

**Practical 1****Building a simple Hello World Application****Steps to Install Android Studio**

Step – 1:

Head over to bellow link to get the Android Studio executable or zip file .

**<https://developer.android.com/studio/#downloads>**

Step – 2:

Click on the download android studio button .



Android Studio provides the fastest tools for building apps on every type of Android device.

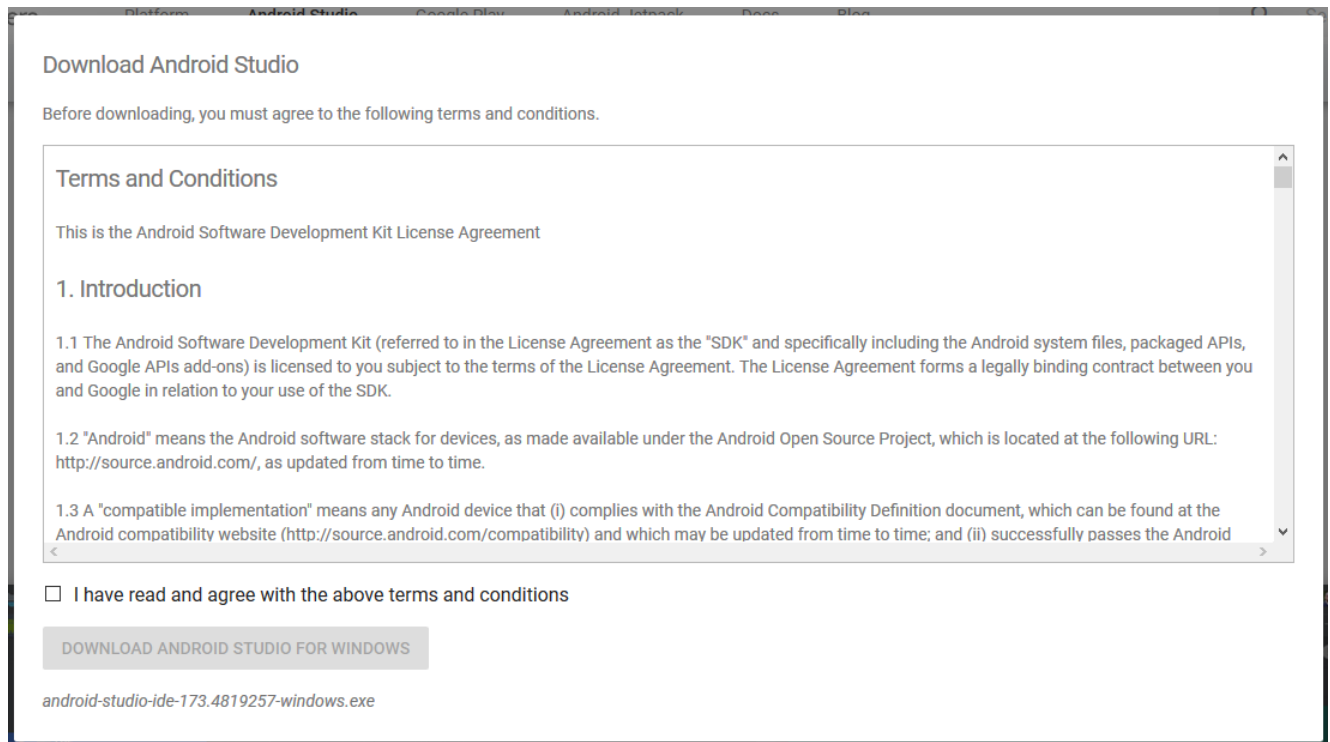
**DOWNLOAD ANDROID STUDIO**

3.1.3 for Windows 64-bit (758 MB)

**DOWNLOAD OPTIONS**

**RELEASE NOTES**

Click on the “I have read and agree with the above terms and conditions” checkbox followed by the download button.



Click on save file button in the appeared prompt box and the file will start downloading.

Step – 3:

After the downloading has finished, open the file from downloads and run it .

It will prompt the following dialogue box

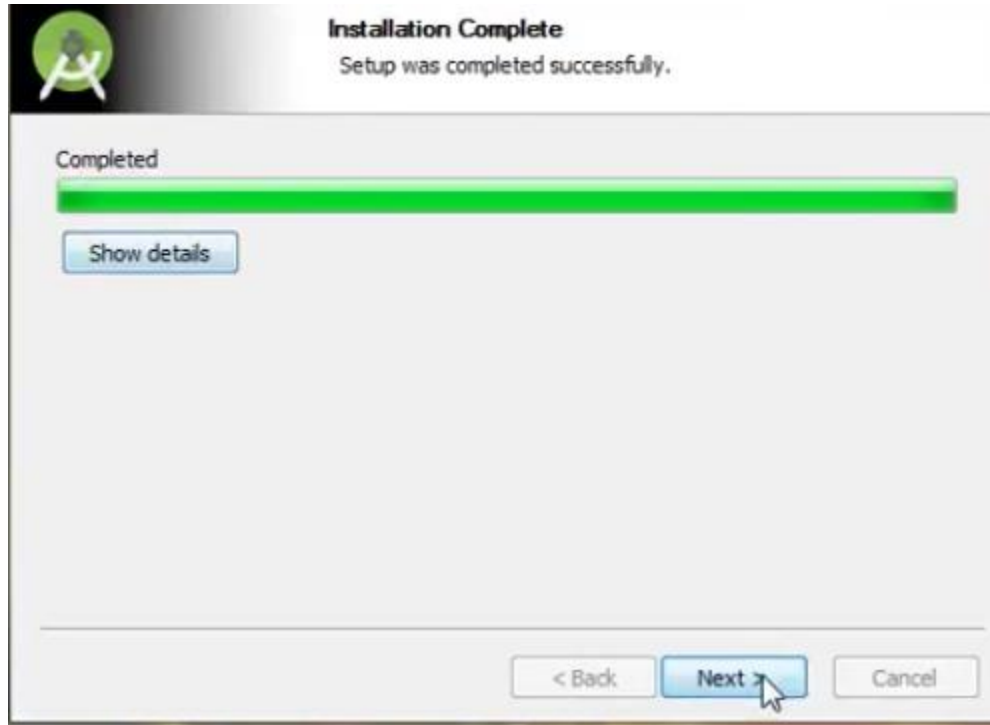


Click on next.

In the next prompt it'll ask for a path for installation. Choose a path and hit next.

Step – 4:

It will start the installation, and once it is completed, it will be like the image shown below



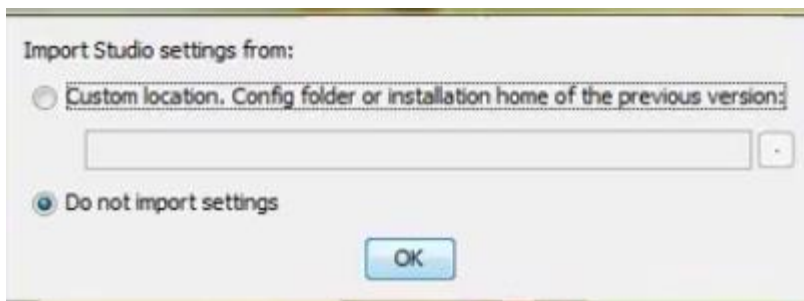
Click on next



Step – 5 :

Once “Finish” is clicked, it will ask whether the previous settings needs to be imported [if android studio had been installed earlier], or not.

It is better to choose the ‘Don’t import Settings option’ .

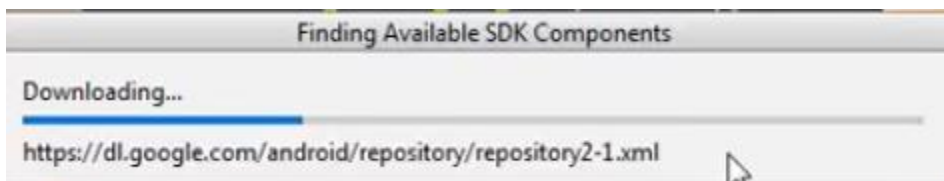


Step – 6 :

This will start the Android Studio.

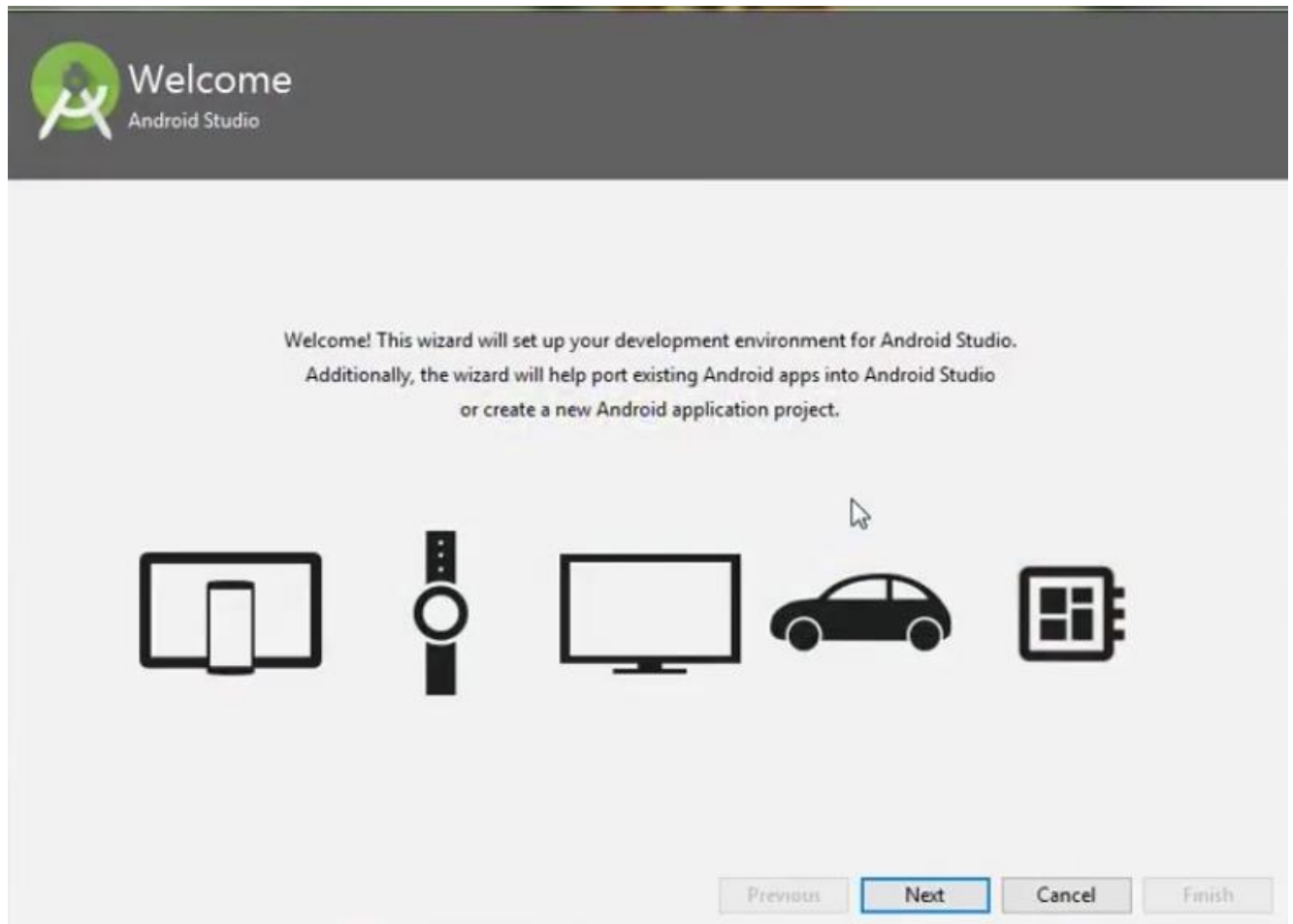


Meanwhile it will be finding the available SDK components .

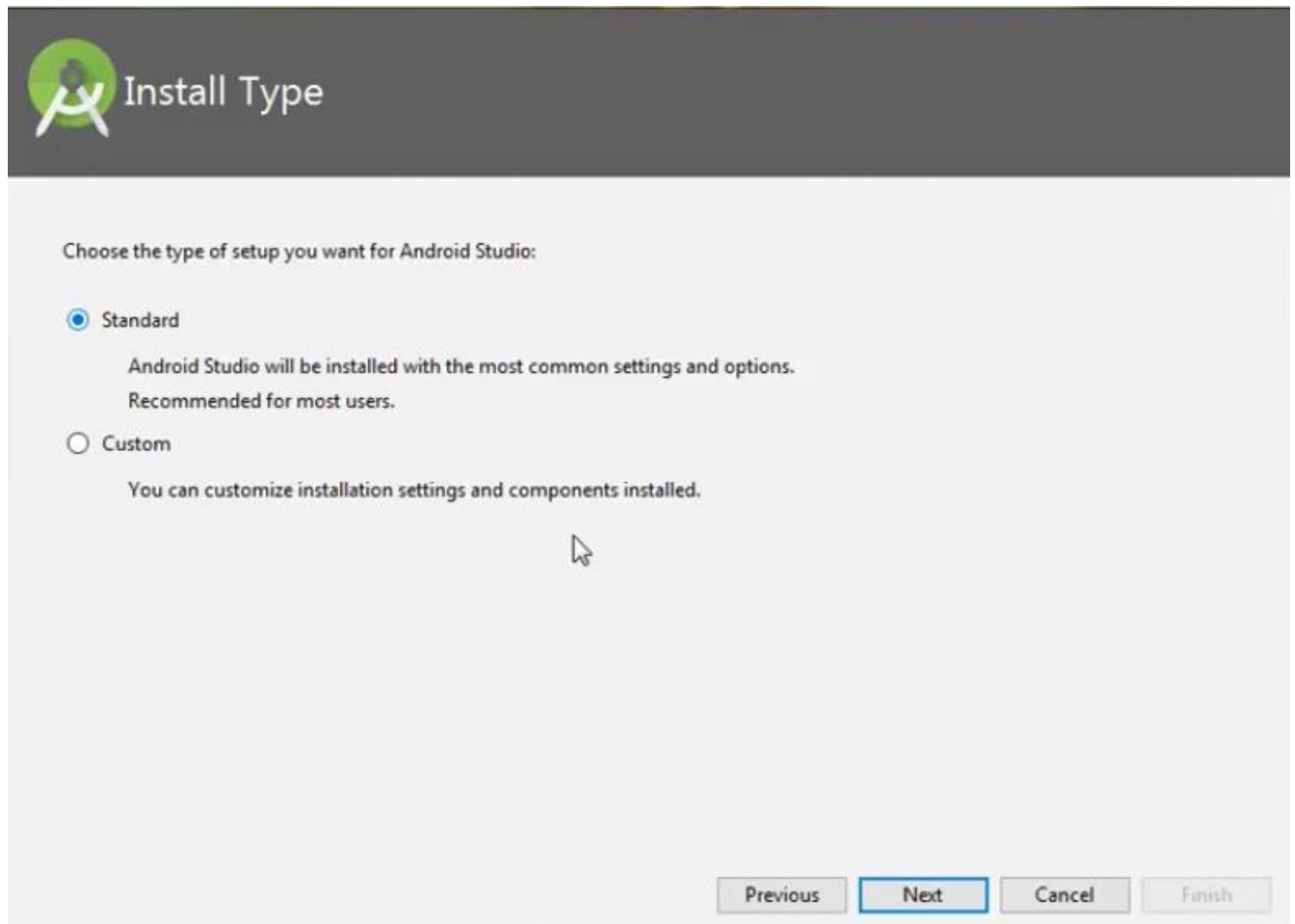


Step – 7:

After it has found the SDK components, it will redirect to the Welcome dialog box .



Click on next .

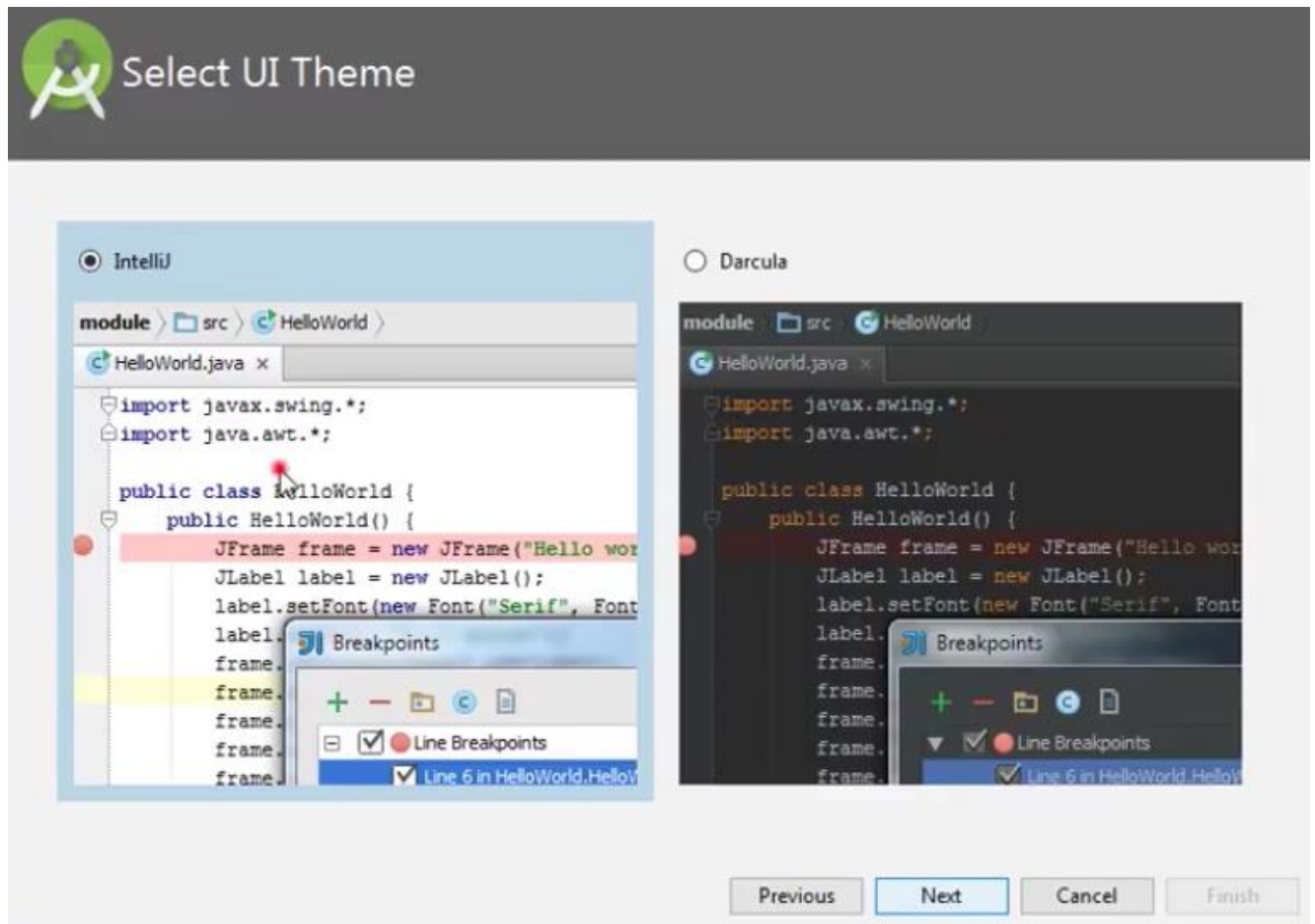


Choose Standard and click on Next.

Now choose the theme, whether Light theme or the Dark one .

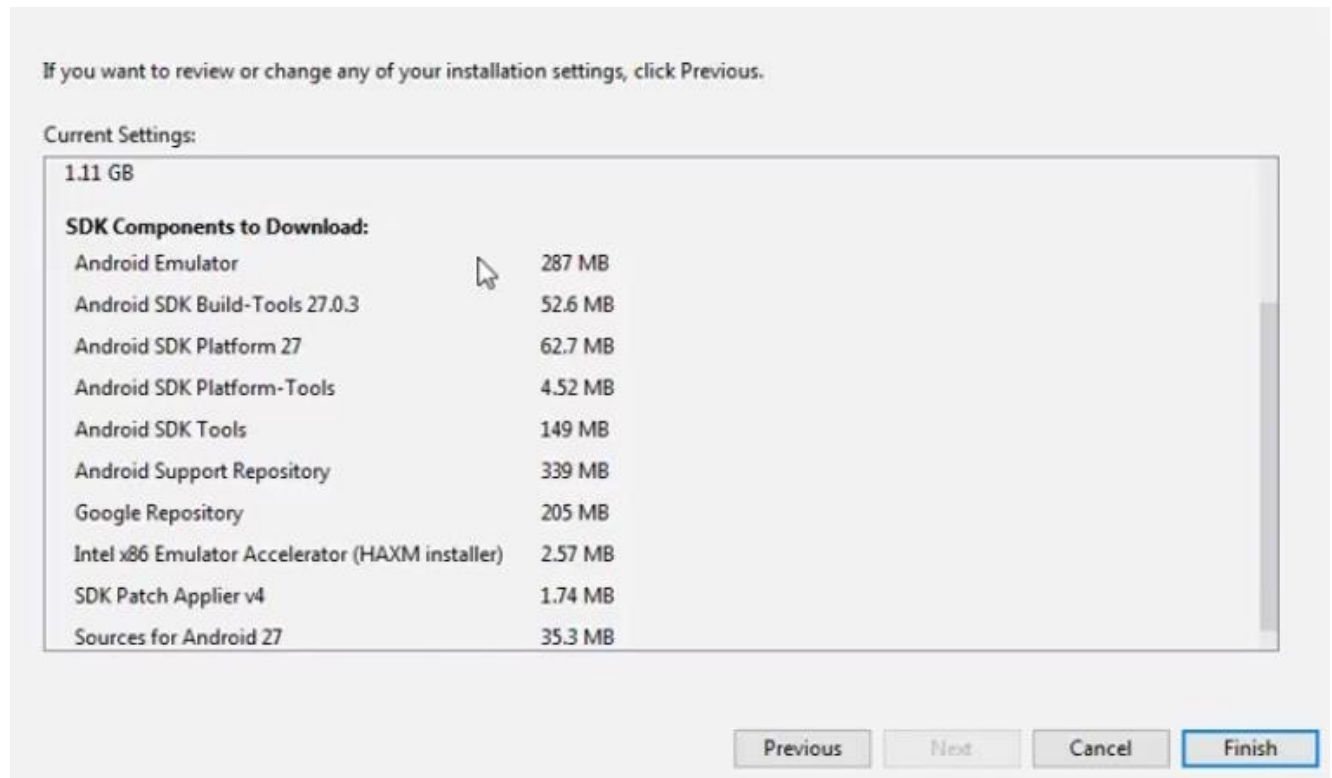
The light one is called the IntelliJ theme whereas the dark theme is called Darcula .

Choose as required.

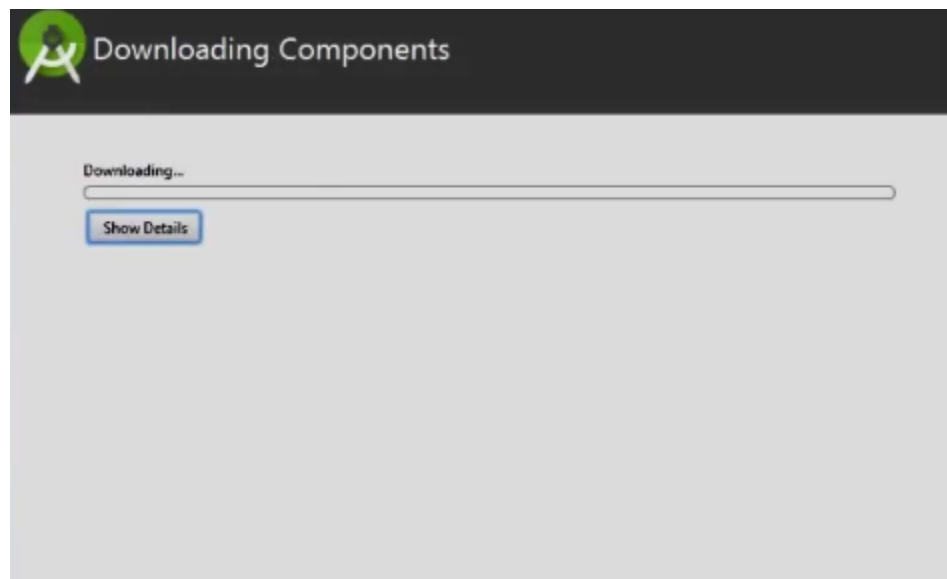


- Click on the Next button
- Step – 8 :  
Now it is time to download the SDK components .

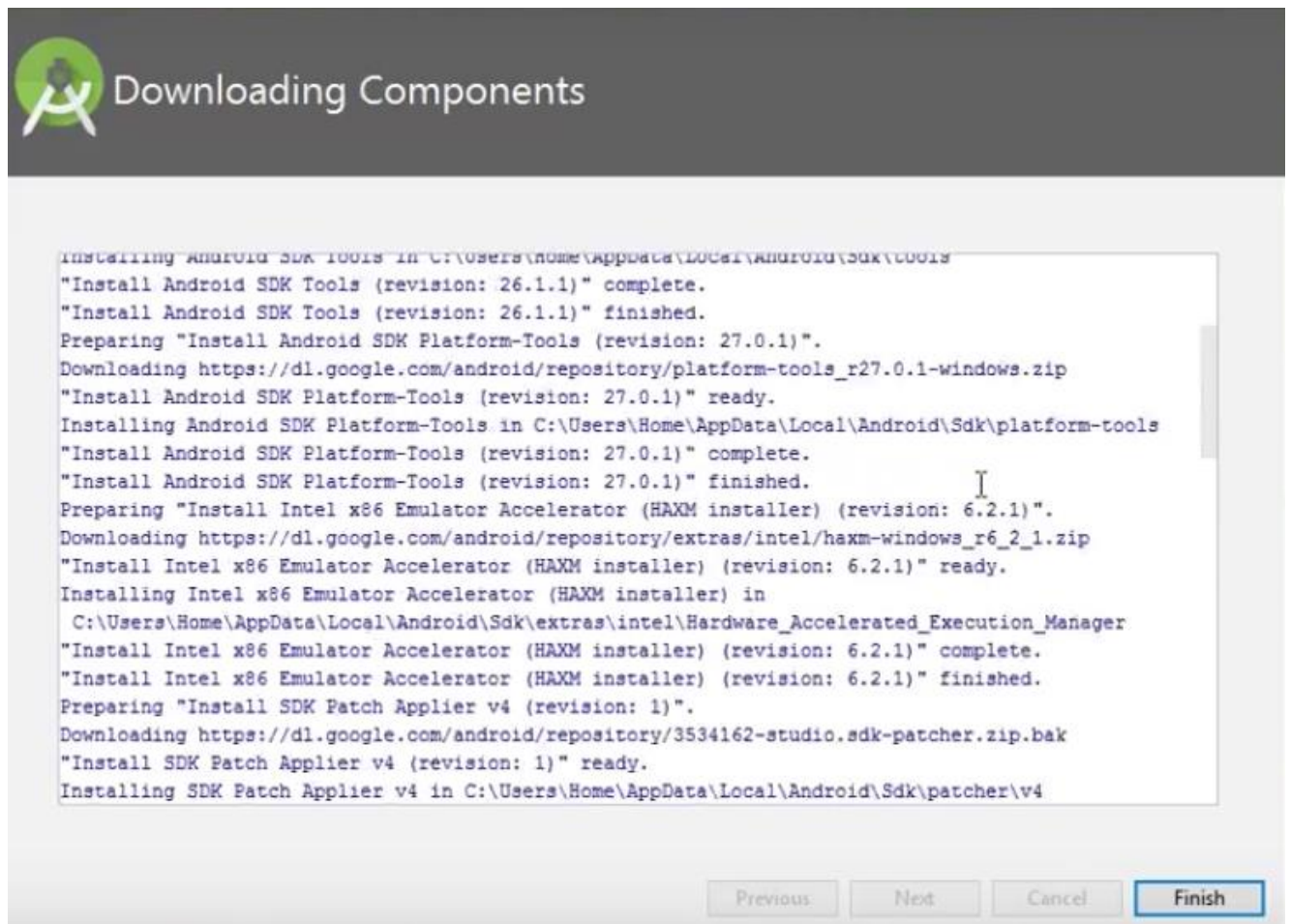




Click on Finish .



It has started downloading the components



The Android Studio has been successfully configured.  
Now it's time to launch and build apps.

## Steps to create a project in android

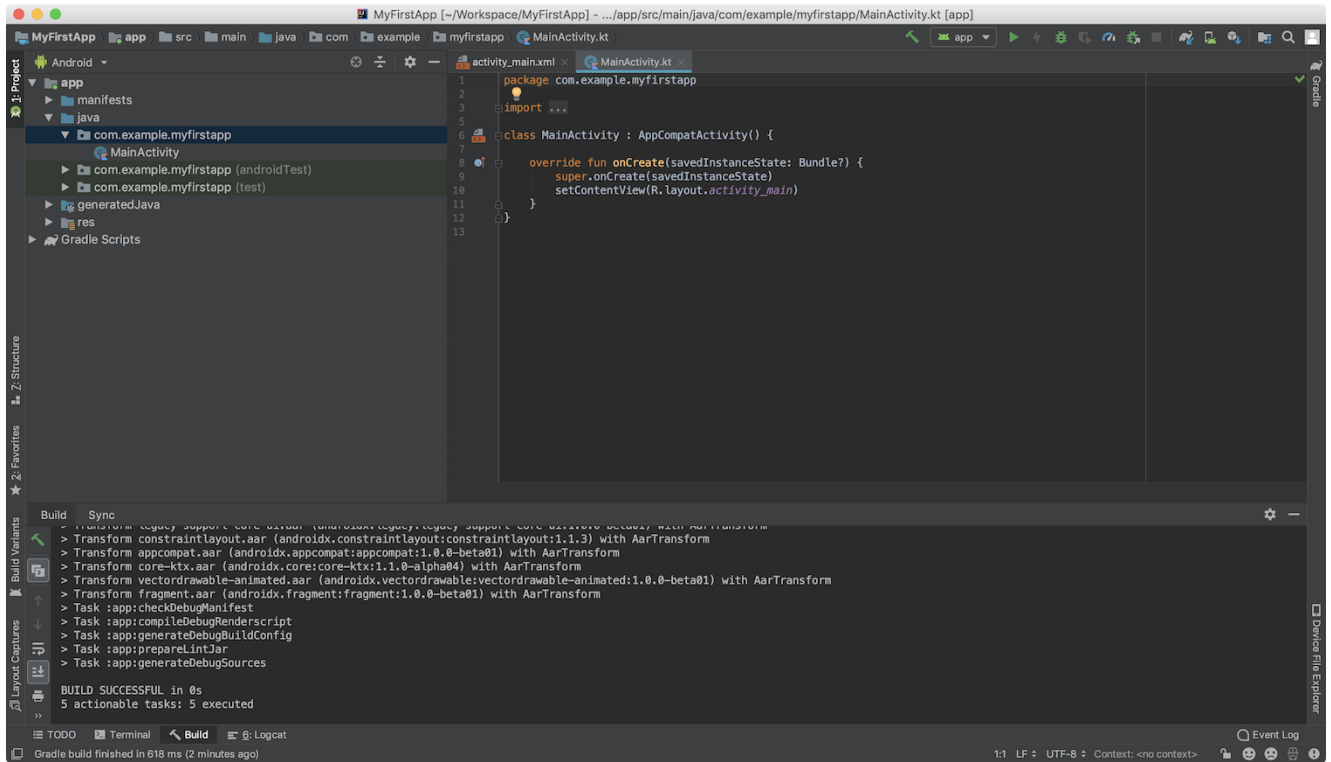
To create your new Android project, follow these steps:

- Install the latest version of Android Studio.
- In the Welcome to Android Studio window, click Start a new Android Studio project.



- If you have a project already opened, select File > New > New Project.
- In the Choose your project window, select Empty Activity and click Next.
- In the Configure your project window, complete the following:
  1. Enter "My First App" in the Name field.
  2. Enter "com.example.myfirstapp" in the Package name field.
  3. If you'd like to place the project in a different folder, change its Save location.
  4. Select either Java or Kotlin from the Language drop-down menu.
- Select the checkbox next to Use androidx.\* artifacts.
- Leave the other options as they are.

- Click Finish.
- After some processing time, the Android Studio main window appears.



## Note

### To Open Project Window

select View > Tool Windows > Project

### To Open MainActivity.java file

app > java > PackageName > MainActivity.java

### To Open Layout activity\_main.xml file

app > res > layout > activity\_main.xml

1. After the project is created, there are 2 files, **MainActivity.java** and **activity\_main.xml**
2. Go to activity\_main.xml and select **Design View**
3. In Design View, change the layout to **LinearLayout(Vertical)** select **Add TextView**, and change the text to “Hello World!”
4. Click on **Run** and select the AVD already created(if not created, first create the AVD)
5. Output screen should show “Hello World”

### To create a new AVD:

1. Open the **AVD Manager** by clicking Tools > **AVD Manager**.
2. Click **Create Virtual Device**, at the bottom of the **AVD Manager** dialog. ...
3. Select a hardware profile, and then click Next.
4. Select the system image for a particular API level, and then click Next.
5. Change **AVD** properties as needed, and then click Finish.



Virtual Device Configuration


**Select Hardware**  
 Android Studio

Choose a device definition

Category	Name	Play Store	Size	Resolution	Density
TV	Pixel XL		5.5"	1440x2...	560dpi
Phone	Pixel 3 XL		6.3"	1440x2...	560dpi
Wear OS	<b>Pixel 3</b>	▶	<b>5.46"</b>	<b>1080x2...</b>	<b>440dpi</b>
Tablet	Pixel 2 XL		5.99"	1440x2...	560dpi
Automotive	Pixel 2	▶	5.0"	1080x1...	420dpi
	Pixel	▶	5.0"	1080x1...	420dpi
	Nexus S		4.0"	480x800	hdpi
	Nexus One		3.7"	480x800	hdpi
	Nexus 6P		5.7"	1440x2...	560dpi

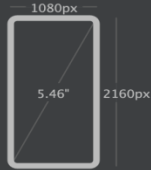
New Hardware Profile

Import Hardware Profiles

↻

Clone Device...

Pixel 3



Size: large  
 Ratio: long  
 Density: 440dpi

?


Cancel

Previous

**Next**

Finish

Virtual Device Configuration


**System Image**  
 Android Studio

Select a system image

Recommended


x86 Images

Other Images

Release Name	API Level	ABI	Target
<a href="#">Q Download</a>	Q	x86	Android 9.+ (Google Play)
<b>Pie</b>	<b>28</b>	<b>x86</b>	<b>Android 9.0 (Google Play)</b>
<a href="#">Oreo Download</a>	27	x86	Android 8.1 (Google Play)
<a href="#">Oreo Download</a>	26	x86	Android 8.0 (Google Play)
<a href="#">Nougat Download</a>	25	x86	Android 7.1.1 (Google Play)
<a href="#">Nougat Download</a>	24	x86	Android 7.0 (Google Play)

↻

Pie



API Level  
**28**  
 Android  
**9.0**  
**Google Inc.**  
 System Image  
**x86**

We recommend these Google Play images because this device is compatible with Google Play.

Questions on API level?  
[See the API level distribution chart](#)

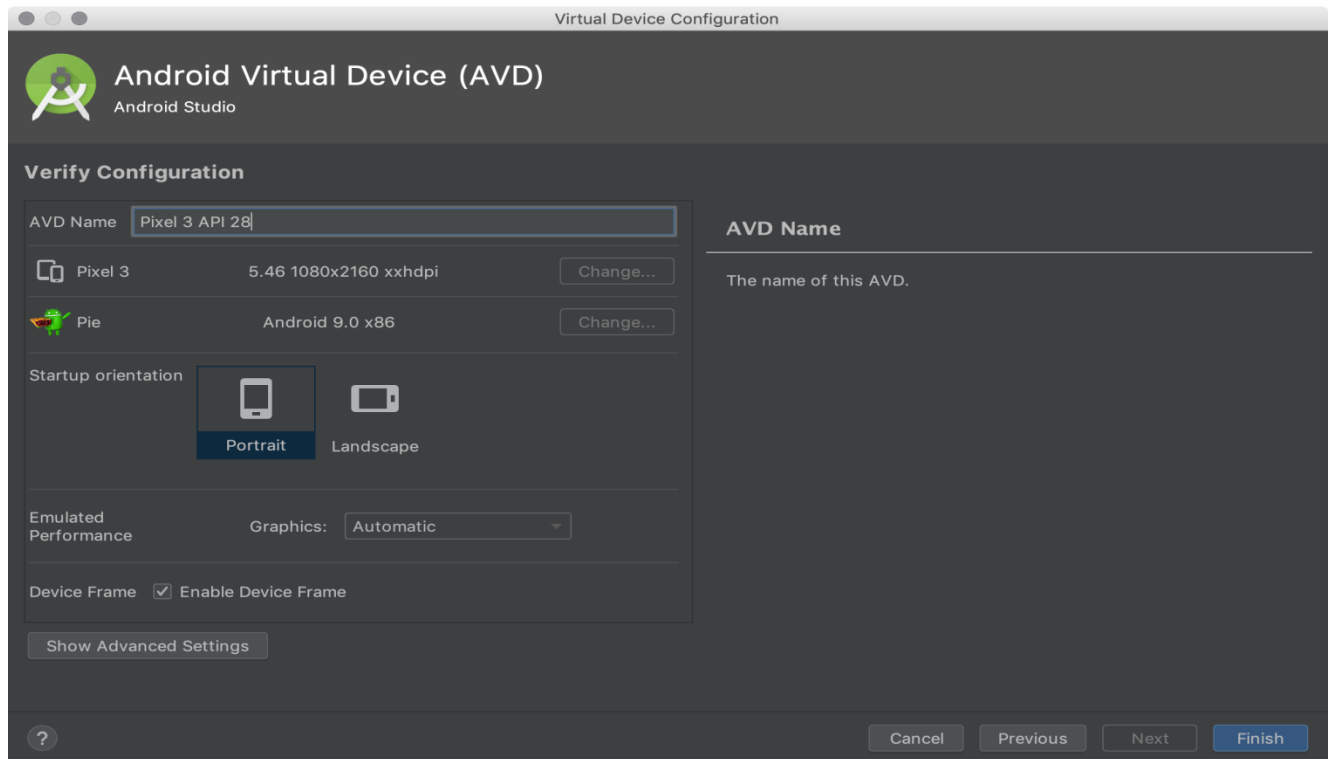
?

Cancel

Previous

**Next**

Finish



## Output

