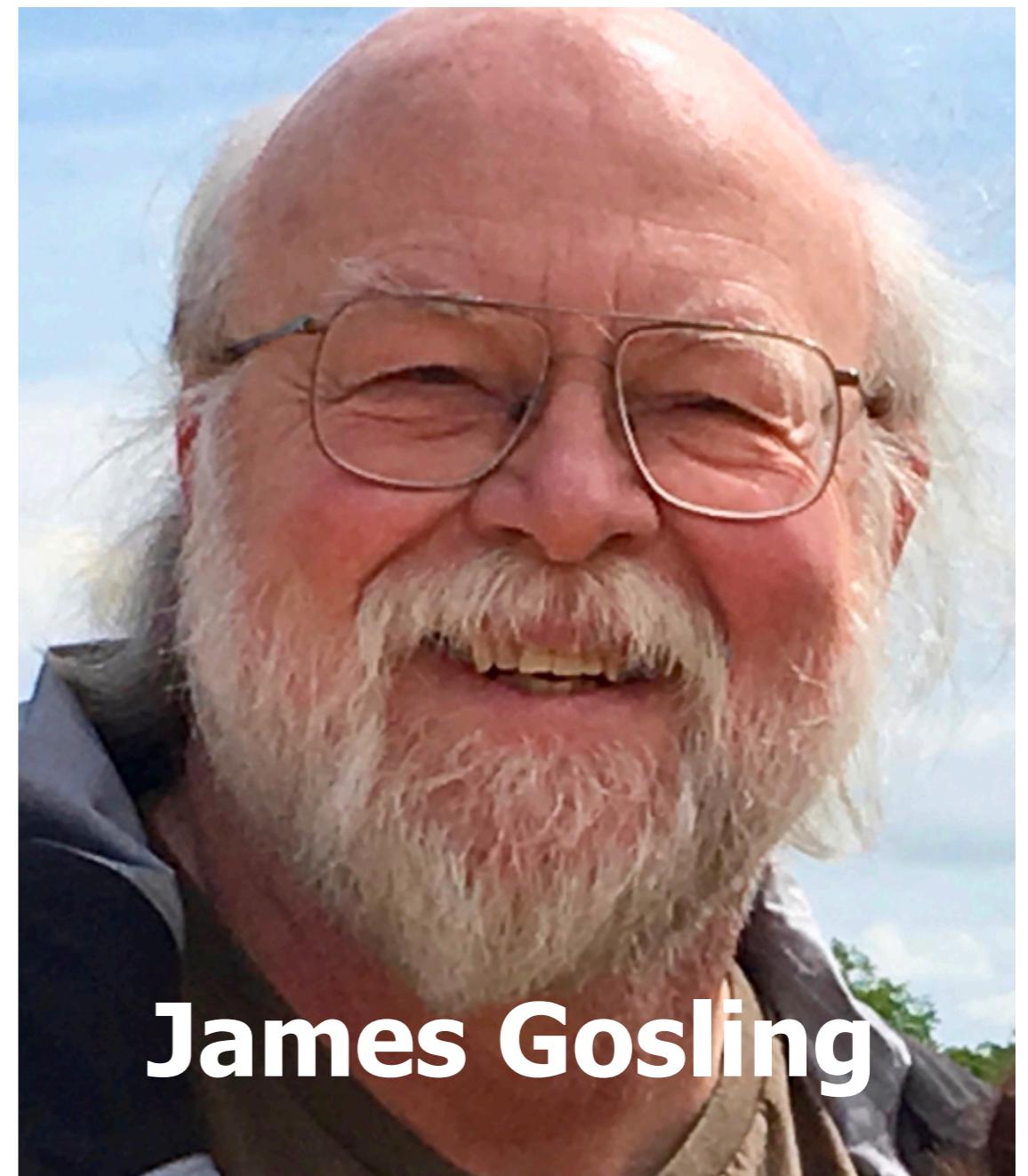
Java概述

杨亮



Java的诞生

- 诞生@Sun 1995 JDK 1.0
- Java 2平台 JDK 1.2
- JDK 1.3
 - Java ME 嵌入式
 - Java SE 标准平台
 - Java EE 企业级平台



James Gosling

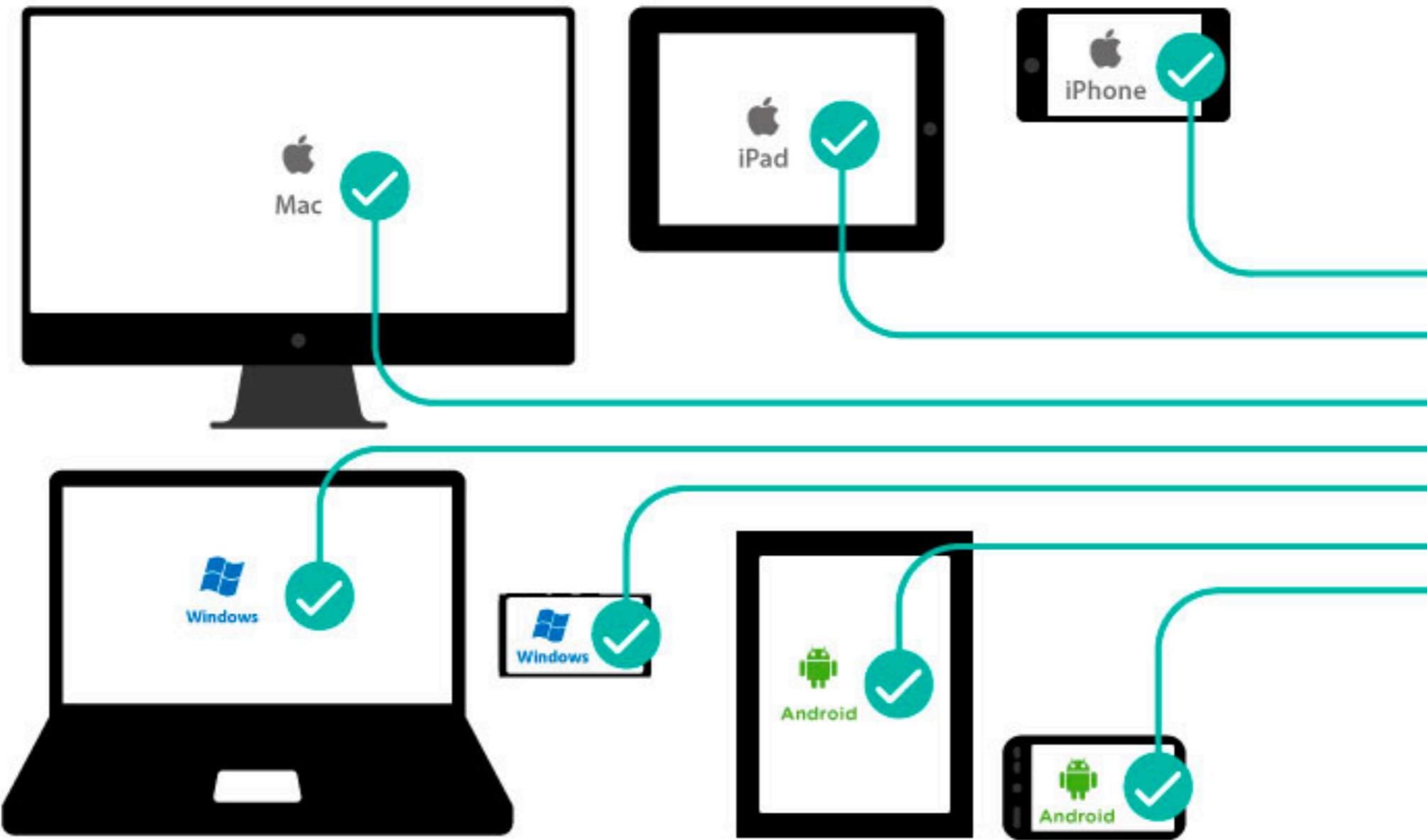


Java的今生

2009年Oracle收购Sun

Java的特点

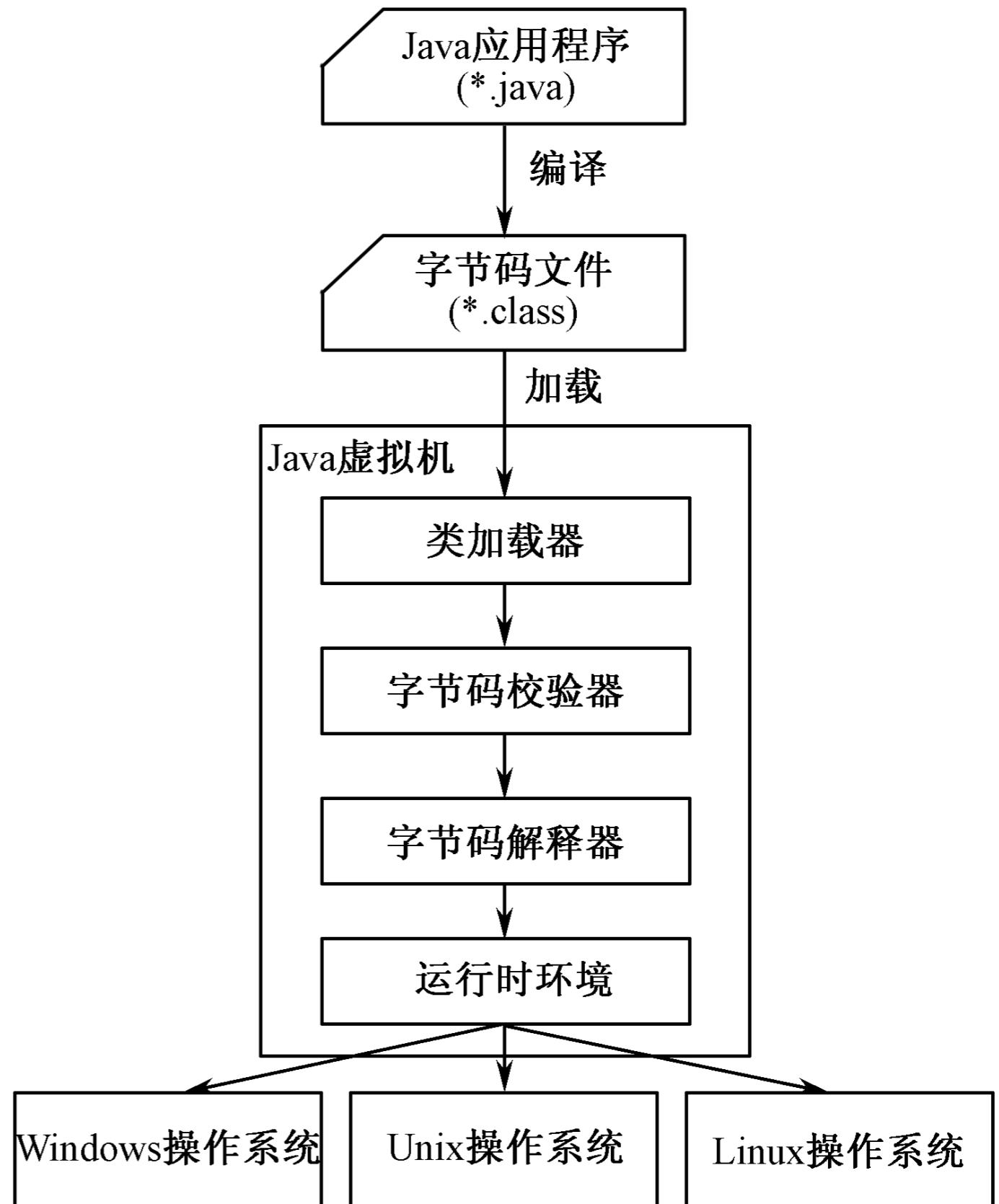
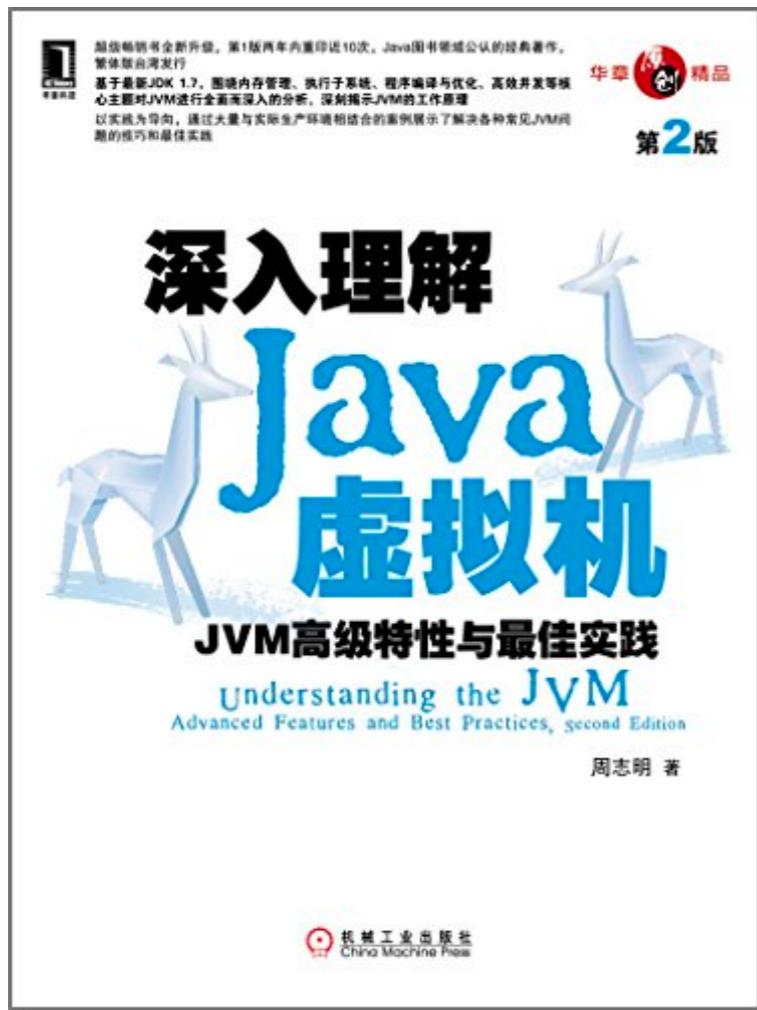
- 跨平台 Write Once, Run Anywhere
- 面向对象 Object-Oriented Programming
- 多线程 Multithreading



Write Once, Run Anywhere

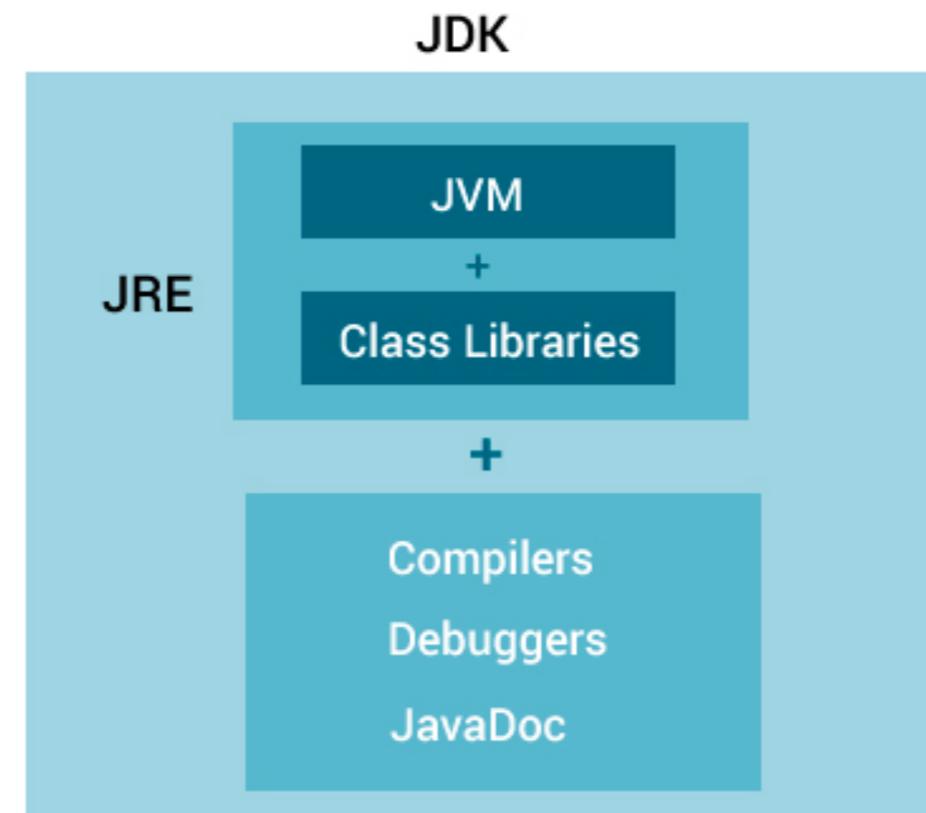
Java 虚拟机

JVM

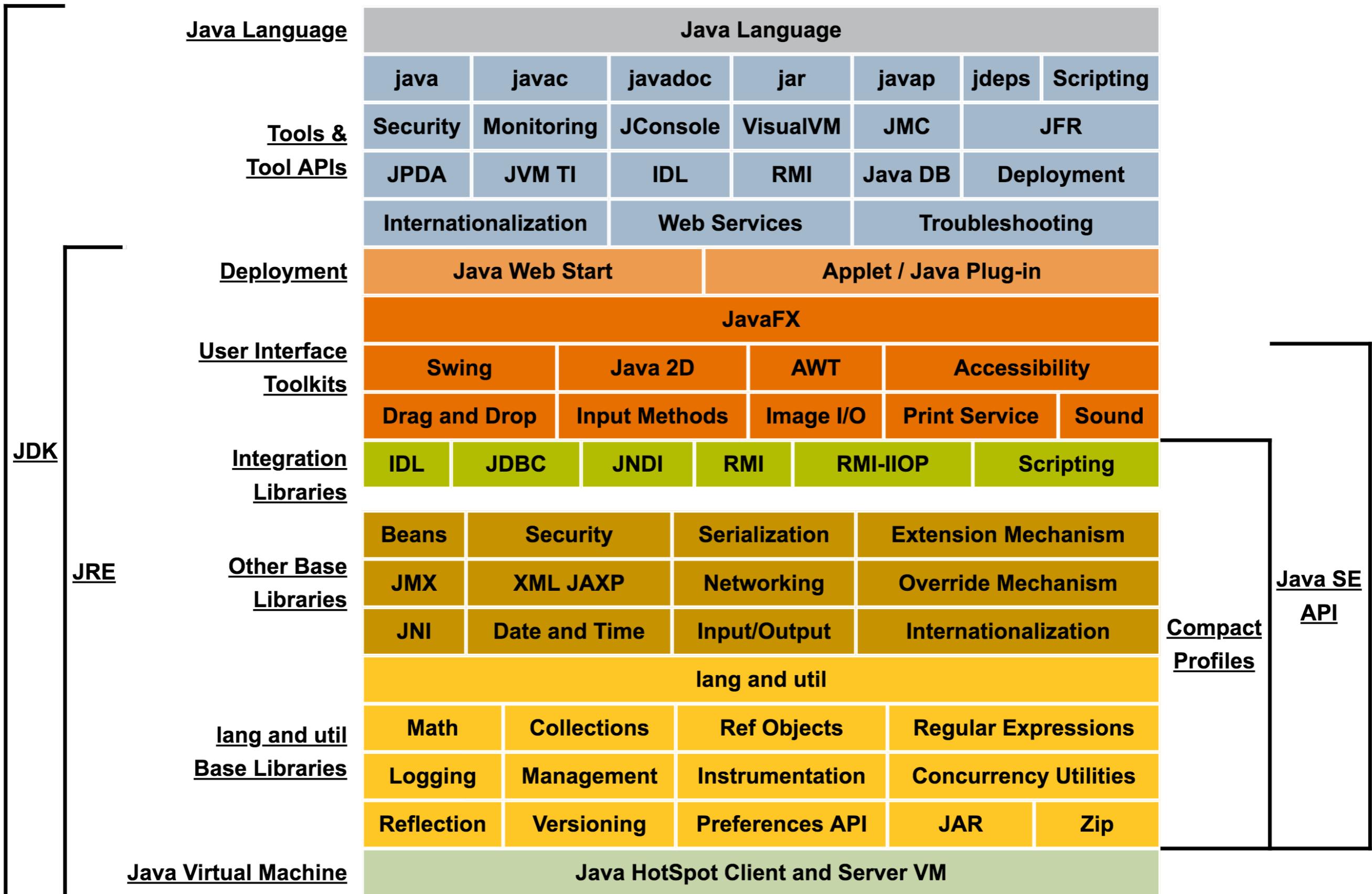


JDK, JRE and JVM

- JDK - Java Development Kit 8
- JRE - Java Runtime Environment
- JVM - Java Virtual Machine



JDK



O

Object

O

Oriented

P

Programming

Class

Definition of objects that share structure, properties and behaviours.



Building
class



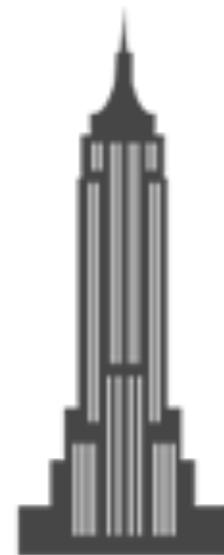
Dog
class



Computer
class

Instance

Concrete object, created from a certain class.



Empire State
instance of Building



Lassie
instance of Dog



Your computer
instance of Computer

class

car

methods

refuel() getFuel
setSpeed() getSpeed()
drive()

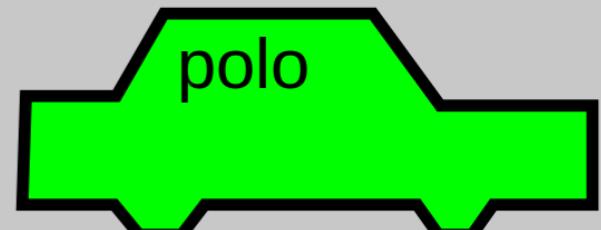
attributes

fuel
maxspeed

class

car

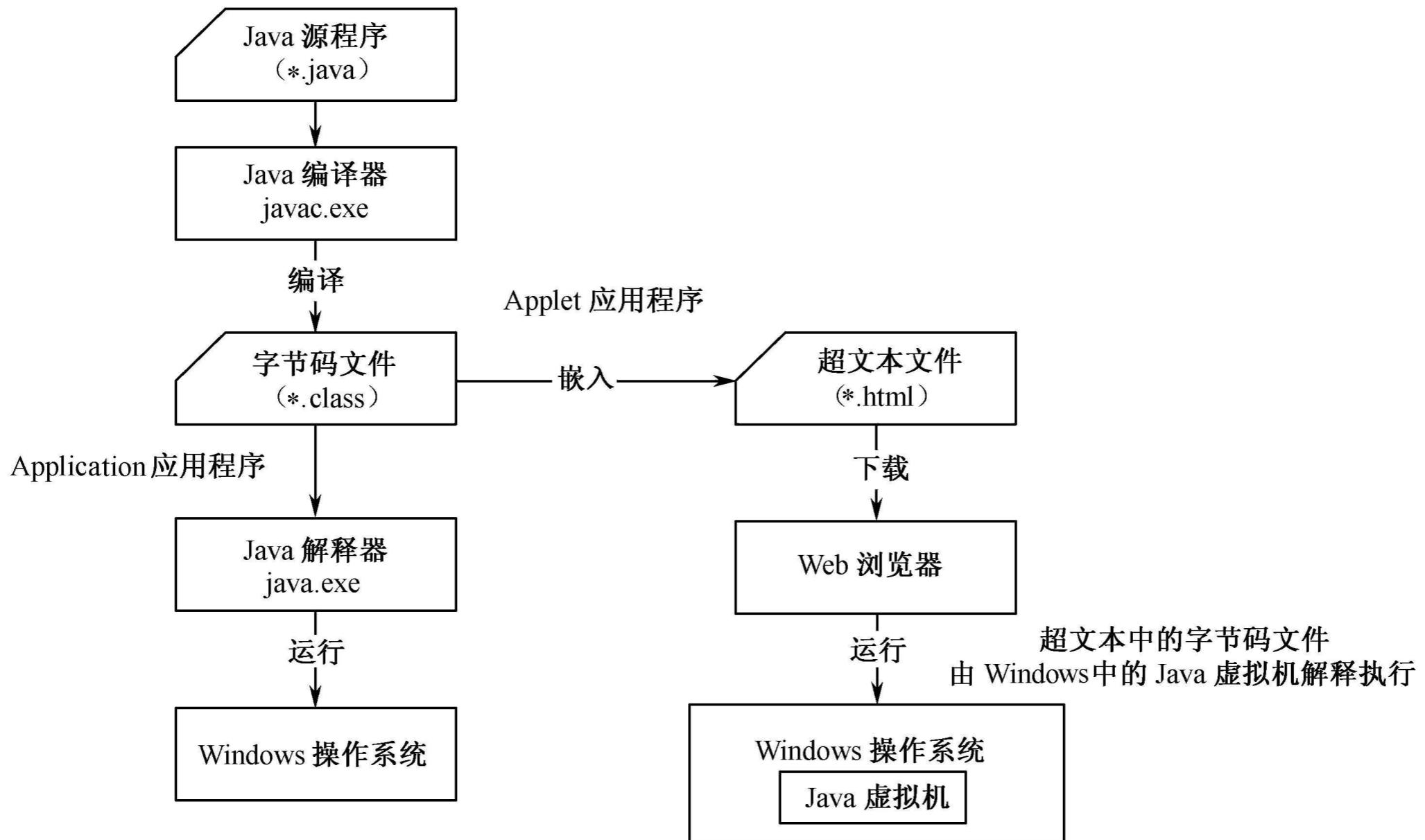
objects



多线程

Multithreading





Application & Applet

Example



C语言代码

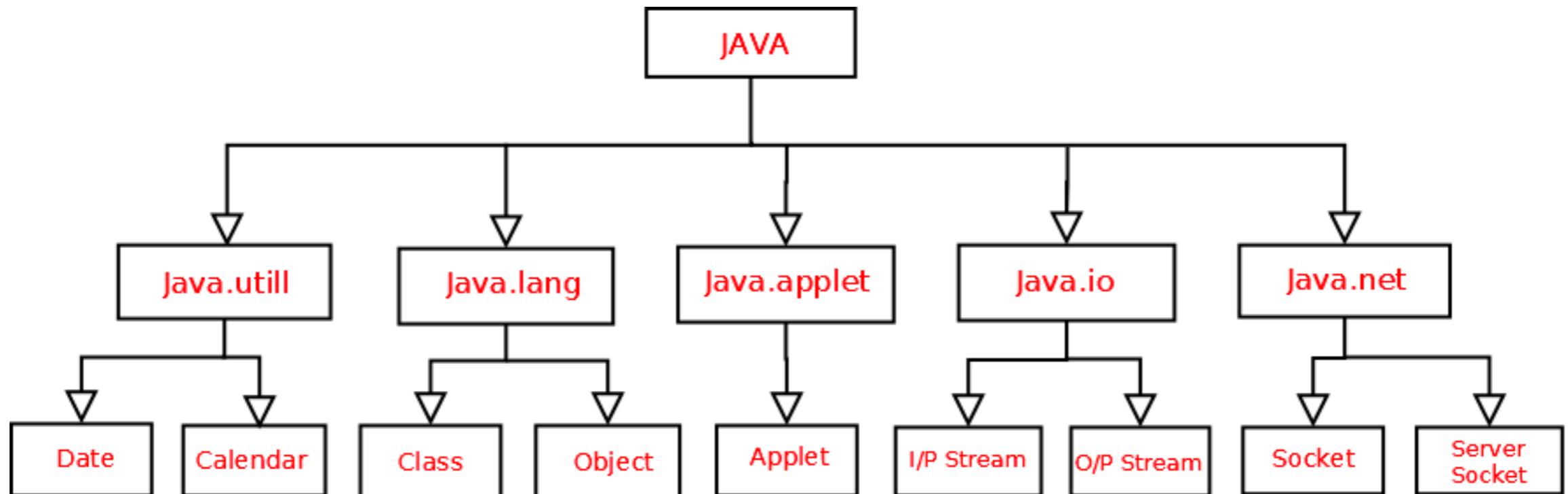
```
void main() {
    printf("Hello, World");
}
```

Java语言代码

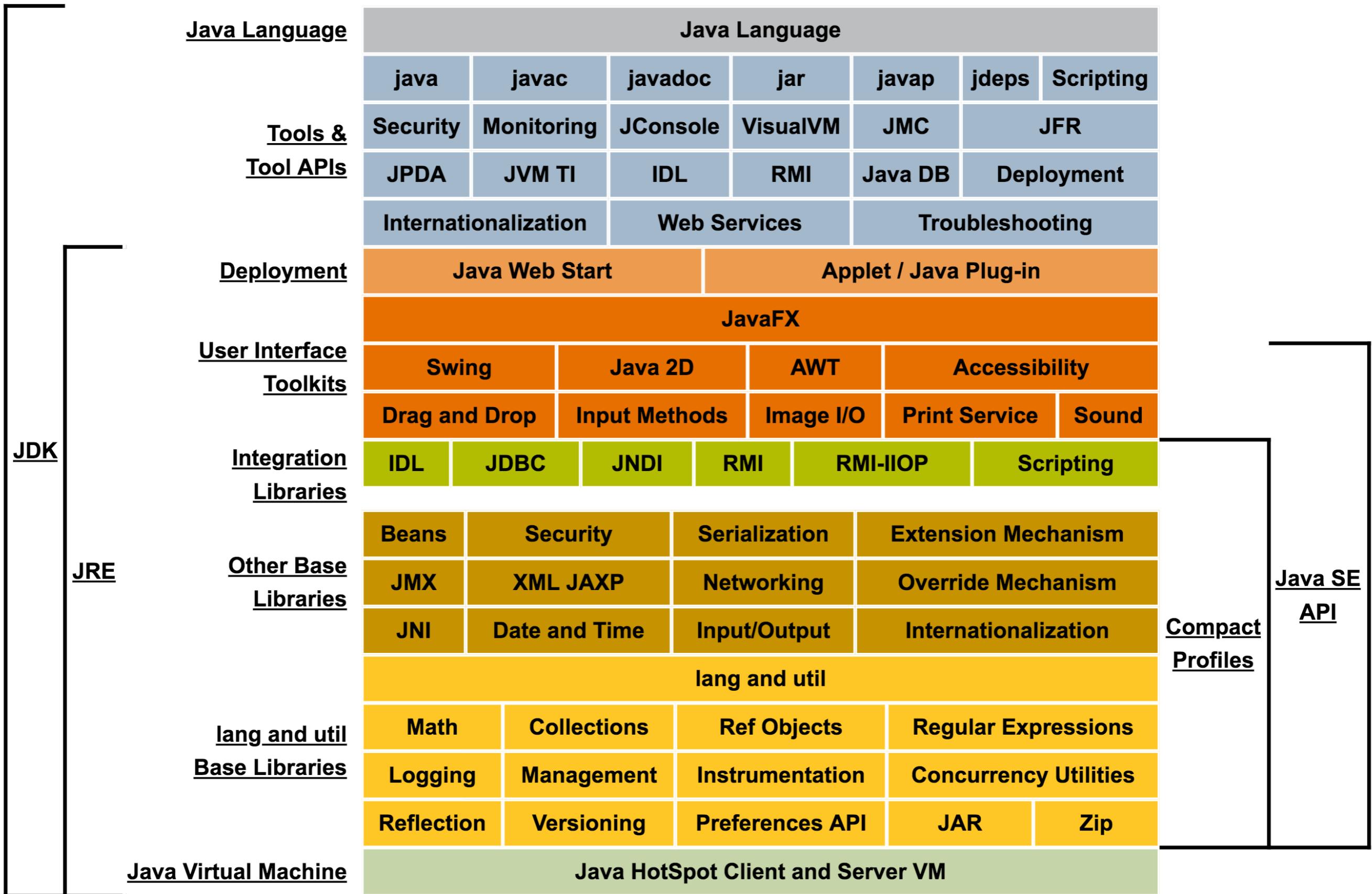
```
public class HelloWorld {
    public static void main(String[] args) {
        System.out.println("Hello, World");
    }
}
```

包 Package

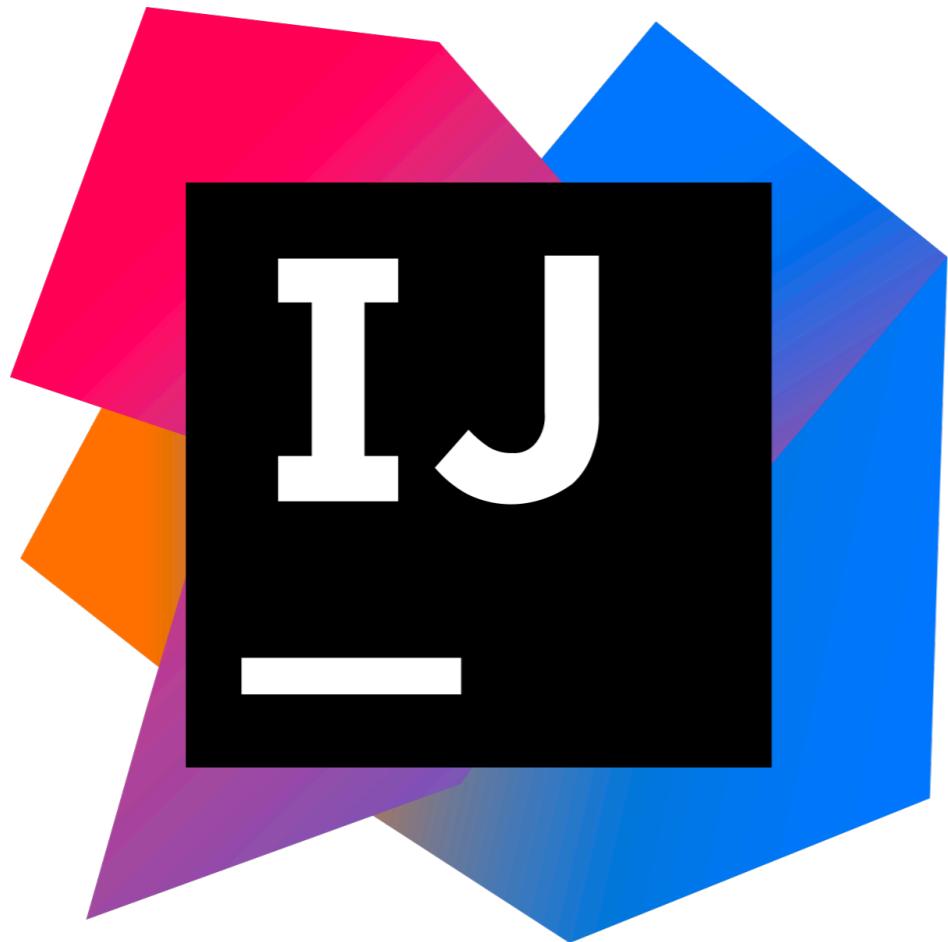
- 类的集合，对应文件夹
- 包中的类引用 - 包{.子包}.类|接口 `java.lang.Math.sqrt(x);`
- 导入包 - **import** 包{.子包}.类|接口|*; `import java.lang.Math.*;`
- 声明类所在的包 - **package** 包{.子包}; `package stefyang;`



Java API



集成开发环境 IDE



IntelliJ IDEA



Eclipse