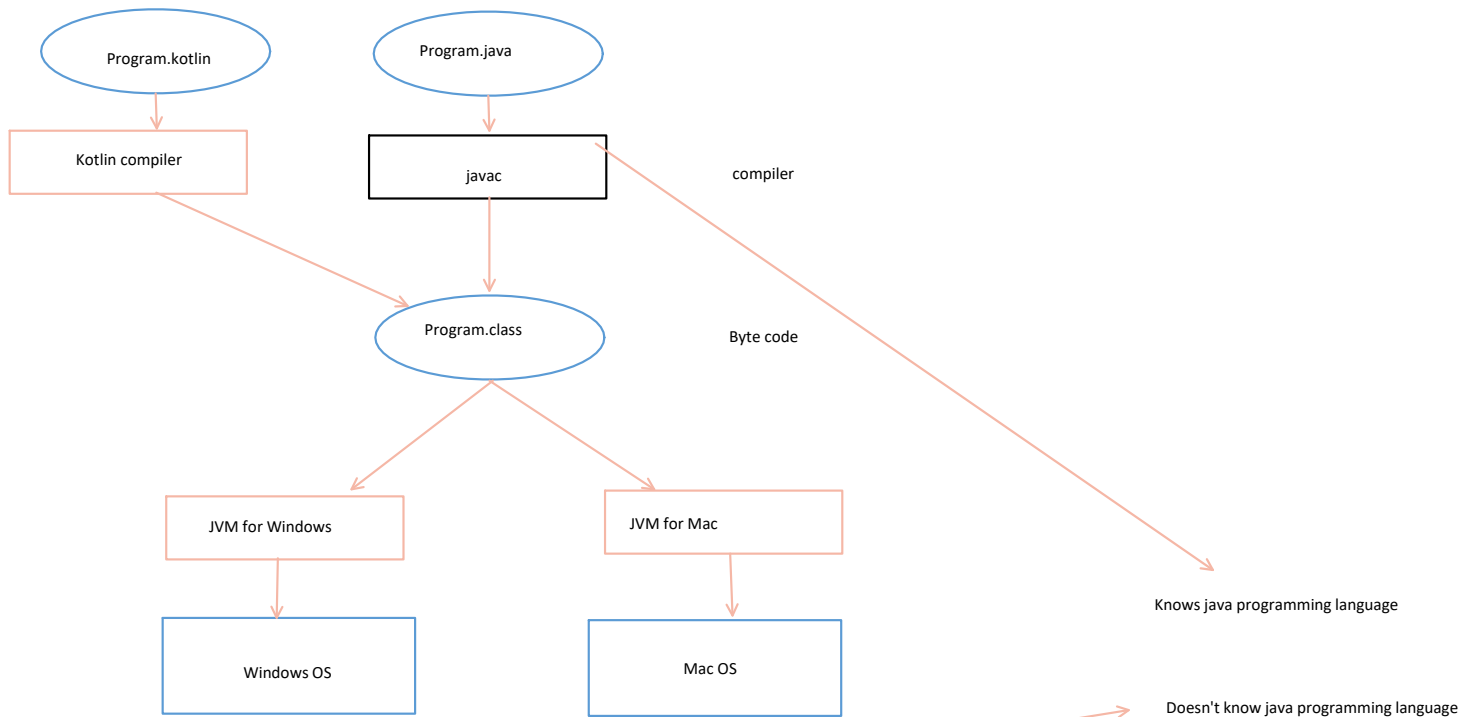


Java Architecture

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How do you run a java program?

C:\> java Program

- You are running a `Program.class`, **not** `program.java`
- Is `Program.class` a **java code**?
 - **No. It's a byte code**
- That means 'Java' is not running Java Program. Why then we call it `java`?

Java Terminology

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Java compiler. Knows java

Java —> Represents to different and related ideas.

1. It's a ... programming language.

- a. But
 - Android Phone is Not a Java Phone but we using java language
 - There were older phone that were java Phone still we never wrote a java code in the phone.

C:\> **javac** Program.java

C:\> **java** Program

Executes the byte code that is not a java program

2. It's an Execution Platform to Execute an Application

- a. Android Phones use Java Programming language to write the program
- b. **But** Android Phones don't use Java Execution Platform
 - i. They are not considered Java Phones
- c. You may write an Android application in a new programming language called Kotlin and can run it on Java Platform

3. JRE — Just another word for 'Java Platform'

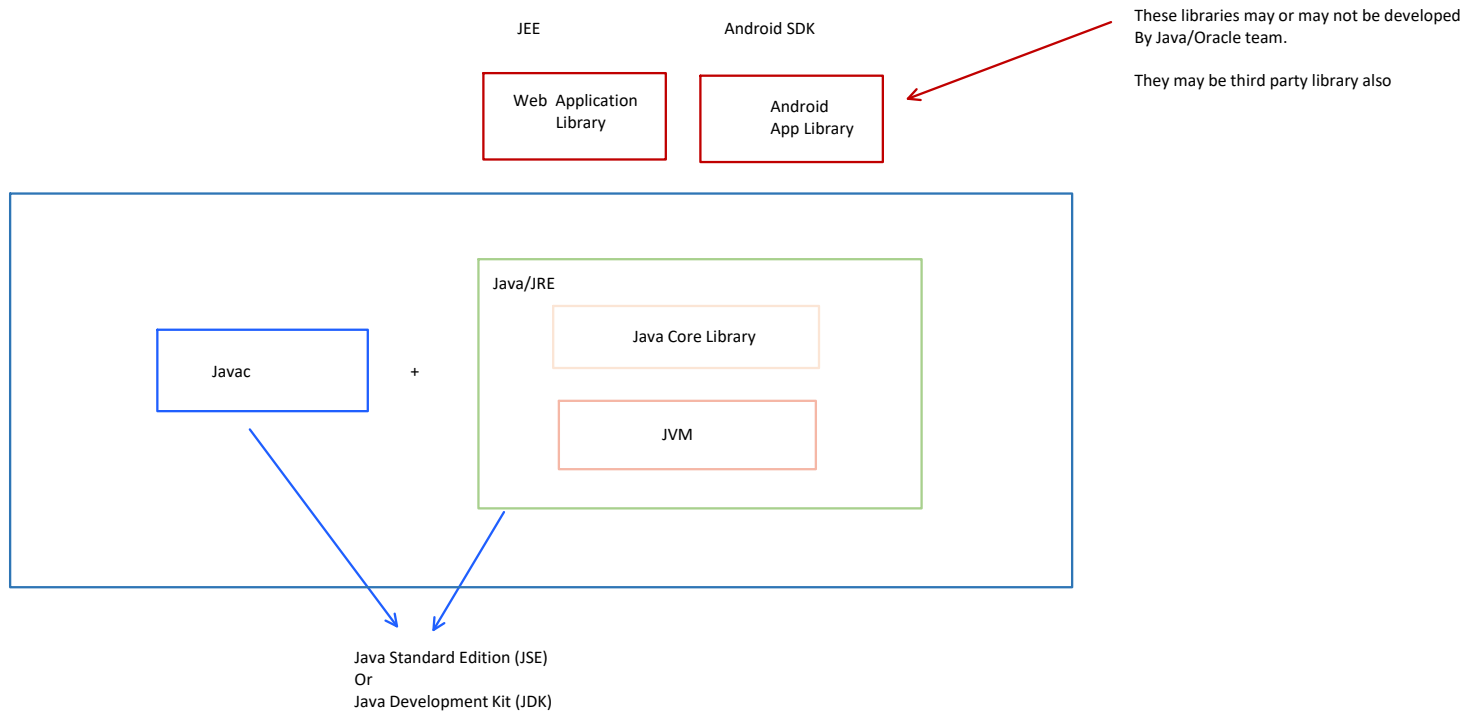
- a. When you want to run an application on an operating system you need Java installed -> you need JRE installed.

4. JVM — JVM is a component of Java Platform that interprets the entire byte code.

JEE

Java Technology Stack

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Abstract Windowing Toolkit

Monday, 25 May 2020

4:36 PM

- Original Java Desktop (and Applet) Development Model
- You can develop Java Desktop Application using AWT
- These applications shall be platform Independent
 - On each platform JVM using native OS api to render the UI

AWT Model

- Each UI element such as Button, TextBox, Checkbox are individual Objects
- They are gathered together on a Form