

Experiment No. : 1	Installing Android SDK	Date:
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**AIM:** To understand the installation & use of android SDK.

### **THEORY:**

Android SDK is a collection of libraries and Software Development tools that are essential for Developing Android Applications. Whenever Google releases a new version or update of Android Software, a corresponding SDK also releases with it. In the updated or new version of SDK, some more features are included which are not present in the previous version. Android SDK consists of some tools which are very essential for the development of Android Application. These tools provide a smooth flow of the development process from developing and debugging. Android SDK is compatible with all operating systems such as Windows, Linux, macOS, etc..

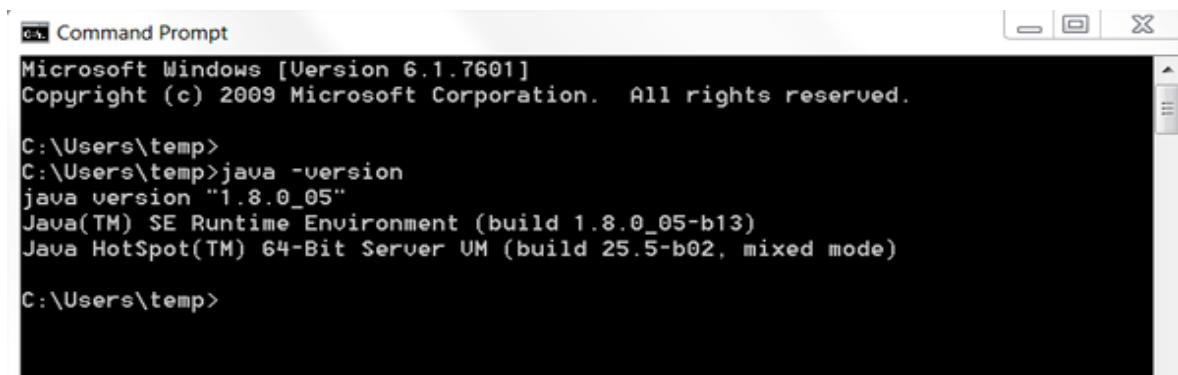
### **Installing the Java Development Kit**

#### **Verify That You Have Java**

First, check if you have the Java Developer Kit, version 7 or greater already installed. To check if you have JDK installed (and which version), open a terminal window and type:

“java -version” and hit enter.

The example below shows Java version 8.0\_05 -- the version number comes after the “1.”



```

C:\Users\temp>java -version
java version "1.8.0_05"
Java(TM) SE Runtime Environment (build 1.8.0_05-b13)
Java HotSpot(TM) 64-Bit Server VM (build 25.5-b02, mixed mode)
C:\Users\temp>

```

If the JDK is **not** available, or the version is lower than 7, go on to Step 2 below.

#### **Download the Java Development Kit**

Download the Java Development Kit, aka, the JDK, from [this page](#).

Oracle, the company that maintains Java, has a lot of options and acronyms. We're looking for the plain old JDK. This is the kit you need to start developing your apps with Java.

As of April 2022, the download icon for the JDK looked like this:



After you click the download link, you'll see a list of options for download. Go to the **Java SE Development Kit** menu of options. Do not go to the demos and samples (the menus look very similar, so make sure to read the heading at the top).

## Install

Download the 64-bit option (highlighted below).

Java SE Development Kit 8u45		
You must accept the Oracle Binary Code License Agreement for Java SE to download this software.		
<input type="radio"/> Accept License Agreement <input checked="" type="radio"/> Decline License Agreement		
Product / File Description	File Size	Download
Linux x86	146.89 MB	jdk-8u45-linux-i586.rpm
Linux x86	166.88 MB	jdk-8u45-linux-i586.tar.gz
Linux x64	145.19 MB	jdk-8u45-linux-x64.rpm
Linux x64	165.24 MB	jdk-8u45-linux-x64.tar.gz
Mac OS X x64	221.98 MB	jdk-8u45-macosx-x64.dmg
Solaris SPARC 64-bit (SVR4 package)	131.73 MB	jdk-8u45-solaris-sparcv9.tar.Z
Solaris SPARC 64-bit	92.9 MB	jdk-8u45-solaris-sparcv9.tar.gz
Solaris x64 (SVR4 package)	139.51 MB	jdk-8u45-solaris-x64.tar.Z
Solaris x64	95.88 MB	jdk-8u45-solaris-x64.tar.gz
Windows x86	175.98 MB	jdk-8u45-windows-i586.exe
Windows x64	180.44 MB	jdk-8u45-windows-x64.exe

Accept the license agreement, and download it. Once you've downloaded it, go ahead and double click it to install.

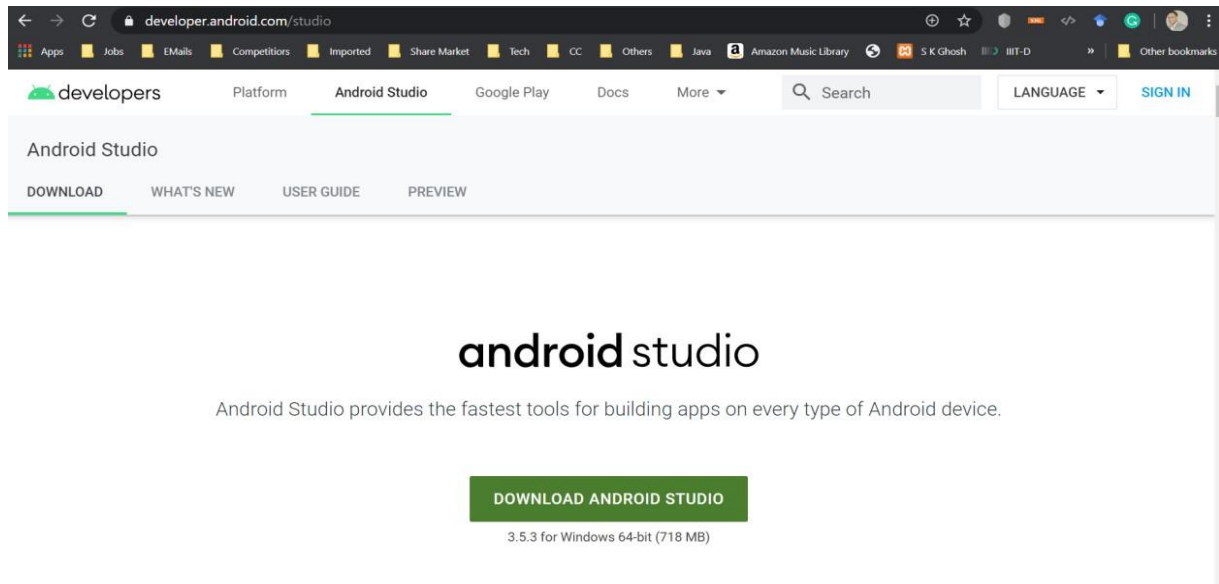
**Do not move on with Android Studio install until after you have installed the JDK.** Without a working copy of Java, the rest of the process will not work. If you can't get the download to work, look for error messages, and try googling to find a solution.

Windows: Guide to Install Android Studio

- Note 1: Install JDK before you proceed for installing *Android Studio IDE*.
- Note 2: For instructions to install Android Studio in Mac OS, go to [this page](#).
- Note 3: Appearance of the *installation wizard* may change over time. However, the installation steps would remain the same.
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## Step 1. Download Android Studio

Navigate to the [Android developers' site](#). This page will automatically detect your operating system. Click on the "DOWNLOAD ANDROID STUDIO" button.



It will open up the **Terms and Conditions** pop-up. Select the checkbox that says *"I have read and agree with the above terms and conditions"* and click the **"DOWNLOAD ANDROID STUDIO FOR WINDOWS"** button to start the download.

#### Download Android Studio

Before downloading, you must agree to the following terms and conditions.

**Terms and Conditions**

This is the Android Software Development Kit License Agreement

**1. Introduction**

1.1 The Android Software Development Kit (referred to in the License Agreement as the "SDK" and specifically including the Android system files, packaged APIs, and Google APIs add-ons) is licensed to you subject to the terms of the License Agreement. The License Agreement forms a legally binding contract between you and Google in relation to your use of the SDK.

☒ I have read and agree with the above terms and conditions

[DOWNLOAD ANDROID STUDIO FOR WINDOWS](#)

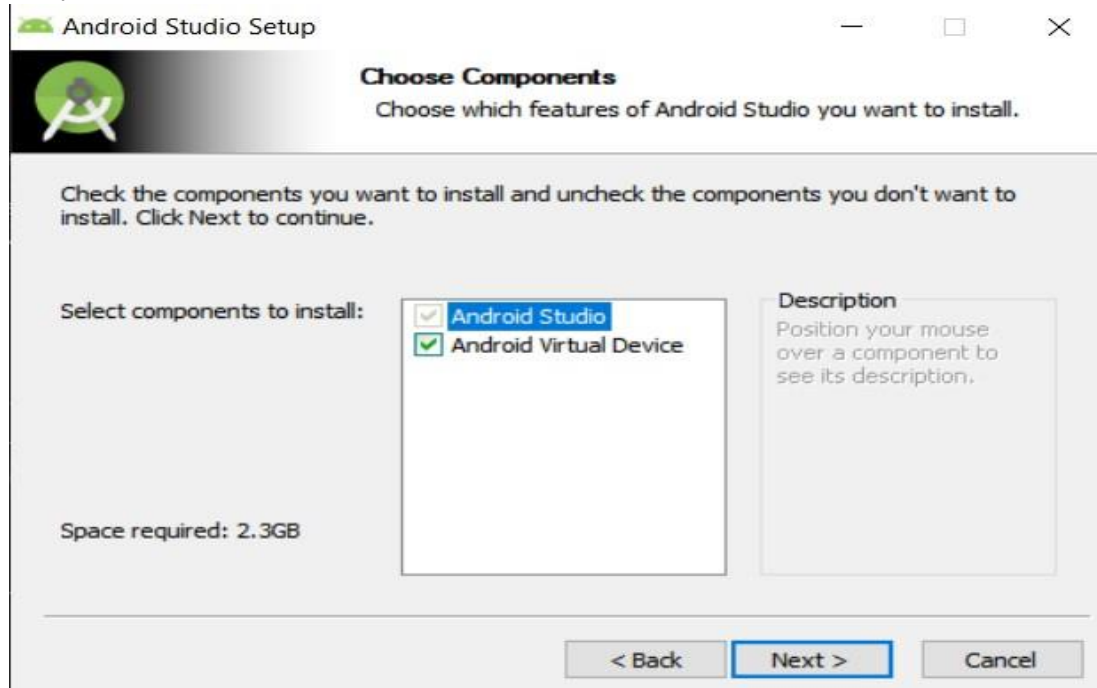
android-studio-ide-191.6010548-windows.exe

## Step 2. Install Android Studio

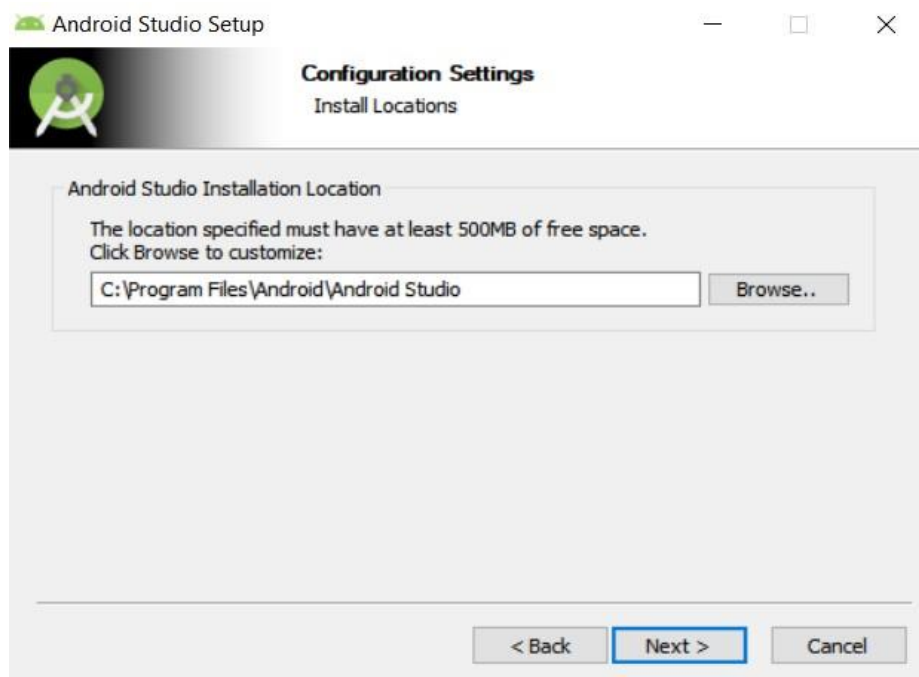
Right-click the downloaded **.exe** file and select to *Run as Administrator*. It will start the Android Studio installation wizard as follows:



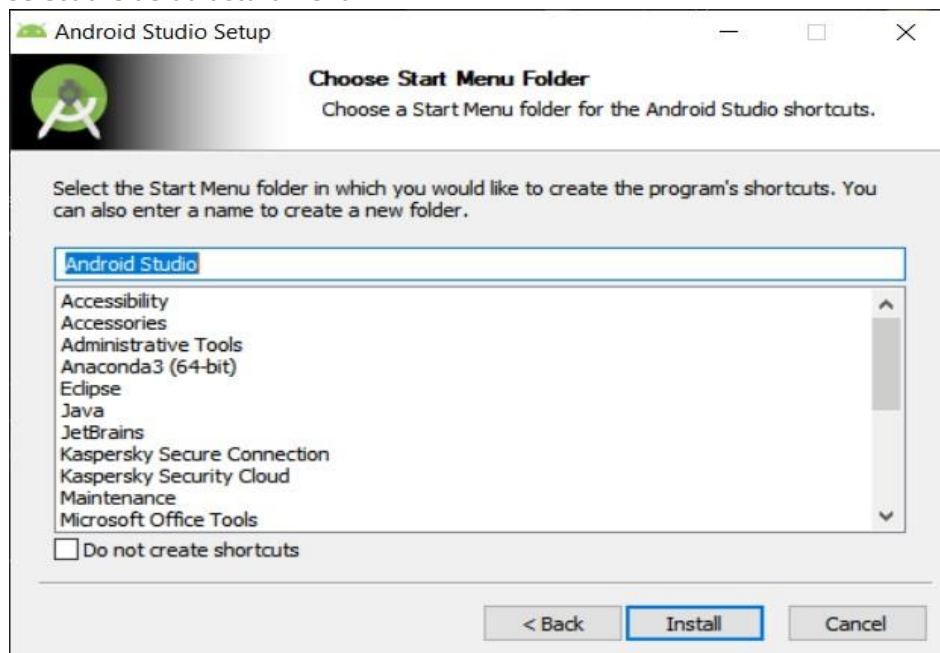
You need to follow the prompts and accept the default for all steps. In the next window, choose all the components to be installed:



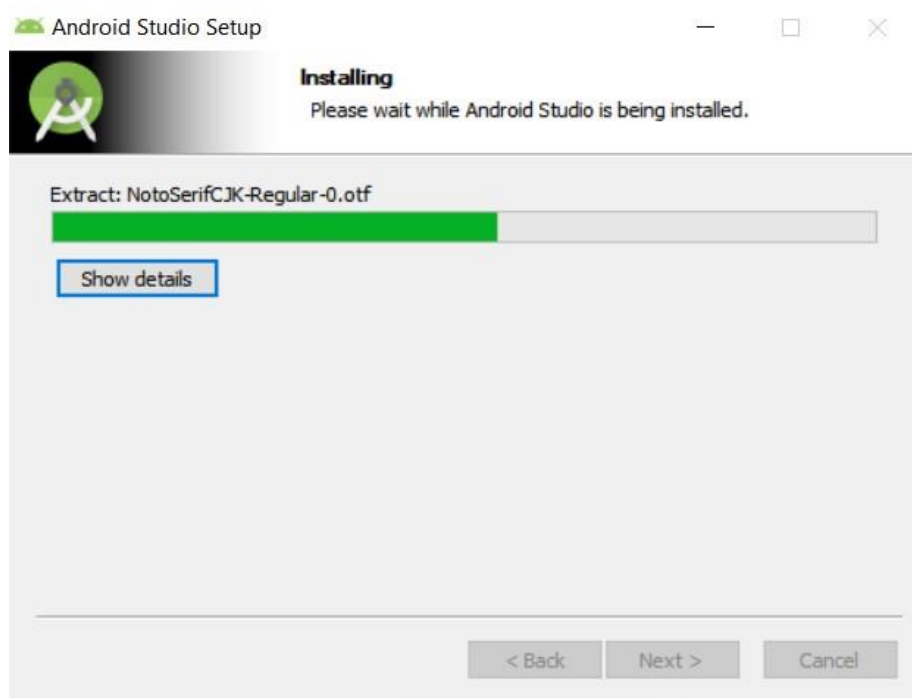
Select the default configuration settings:



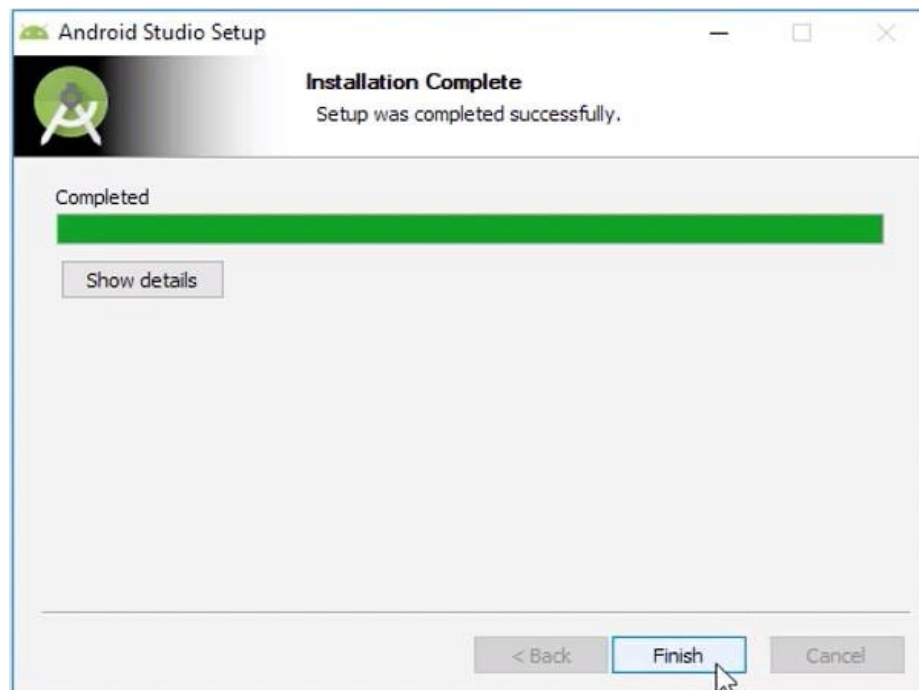
Select the default start menu:



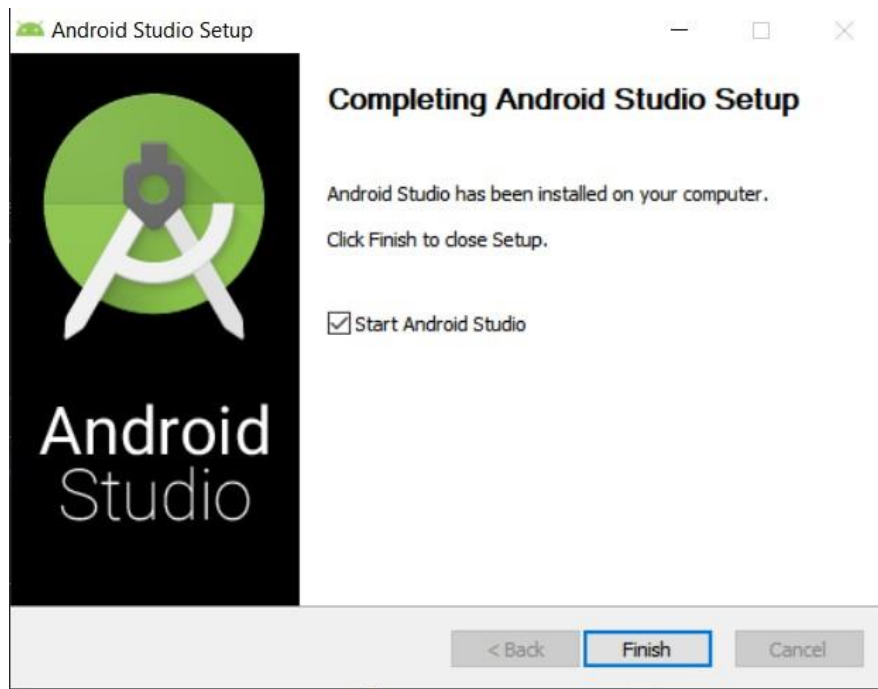
The installation wizard will download some additional components. This step might take some time depending on your internet speed.



The following window would confirm the successful *download* of all the necessary components. Click on the “Finish” button.



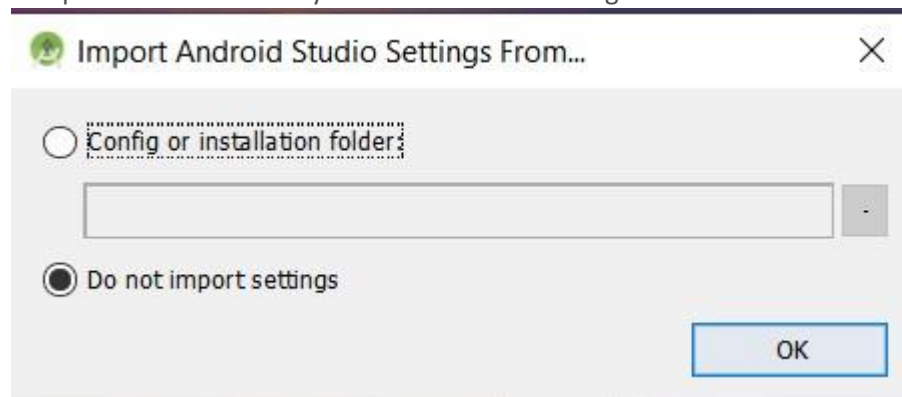
The following window would confirm the successful *installation*:



You need to select the "**Start Android Studio**" checkbox, which will open up the Android Studio application that just got installed on your computer. Next, the **Setup** wizard would follow.

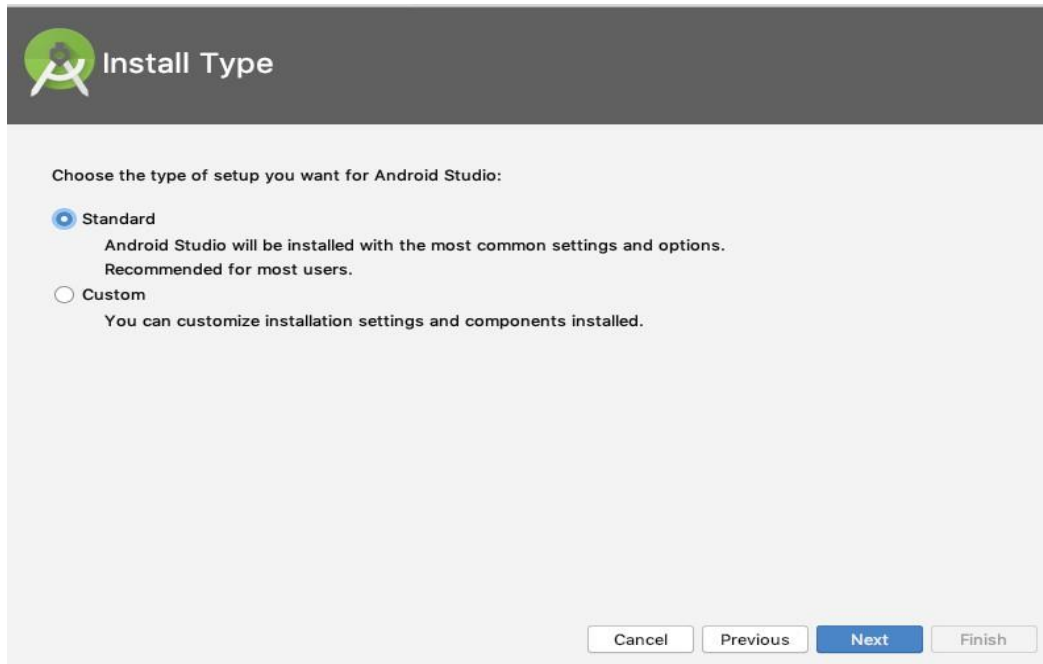
### Step 3. Android Studio Setup Wizard

This wizard will set up Android Studio for you for the first time usage. Proceed with default prompts.

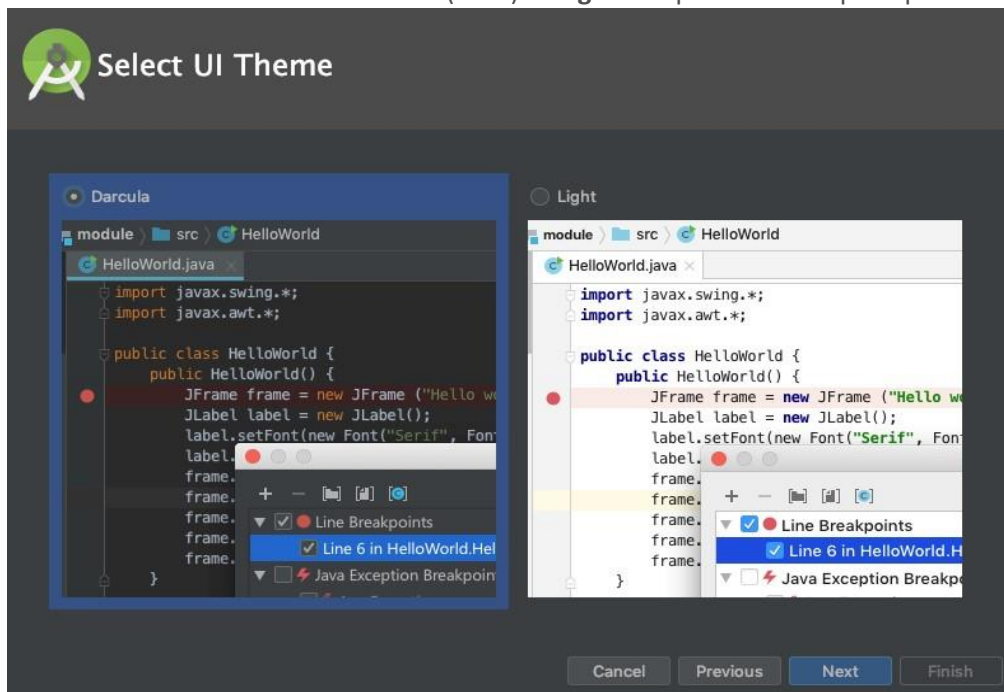


Next, it would take your preferences for installation type and theme. Choose the "**Standard**" as an installation type.



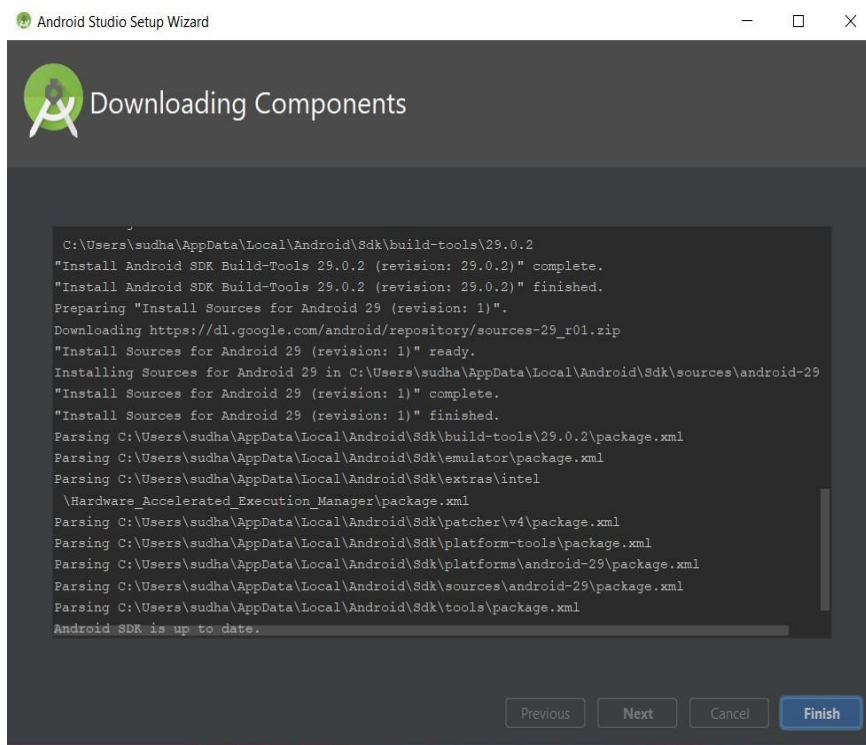


Select the desirable theme - **Darcula** (Dark) or **Light** and proceed with prompts.

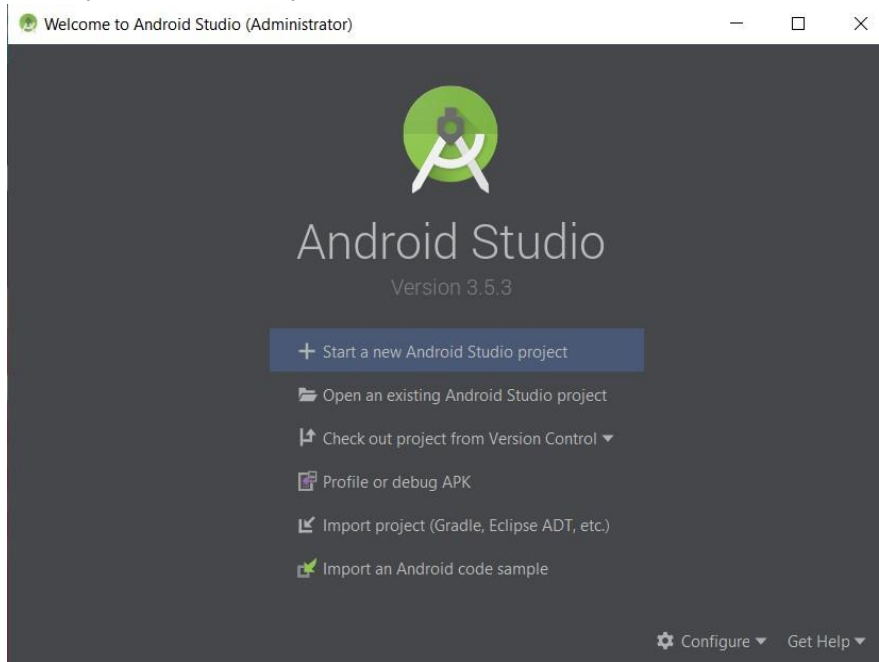


It will download a few more components, as shown below:





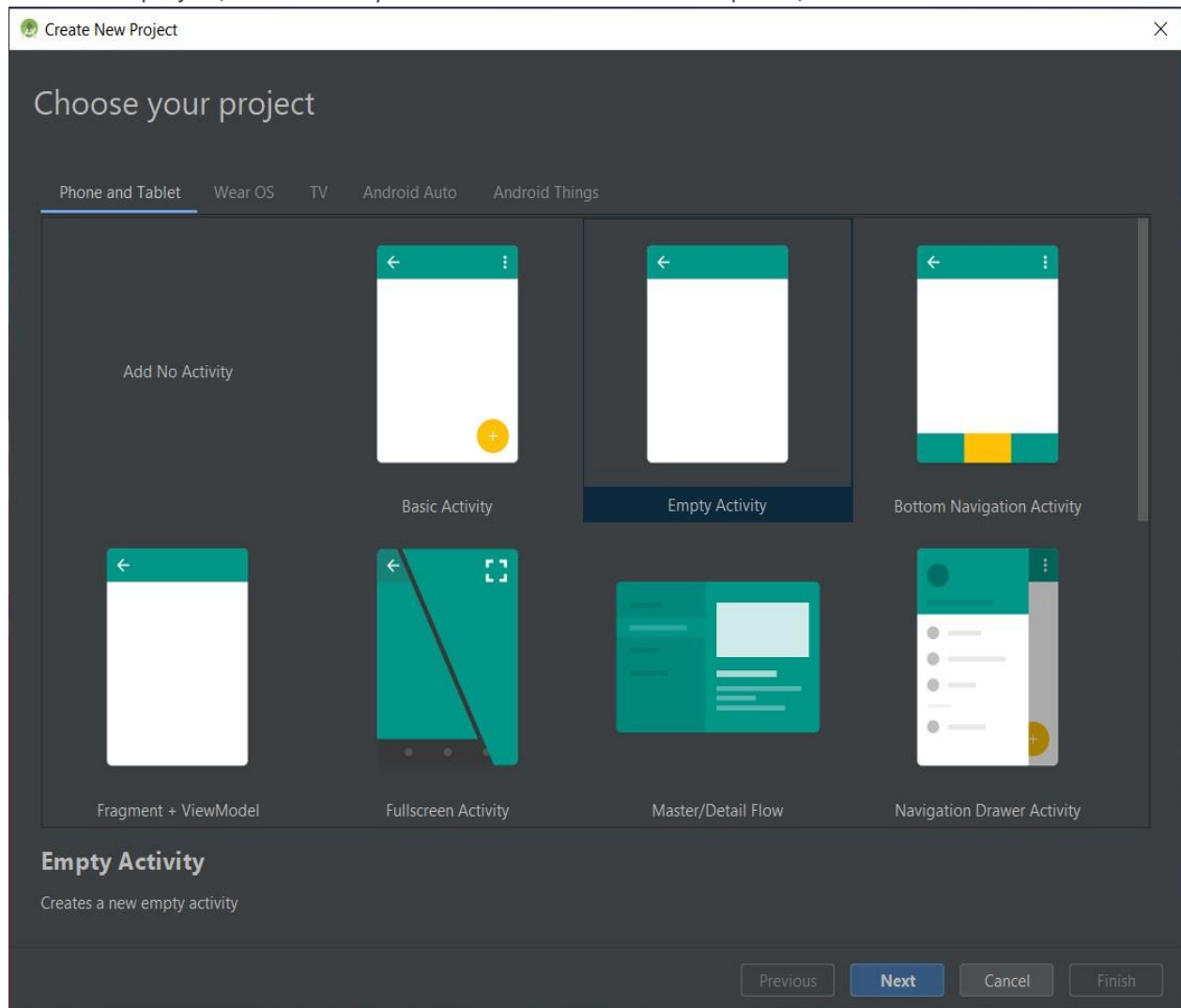
When you are finished, you will see this window:



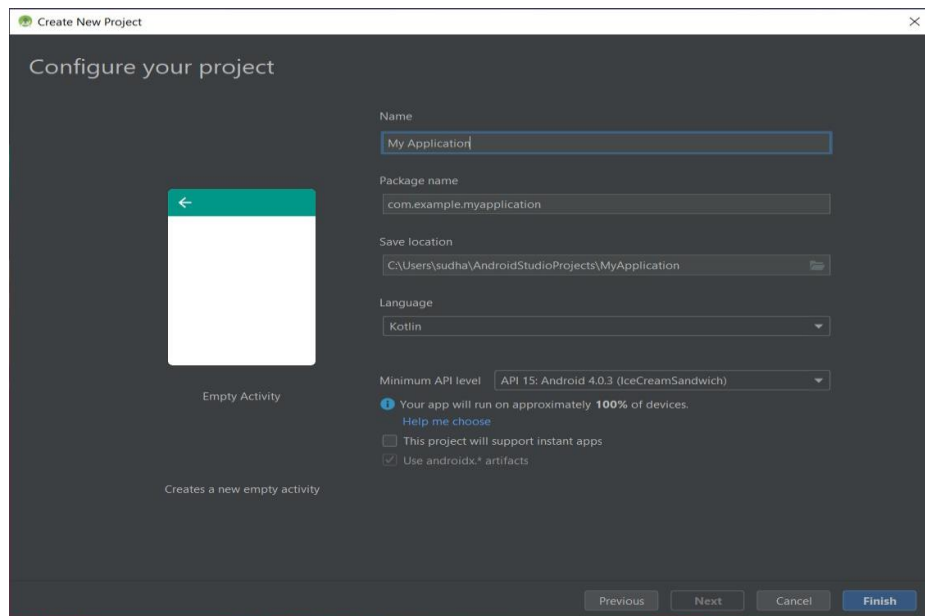
Proceed to "Start a new Android Studio project".

#### Step 4: Start a Project

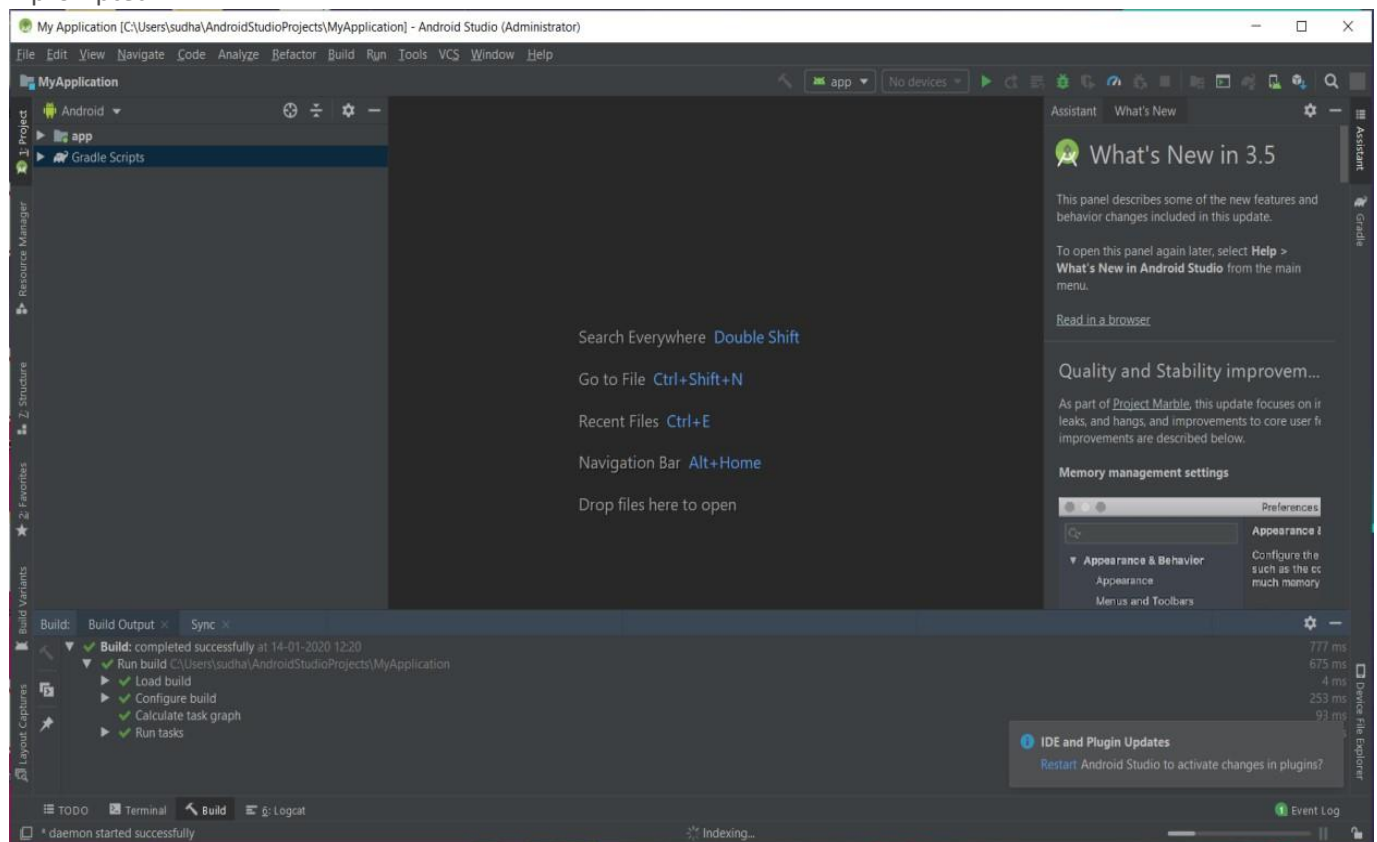
Start a new project, it would ask you to choose from a set of templates, as follows:



Chose the "Empty Activity" template. Enter the necessary project-specific information such as Project Name, Package, Location, and Language in the next window:



Following is the snapshot of the successfully installed IDE. You may choose to update the IDE and Plugins if prompted.



Once this Screen appears, installations are complete and you are all set to develop Apps in Android Studio.

**Conclusion:** Java Development Kit and Android Software Development Kit was successfully installed and configured.

Agnel Institute of Technology & Design Assagao, Goa. Department of ECE	
Programming (2)	
Execution & Result (3)	
Neatness (2)	
Viva (3)	
Total (10)	
Faculty In-charge sign	