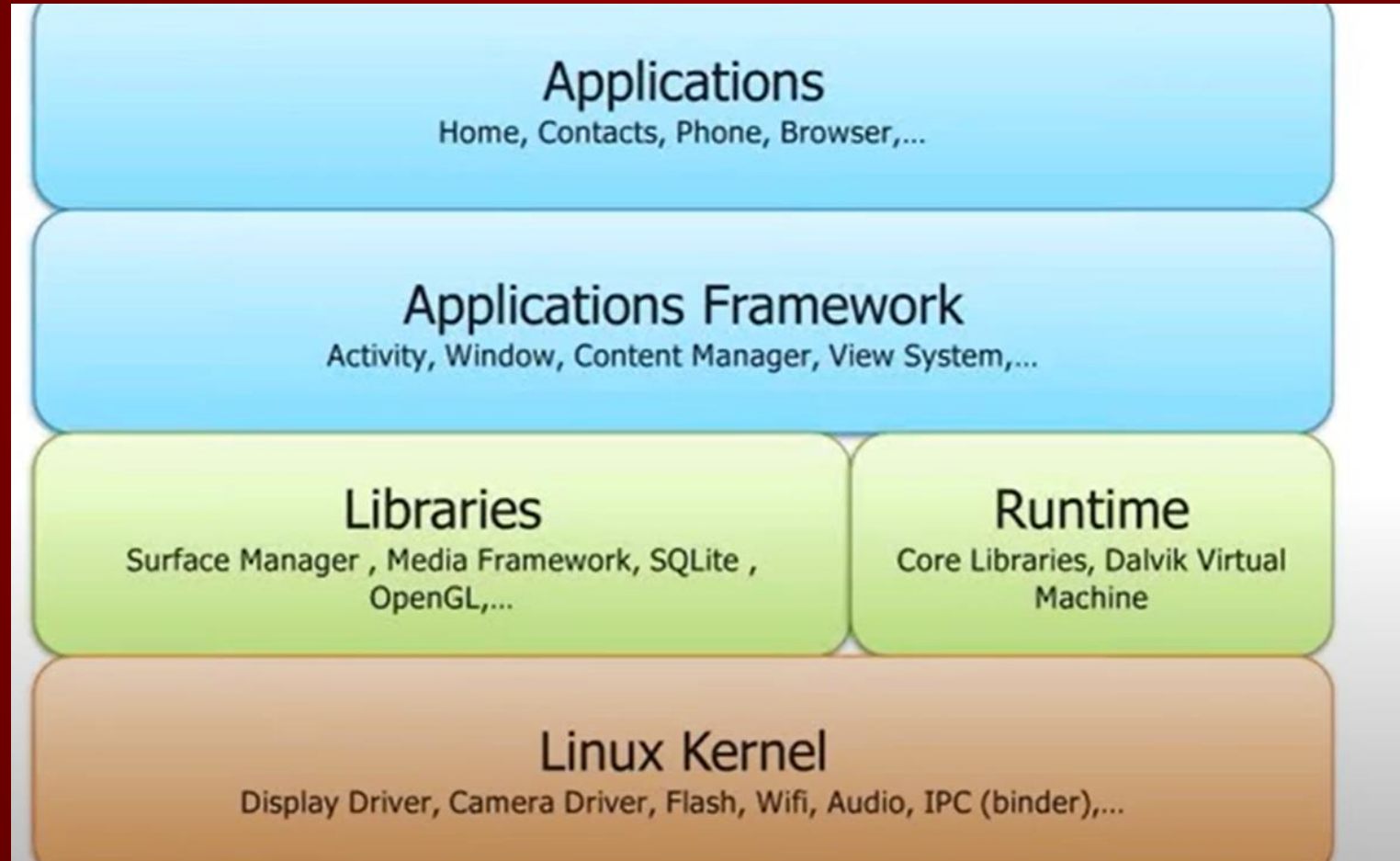


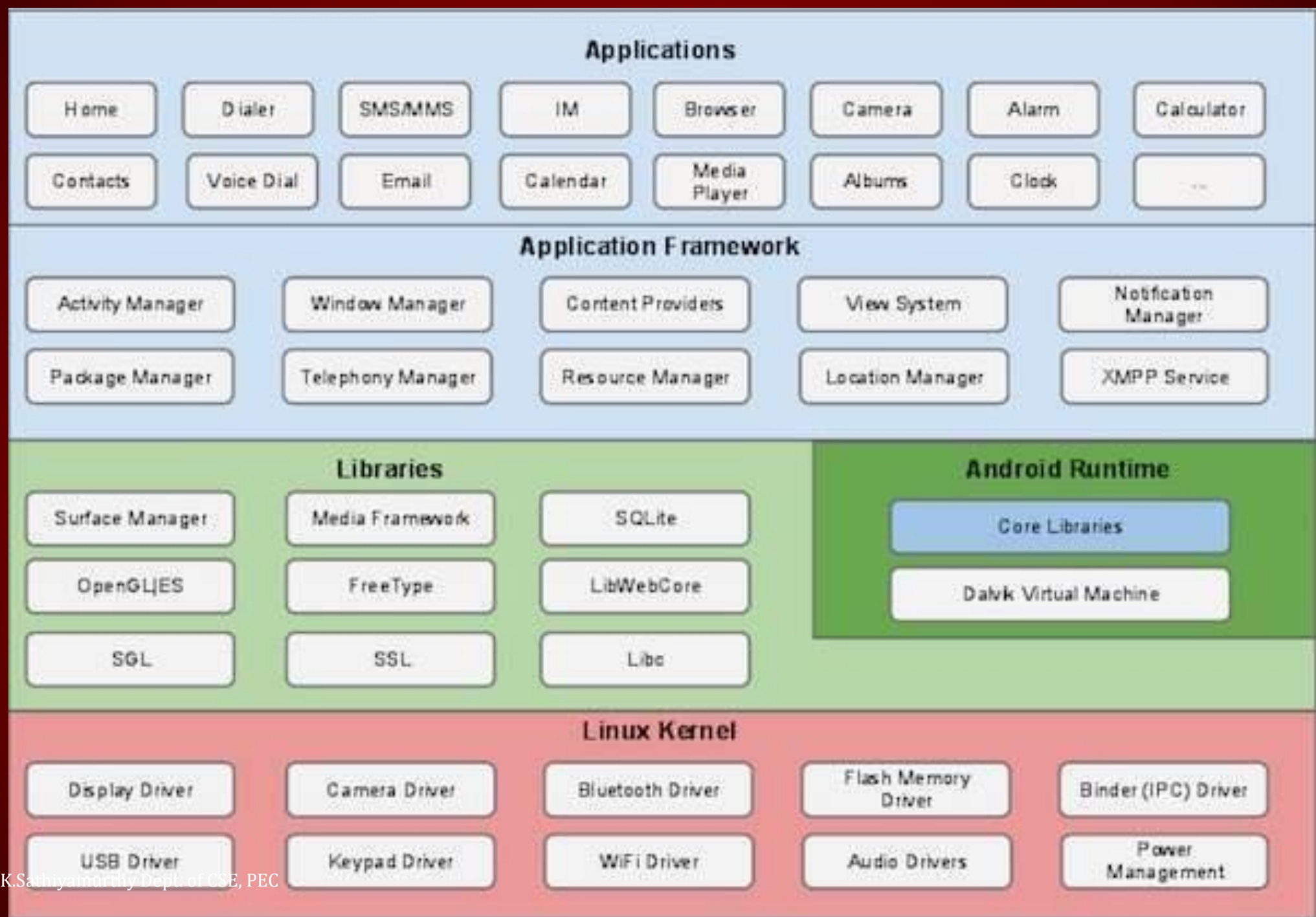
ANDROID

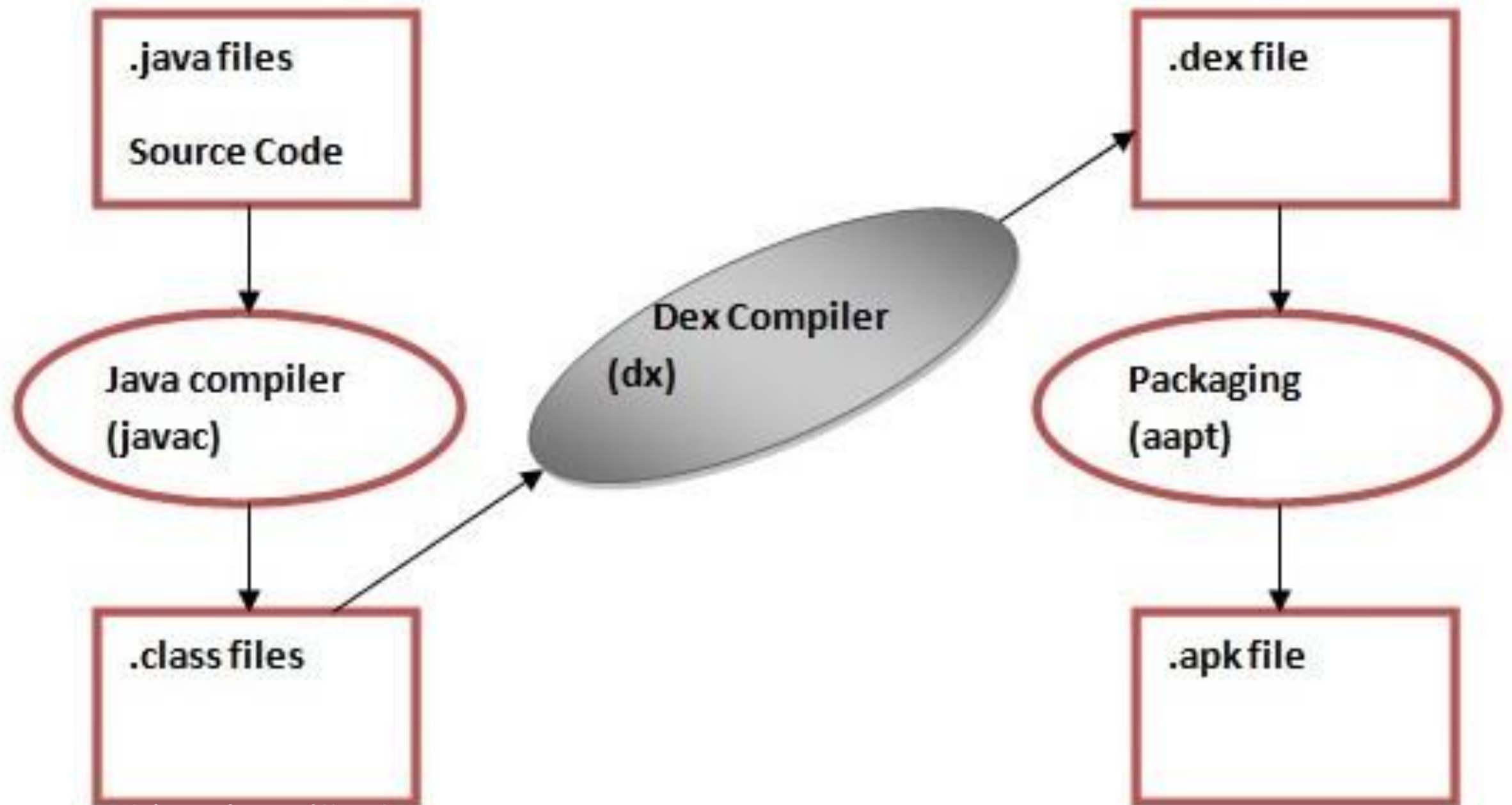
Android Architecture and Studio installation

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Department of CSE, PTU

ANDROID ARCHITECTURE









Alpha
Android 1.0



Beta
Android 1.1



Cupcake
Android 1.5



Donut
Android 1.6



Eclair
Android 2.02.1



Froyo
Android 2.2



Gingerbread
Android 2.3



ANDROID VERSIONS



Honeycomb
Android 3.0



Ice Cream Sandwich
Android 4.0



Jelly Bean
Android 4.1



KitKat
Android 4.4



Lollipop
Android 5.0

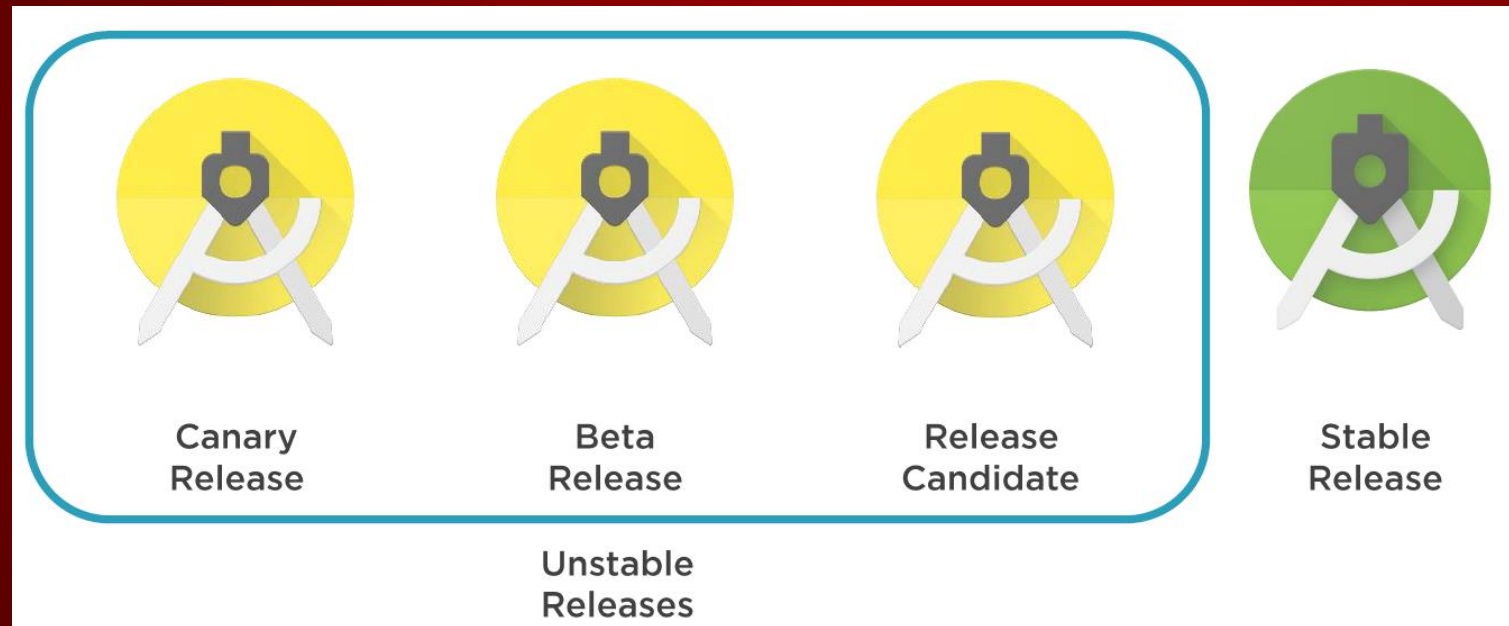


Marshmallow
Android 6.0

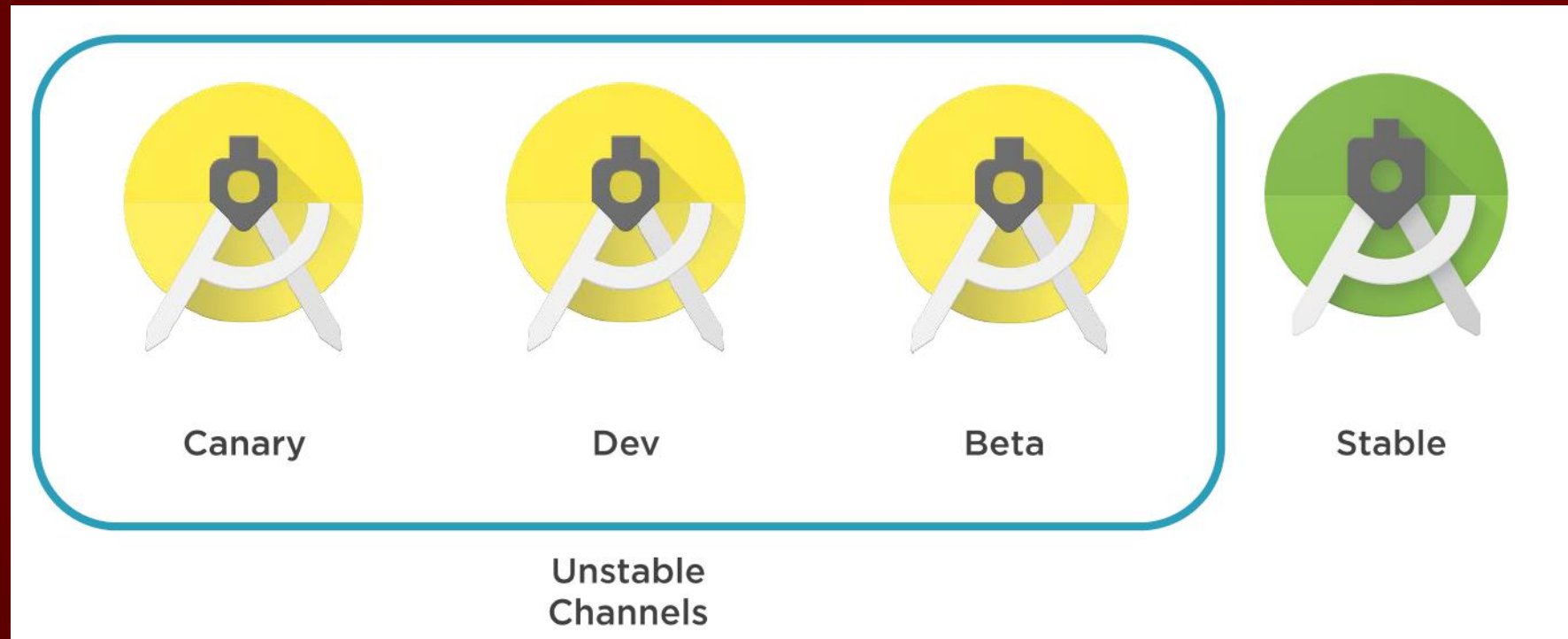
ANDROID STUDIO IDE

- Based on IntelliJ IDEA
- FREE
- Wide variety of android specific features

RELEASE TYPES



RELEASE CHANNELS



SYSTEM REQUIREMENTS



Windows, macOS or Linux based computer



Minimum of 3GB of RAM or 4 GB if using an emulator
(8 GB is recommended)



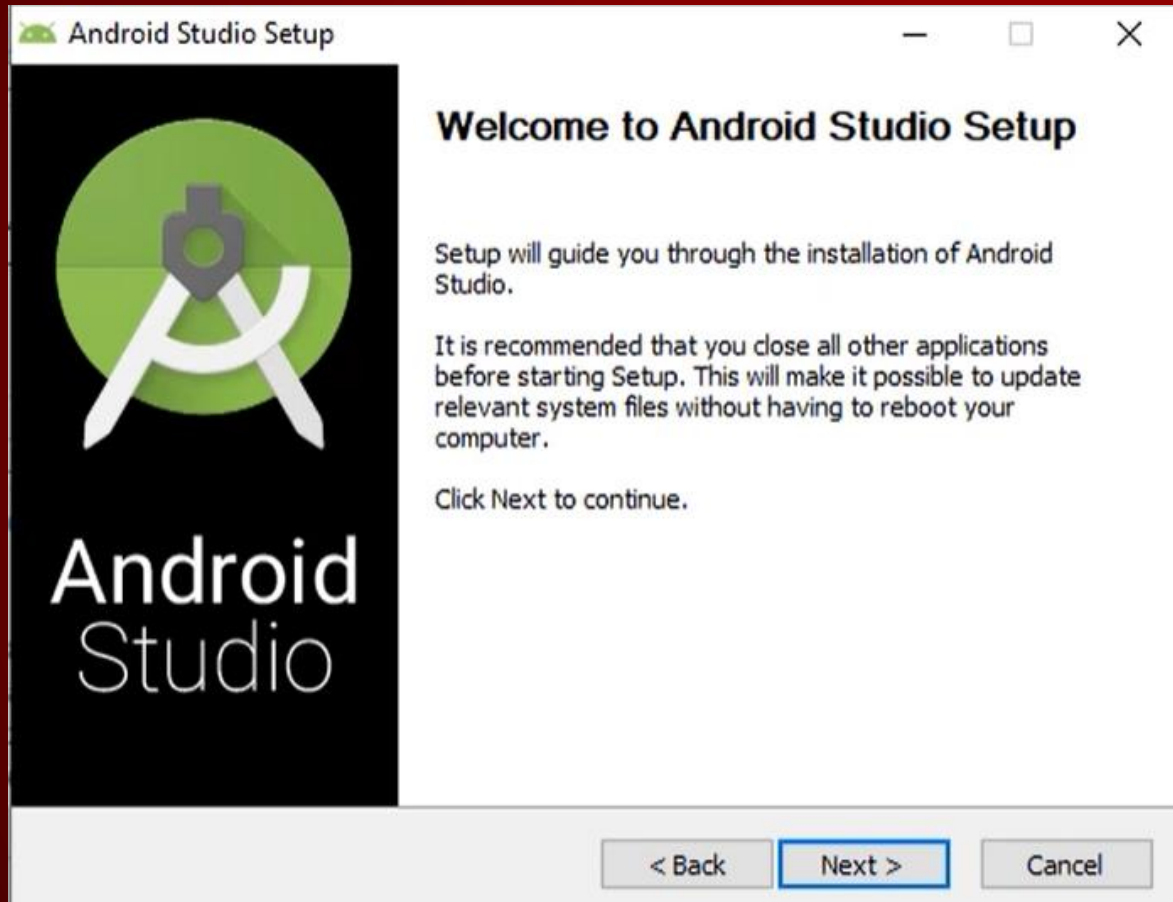
1280x800 screen resolution

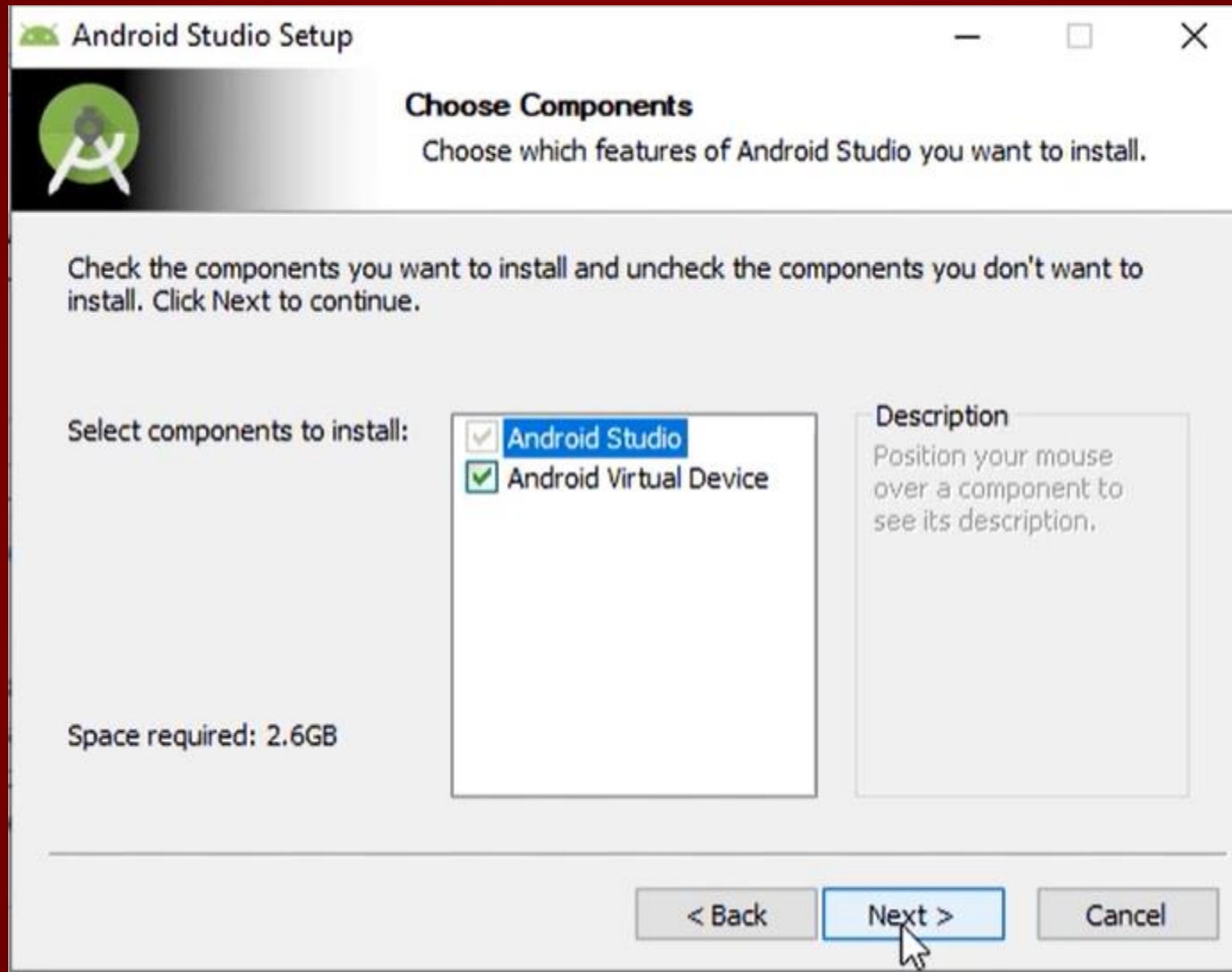


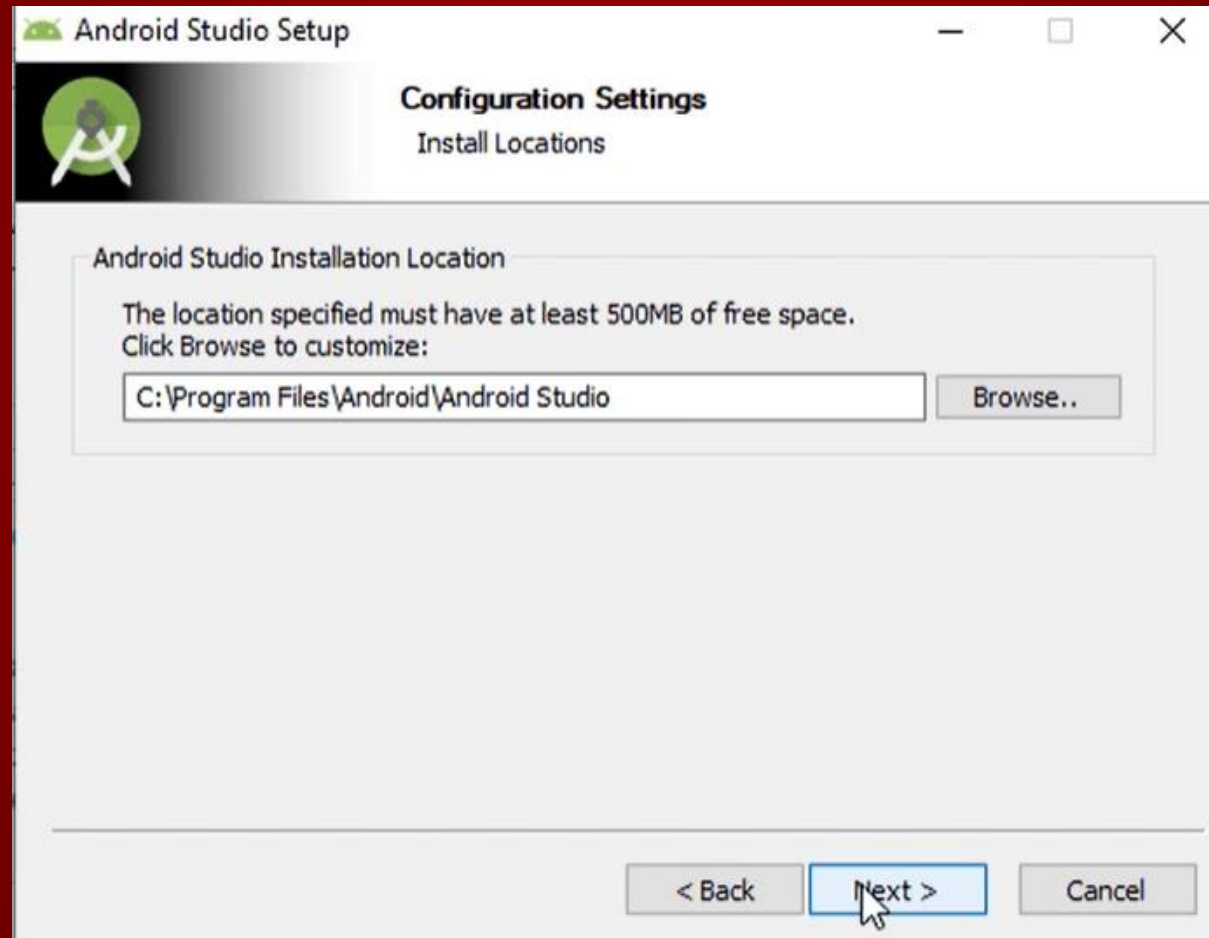
Minimum of 2 GB of disc space (4 GB is recommended)

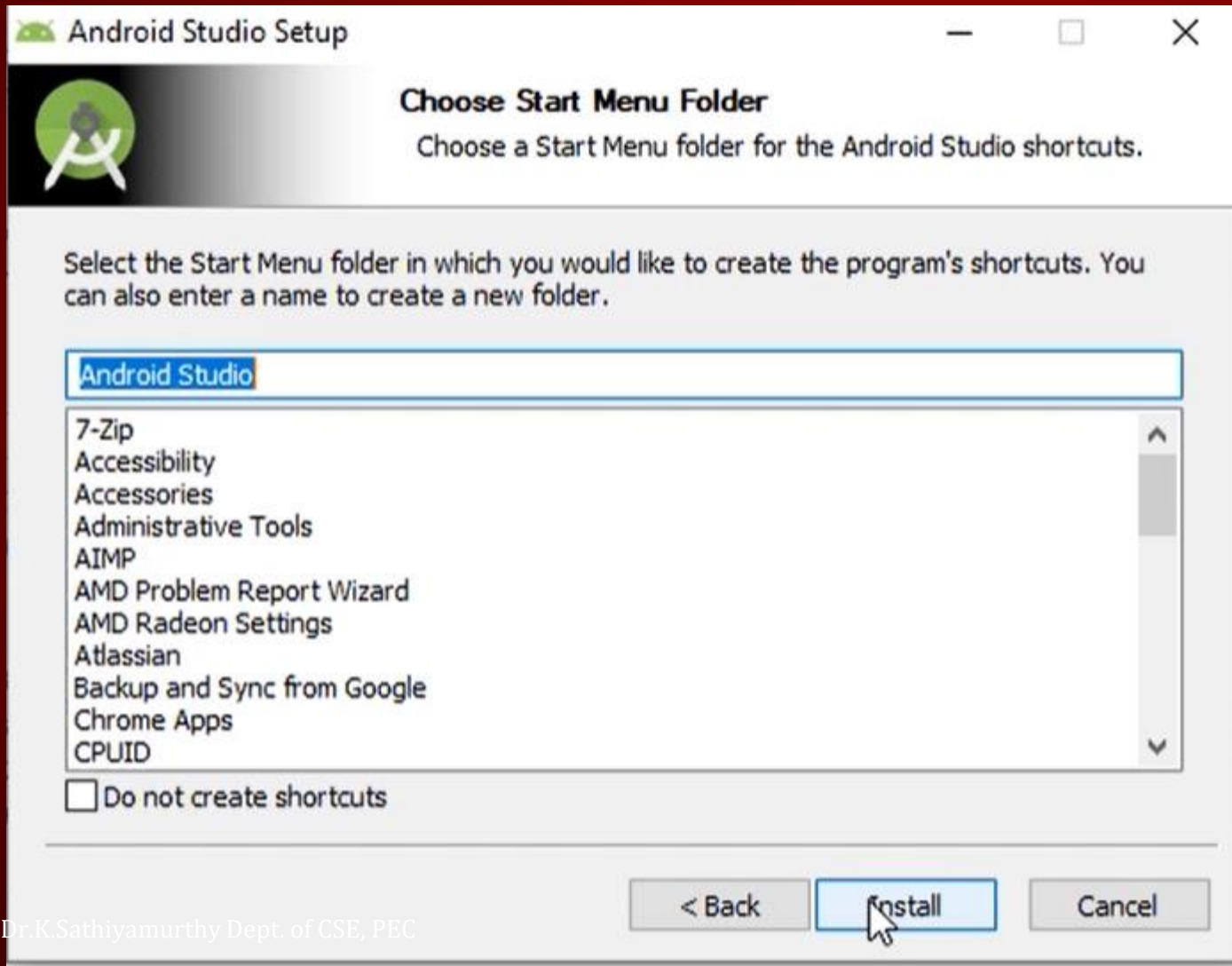
DOWNLOADING

- <https://developer.android.com/studio>
- Check the latest system requirements
- Check the latest features
- Download Android Studio













Welcome

Android Studio

Welcome! This wizard will set up your development environment for Android Studio.
Additionally, the wizard will help port existing Android apps into Android Studio
or create a new Android application project.



i IDE and Plugin Updates
Android Studio is ready to [update](#).



Install Type

Choose the type of setup you want for Android Studio:



Standard

Android Studio will be installed with the most common settings and options.

Recommended for most users.



Custom

You can customize installation settings and components installed.

Android Studio Setup Wizard



Select UI Theme

☐ **Darcula**

The screenshot shows an IDE with the following content:

- Project Explorer:** module > src > HelloWorld
- Editor:** HelloWorld.java


```
import javax.swing.*;
import java.awt.*;

public class HelloWorld {
    public HelloWorld() {
        JFrame frame = new JFrame("Hello wor
        JLabel label = new JLabel();
        label.setFont(new Font("Serif", Font
        label.
        frame.
        frame.
        frame.
        frame.
        frame.
```
- Breakpoints Panel:**
 - Line Breakpoints
 - Line 6 in HelloWorld.HelloW

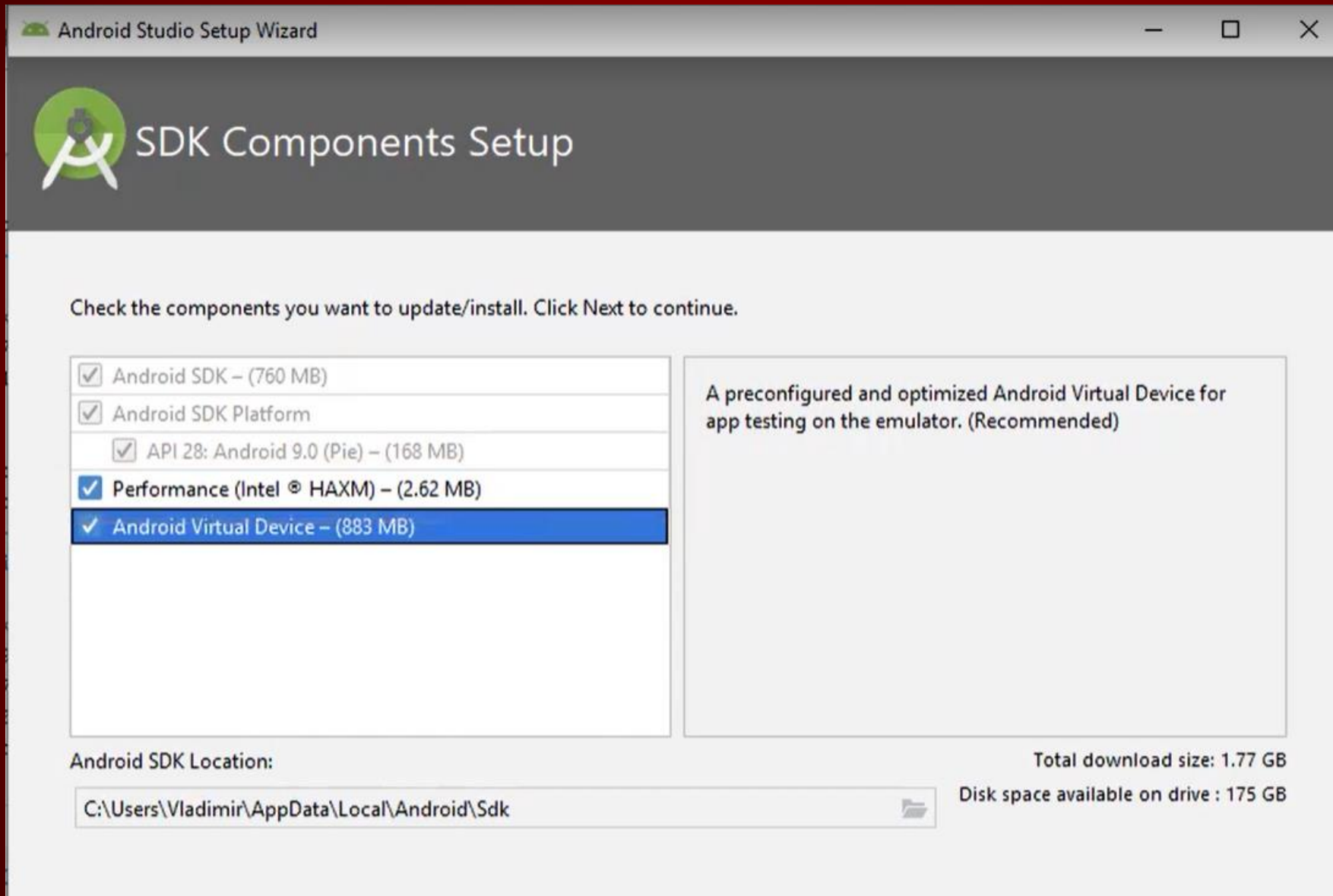
 IntelliJ

The screenshot shows an IDE with a project named 'module' containing a source folder 'src' and a file 'HelloWorld.java'. The code in 'HelloWorld.java' is as follows:

```
import javax.swing.*;
import java.awt.*;

public class HelloWorld {
    public HelloWorld() {
        JFrame frame = new JFrame("Hello world");
        JLabel label = new JLabel();
        label.setFont(new Font("Serif", Font.
        frame.
        frame.
        frame.
        frame.
        frame.
        frame.
    }
}
```

A breakpoint is set on line 6, which is highlighted in yellow. The 'Breakpoints' window is open, showing a list of breakpoints with a checked box for 'Line Breakpoints' and a checked box for 'Line 6 in HelloWorld.java'.





Verify Settings

If you want to review or change any of your installation settings, click Previous.

Current Settings:

SDK Folder:

C:\Users\Vladimir\AppData\Local\Android\Sdk

Total Download Size:

1.97 GB

SDK Components to Download:

Android Emulator	258 MB
Android SDK Build-Tools 28.0.3	55.7 MB
Android SDK Platform 28	72.1 MB
Android SDK Platform-Tools	10.6 MB
Android SDK Tools	149 MB
Android Support Repository	339 MB
Google APIs Intel x86 Atom System Image	883 MB



Android Studio

Version 3.3.1

+ Start a new Android Studio project

Open an existing Android Studio project

Check out project from Version Control ▾

Profile or debug APK

Import project (Gradle, Eclipse ADT, etc.)

Import an Android code sample

INSTALLATION ON LINUX

- Unpack .zip file
- Execute studio.sh inside android-studio/bin/ directory
- 64-bit machines will require some 32-bit libraries
- <https://developer.android.com/studio/install>

SUMMARY

Release Types

- Canary Release
- Beta Release
- Release Candidate
- Stable Release

Release Channels

- Canary
- Dev
- Beta
- Stable

<https://developer.android.com/studio/>