How to do our project fro scratch?

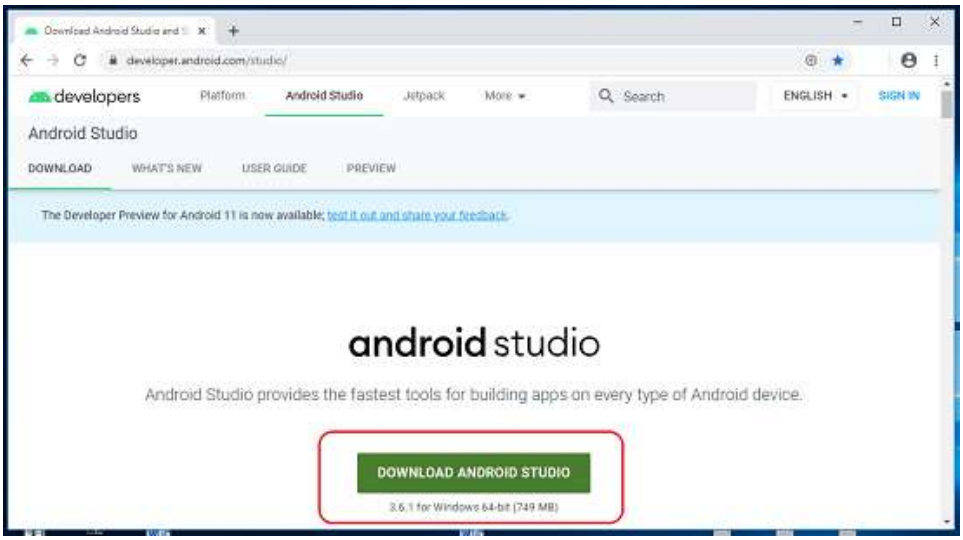
First Download android studio

Step 1

To download the Android Studio, visit the official Android Studio website in your web browser.

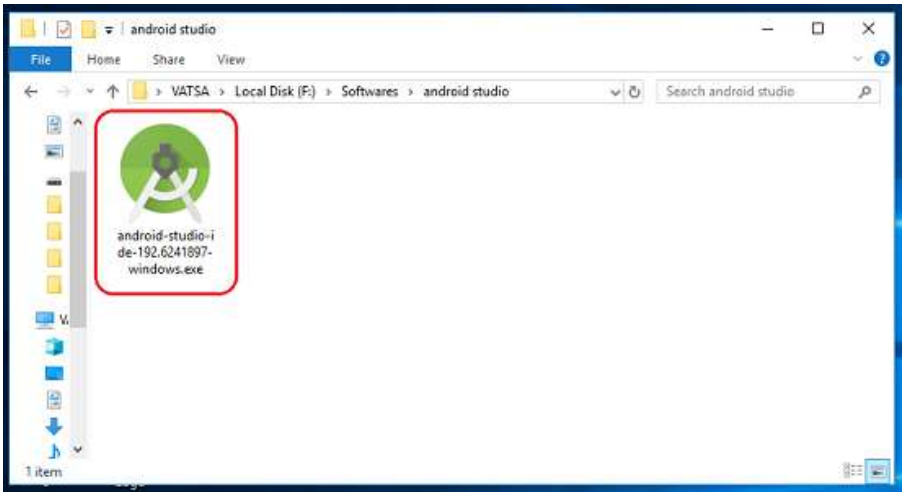
Step 2

Click on the "Download Android Studio" option.



Step 3

Double click on the downloaded "Android Studio-ide.exe" file.

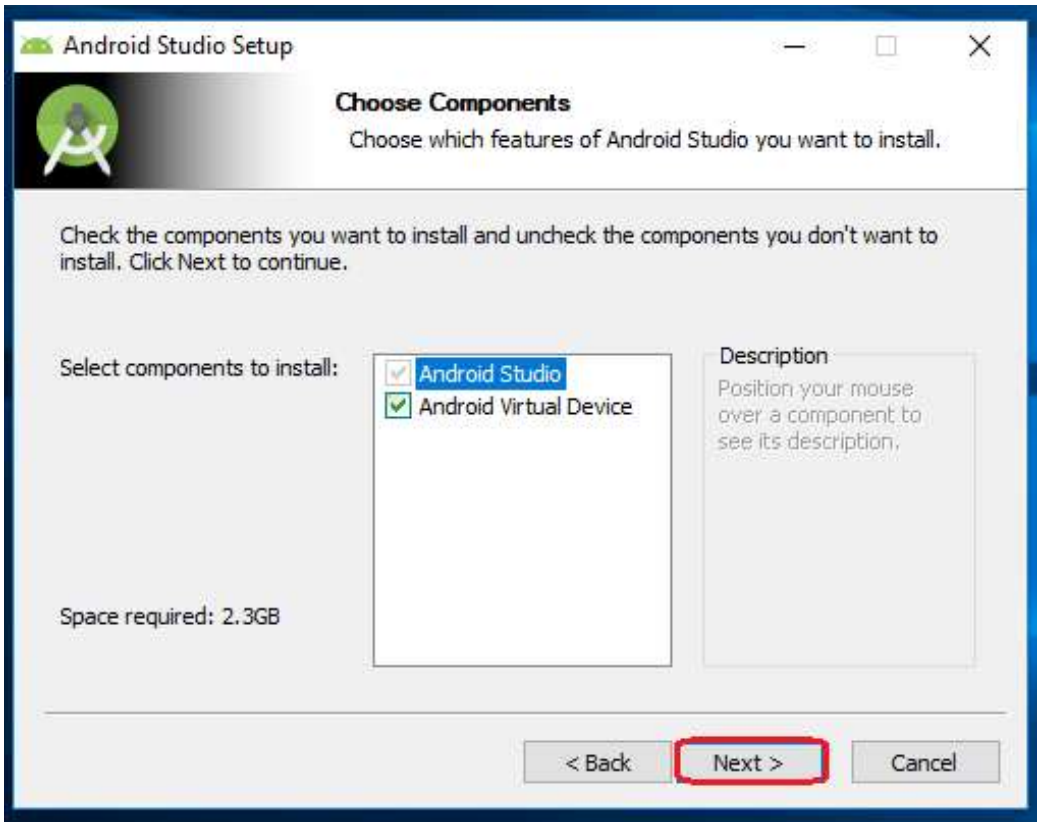


Step 4

"Android Studio Setup" will appear on the screen and click "Next" to proceed.

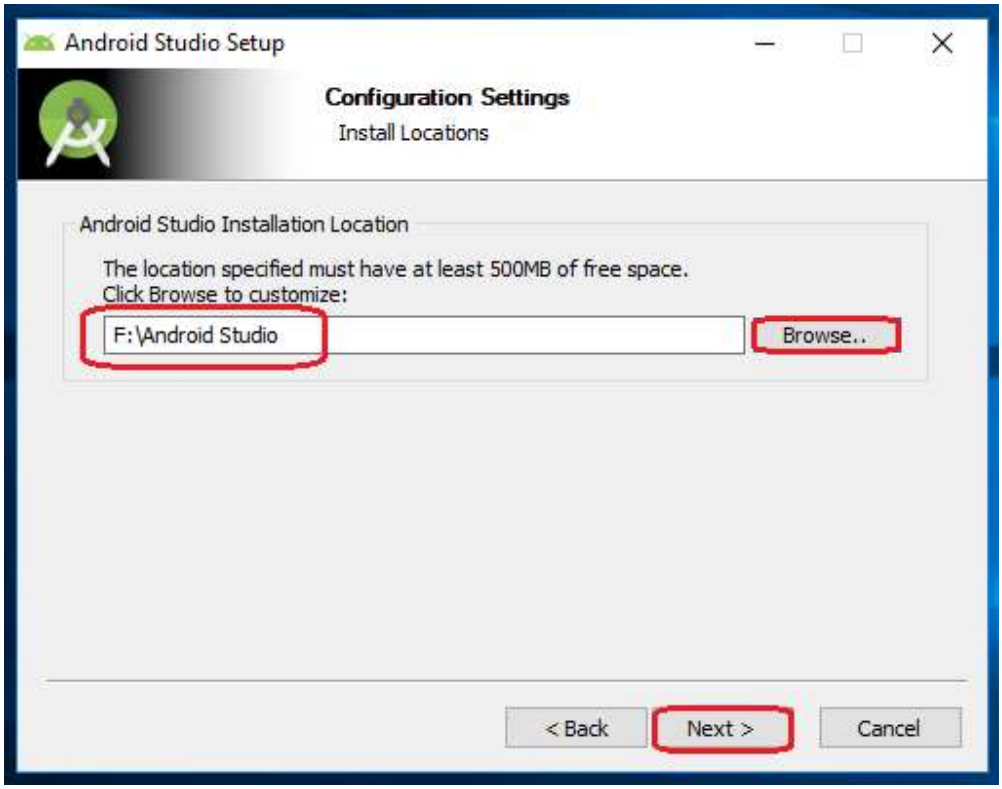
Step 5

Select the components that you want to install and click on the "Next" button.



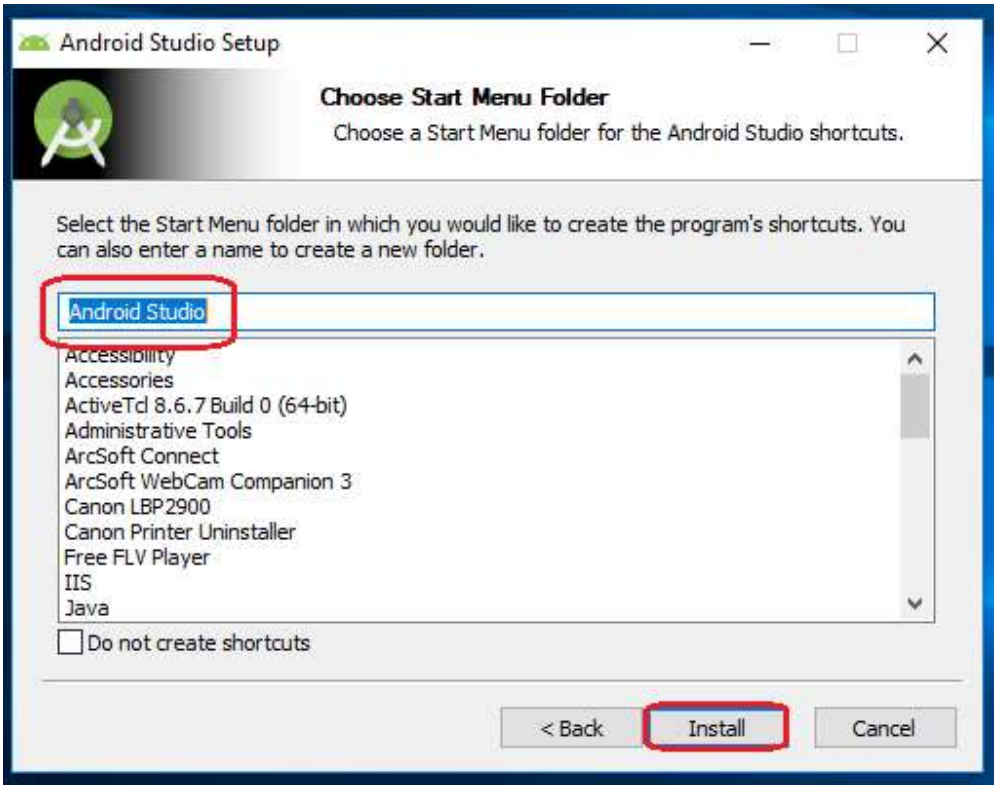
Step 6

Now, browse the location where you want to install the Android Studio and click "Next" to proceed.



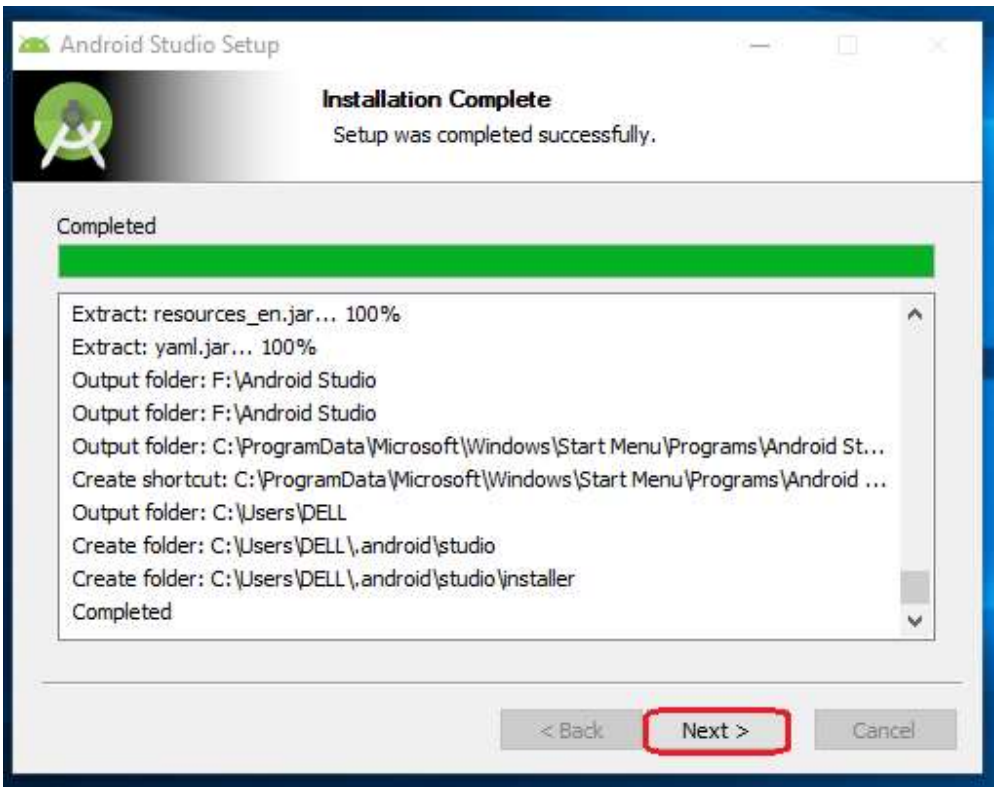
Step 7

Choose a start menu folder for the "Android Studio" shortcut and click the "Install" button to proceed.



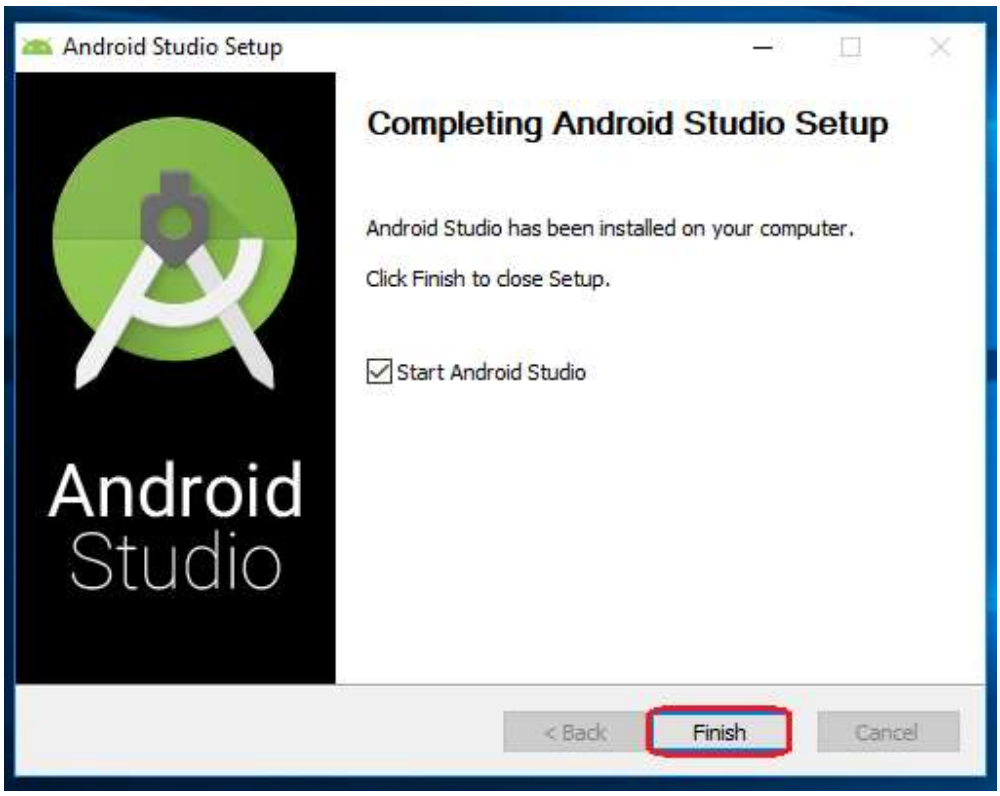
Step 8

After the successful completion of the installation, click on the "Next" button.



Step 9

Click on the "Finish" button to proceed.

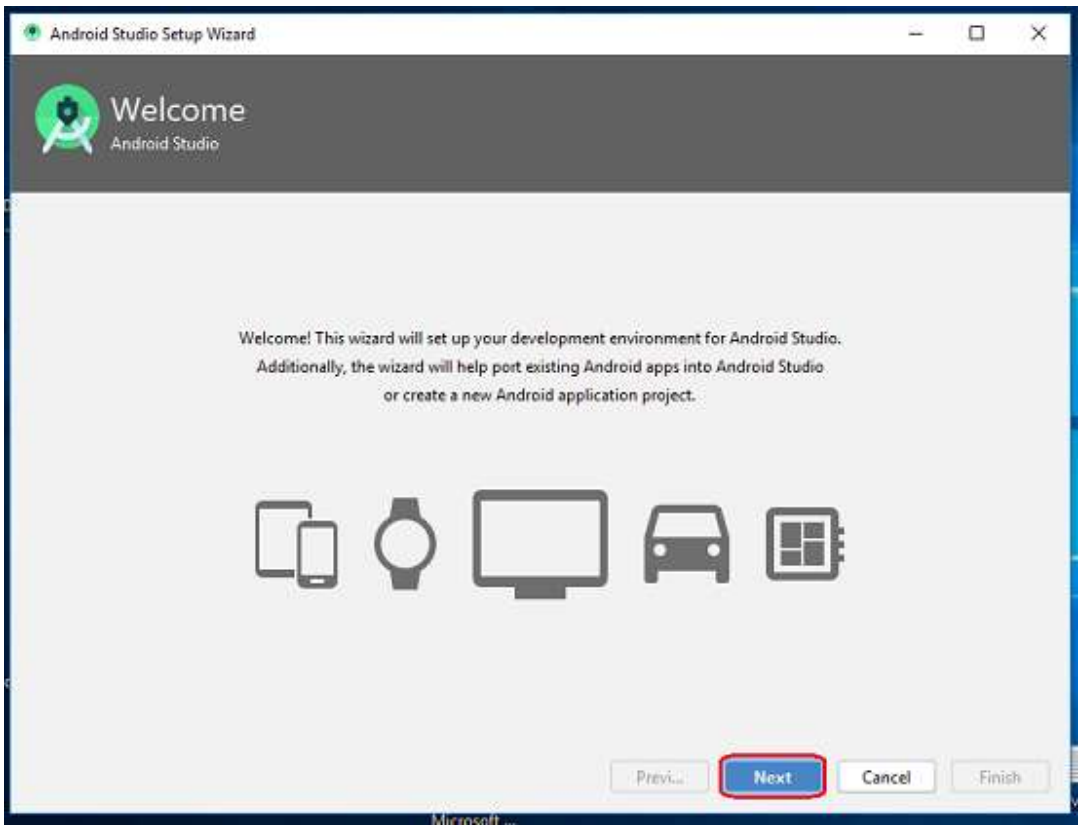


Now, your Android studio welcome screen will appear on the screen.

Android Studio Setup Configuration

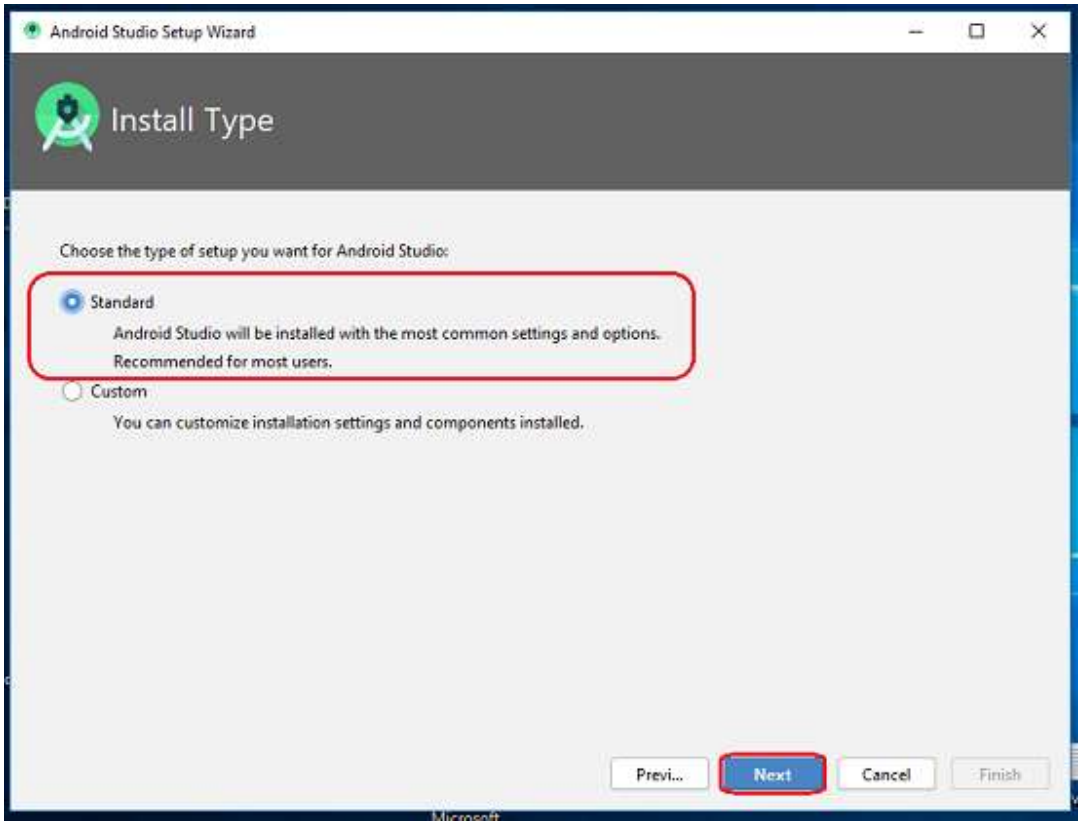
Step 10

"Android Studio Setup Wizard" will appear on the screen with the welcome wizard. Click on the "Next" button.



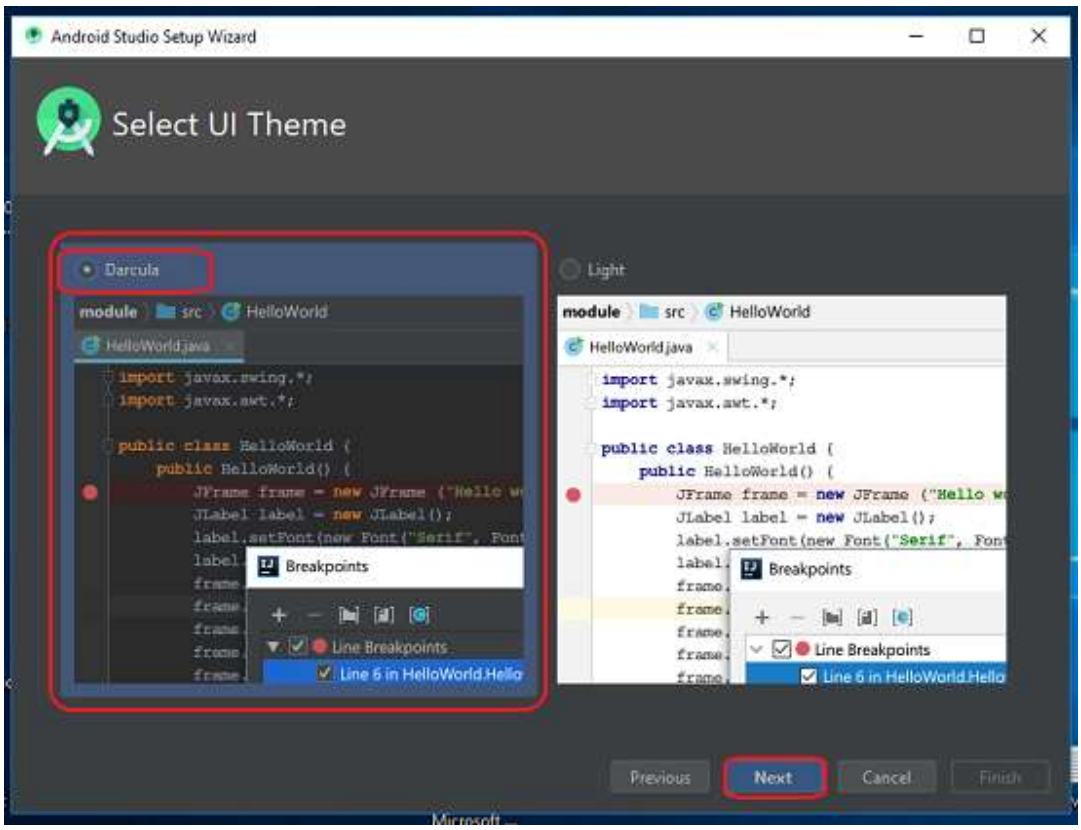
Step 11

Select (check) the "Standard" option if you are a beginner and do not have any idea about Android Studio. It will install the most common settings and options for you. Click "Next" to proceed.



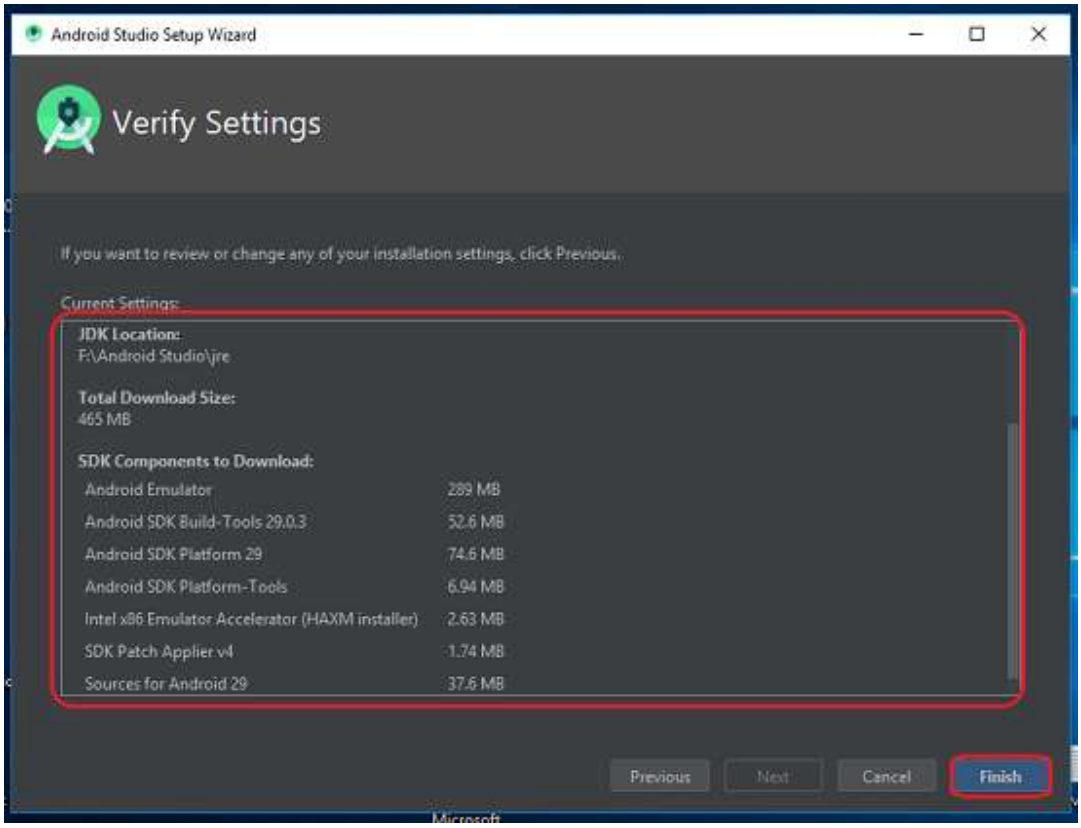
Step 12

Now, select the user interface theme as you want. (I prefer Dark theme (Dracula) that is most liked by the coders). Then, click on the "Next" button.

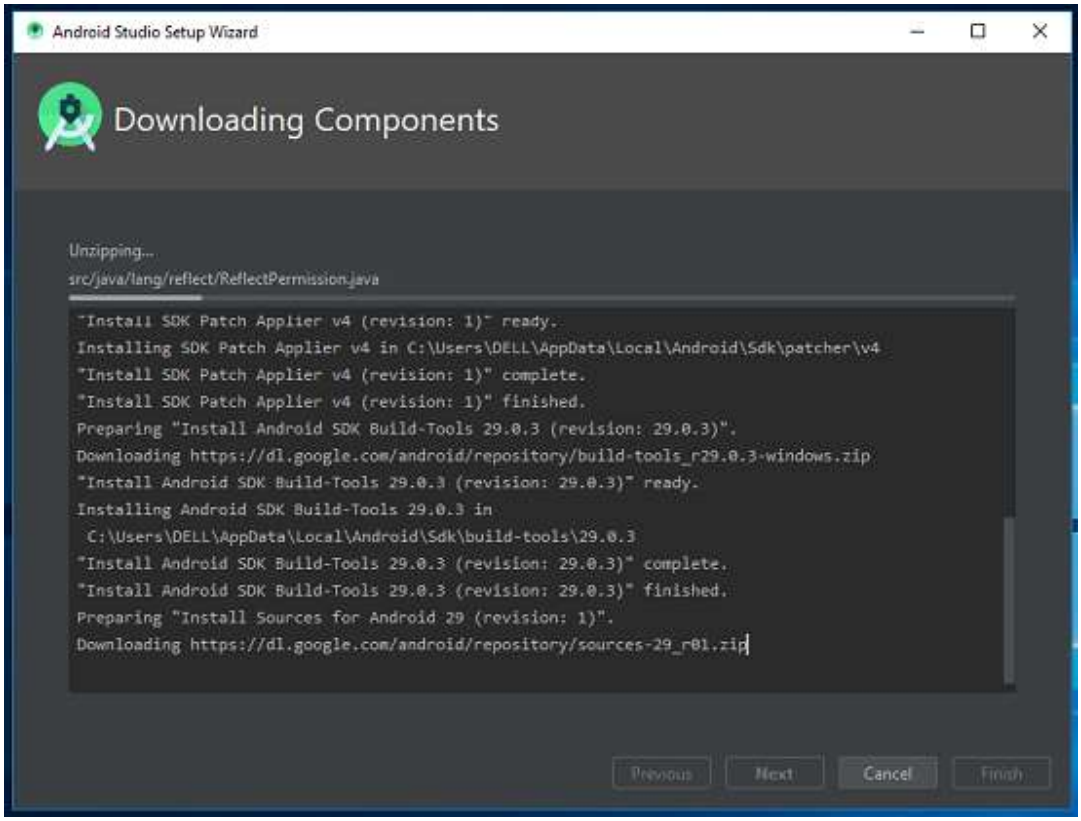


Step 13

Now, click on the "Finish" button to download all the SDK components.

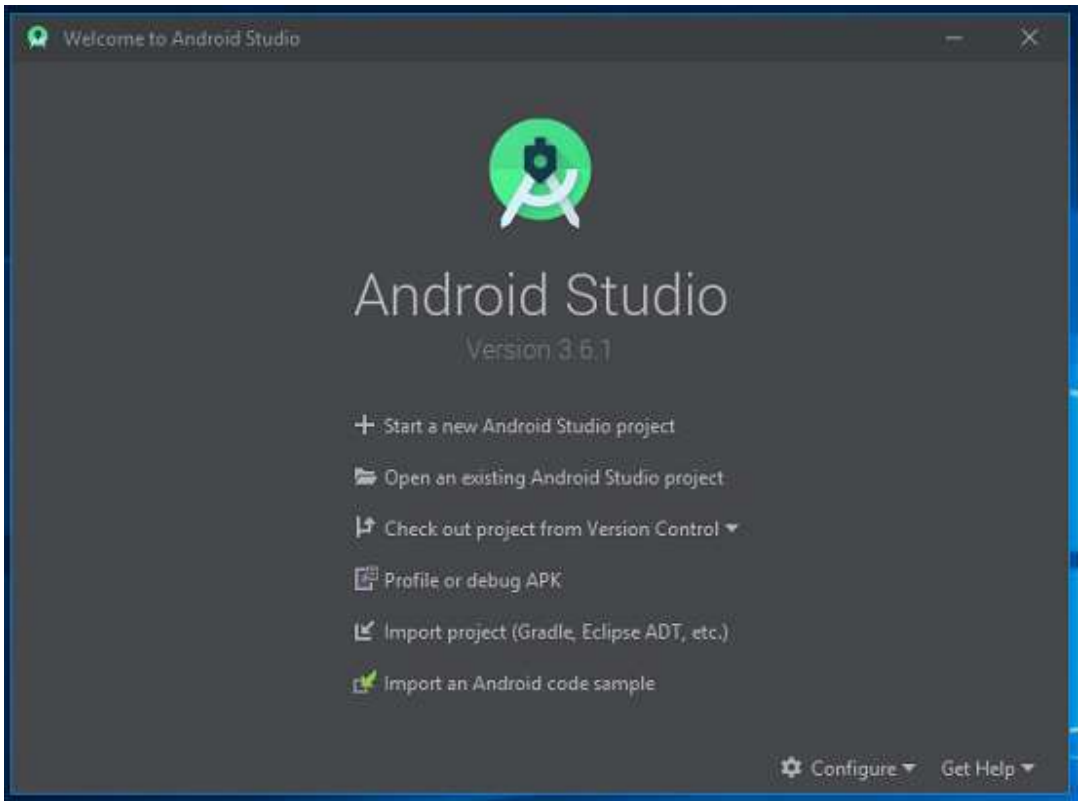


And, the downloading and installation process of components gets started.



Step 14

After downloading all the necessary components, click on the "Finish" button.

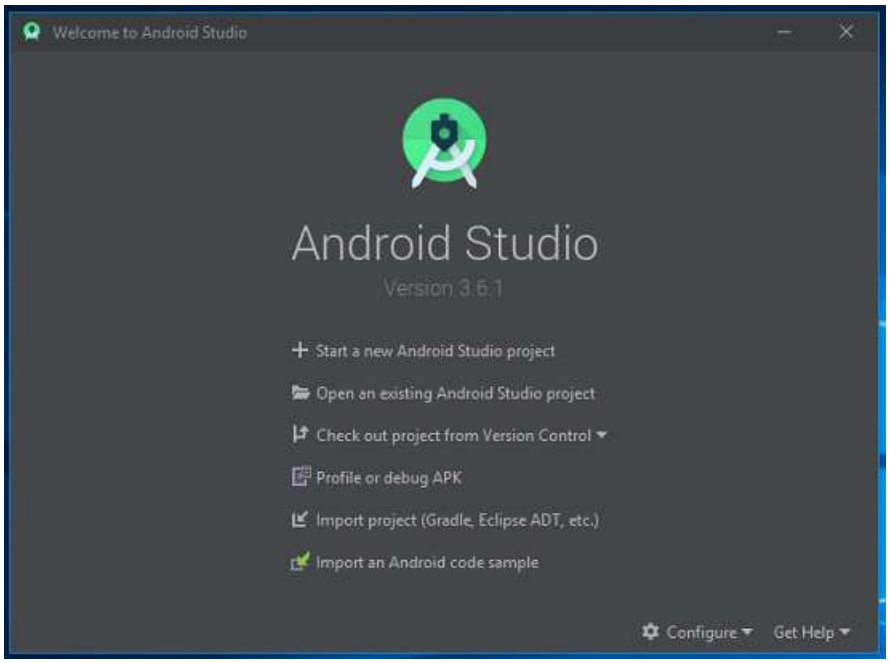


Congrats, your Android Studio has been successfully installed in your system and you can start a new Android studio project.

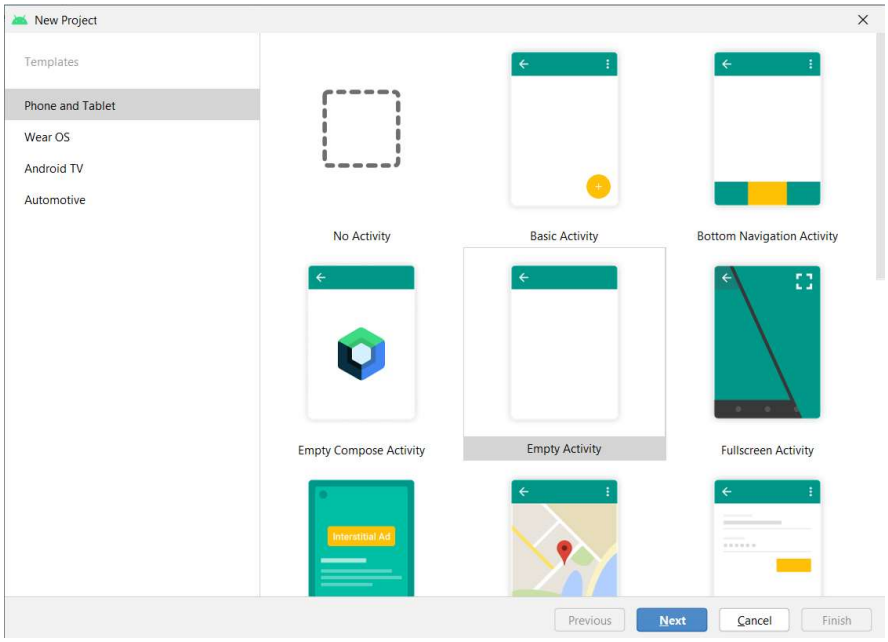
How to write code :

Start by creating a new project.

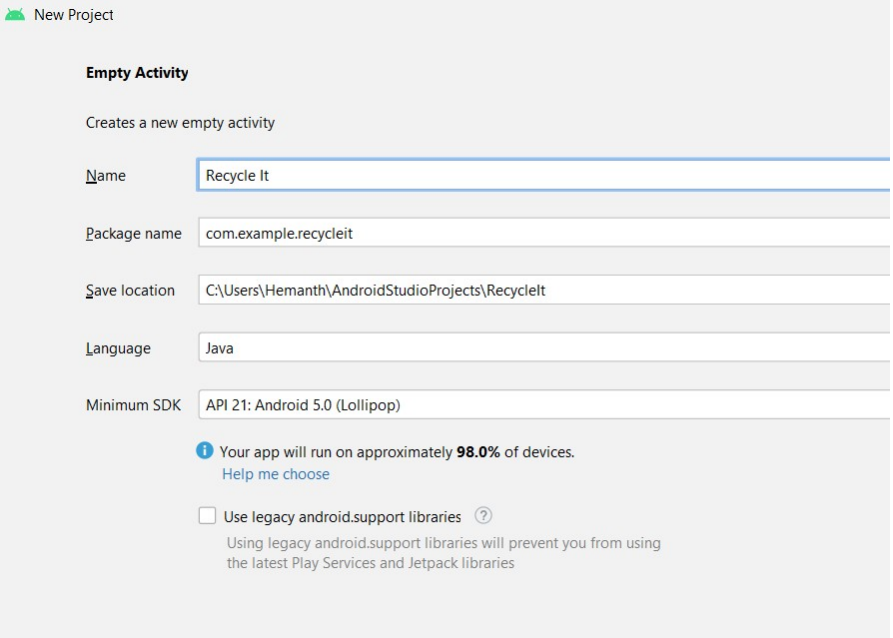
Click on “Start a new android studio project”.



Click on “Empty Activity”



Name the project as “Recycle It”.



Open the code of our project :

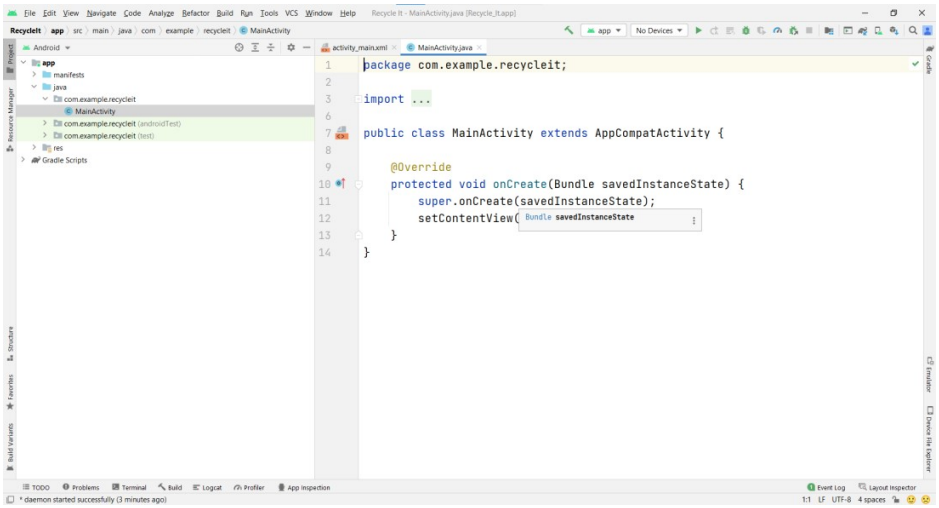
Locate the java codes by the following path -

RecycleIt\app\src\main\java\com\example\recycleit

Locate the xml codes by the following path –

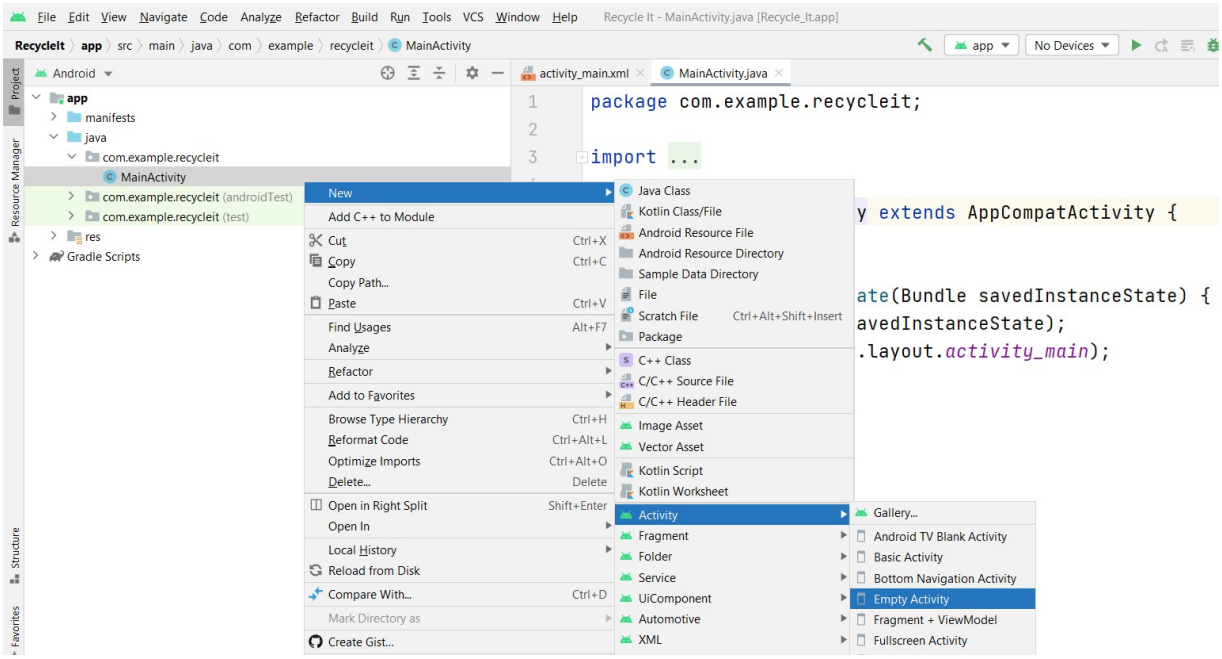
RecycleIt\app\src\main\res\layout

Then copy and paste the codes of MainActivity.java and activity_main.xml in the AndroidStudio

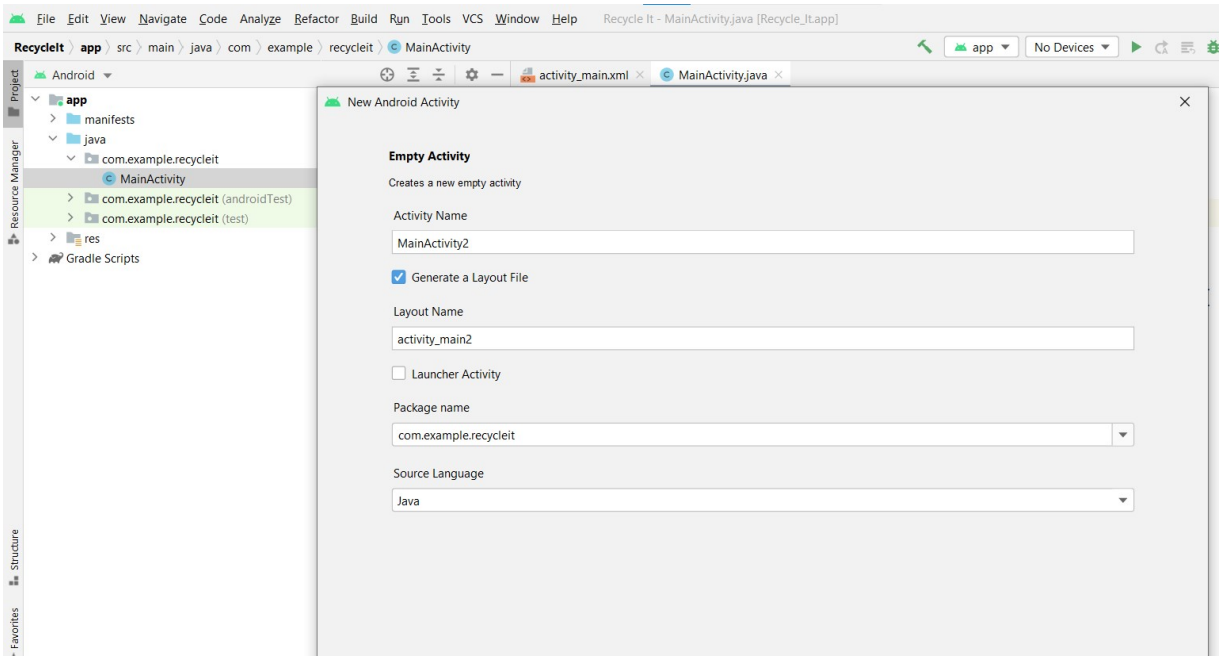


To paste the codes of other activities and xml files create new activities as follows.

New ➔ Activity ➔ Empty Activity



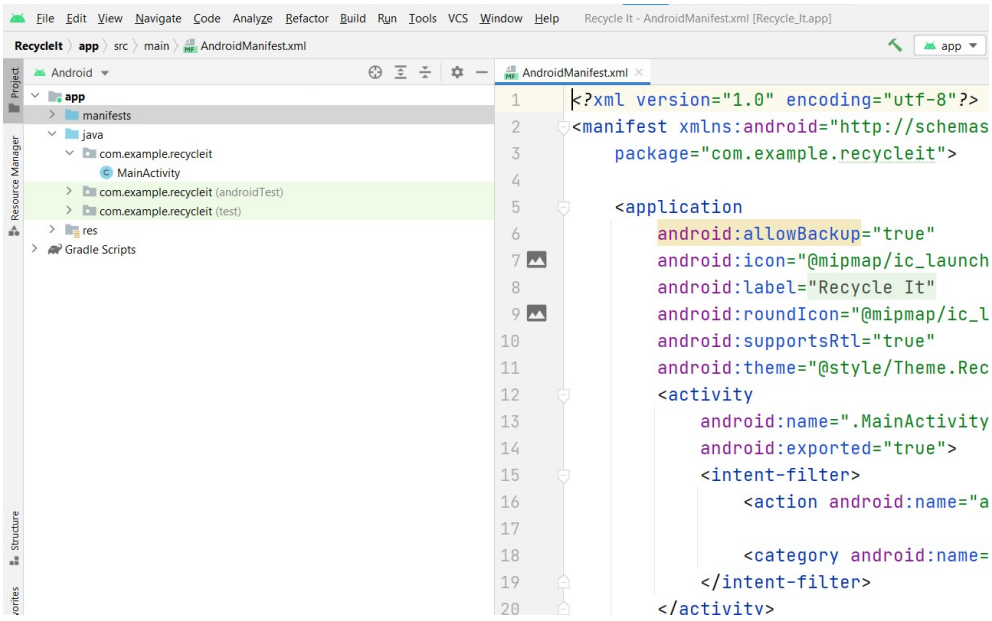
Name the activity as any of the java files and copy-paste the code in java and xml files.



Go to the manifest file in the code of our project by following the below path:

RecycleIt\app\src\main

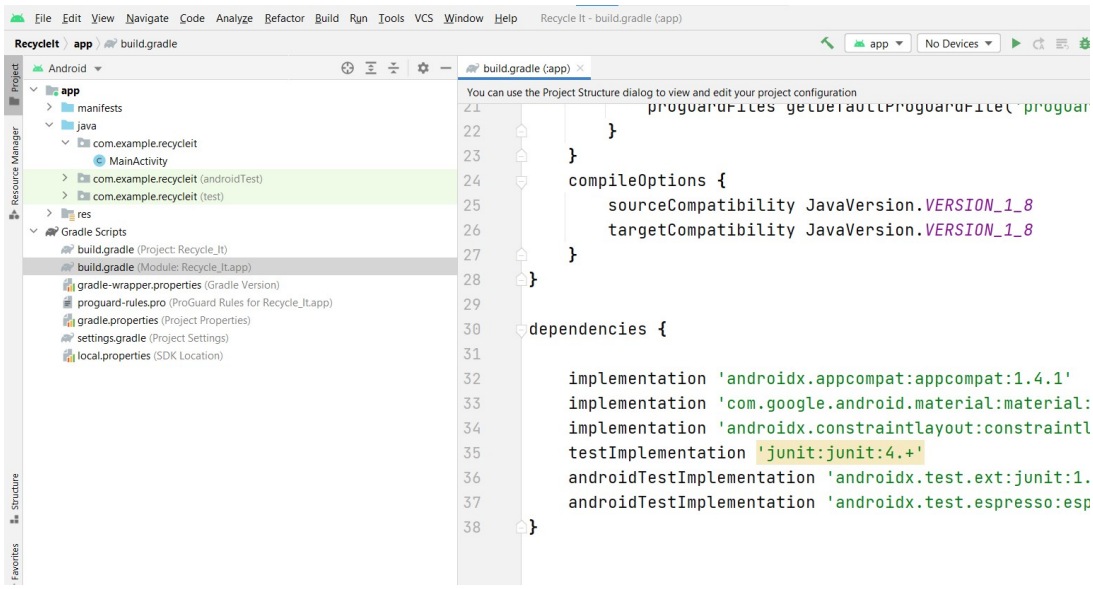
Open the manifest file, copy the code and then paste it in the manifest file in Android Studio.



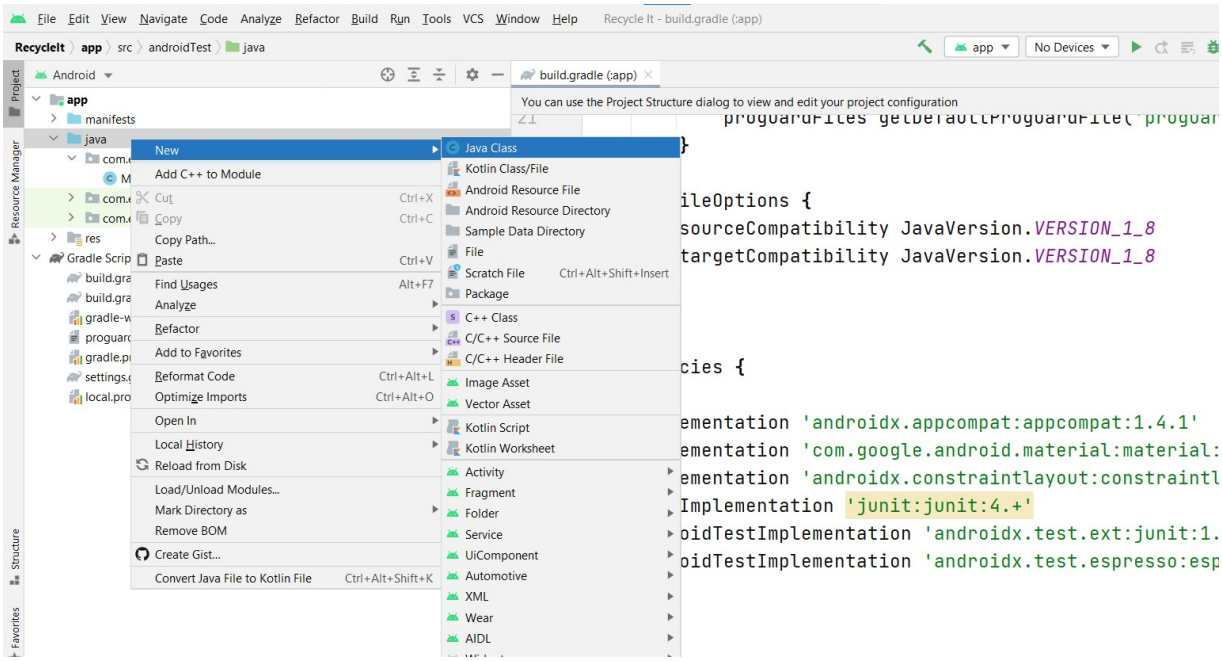
Go to the build.gradle file in the code of our project by following the below path:

RecycleIt

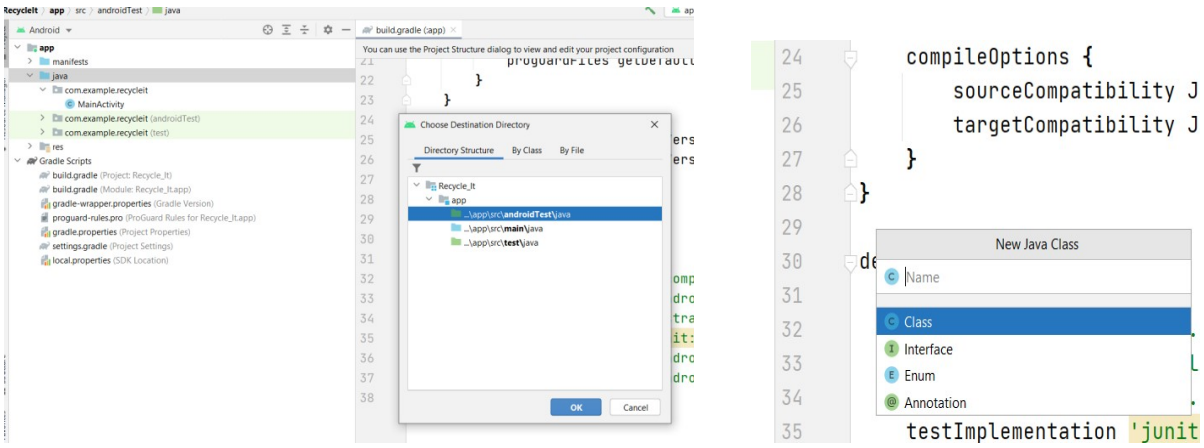
Open the build gradle file, copy the dependencies code and then paste it in the build gradle in Android Studio.



To Create a Java class follow the below procedure as shown below:

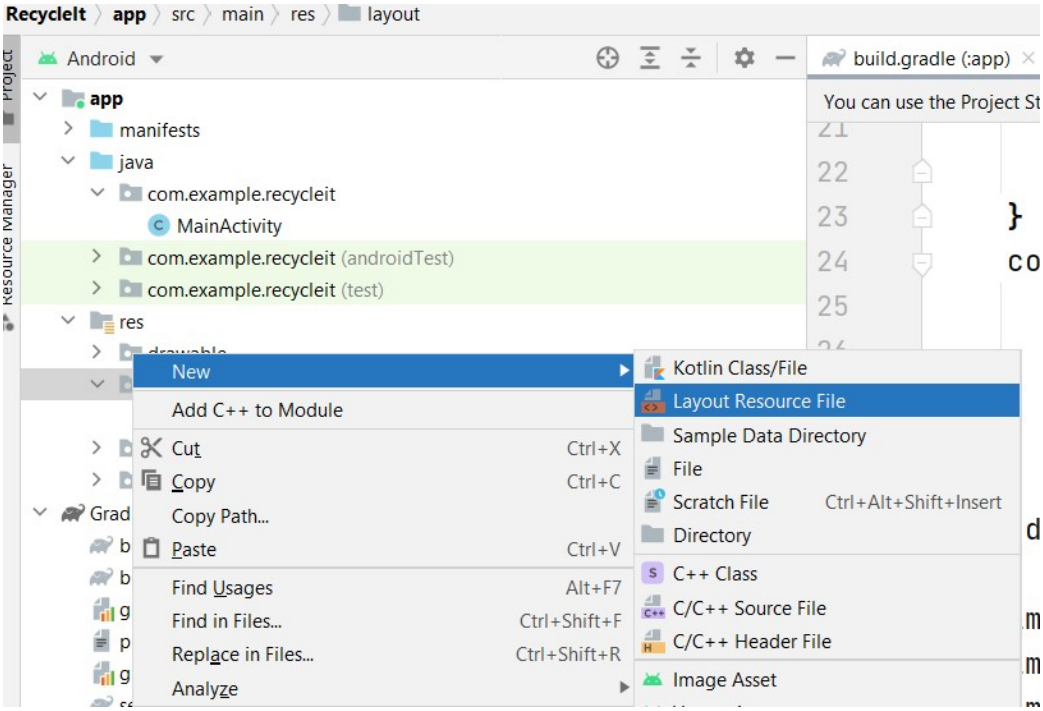


Name the java class as required

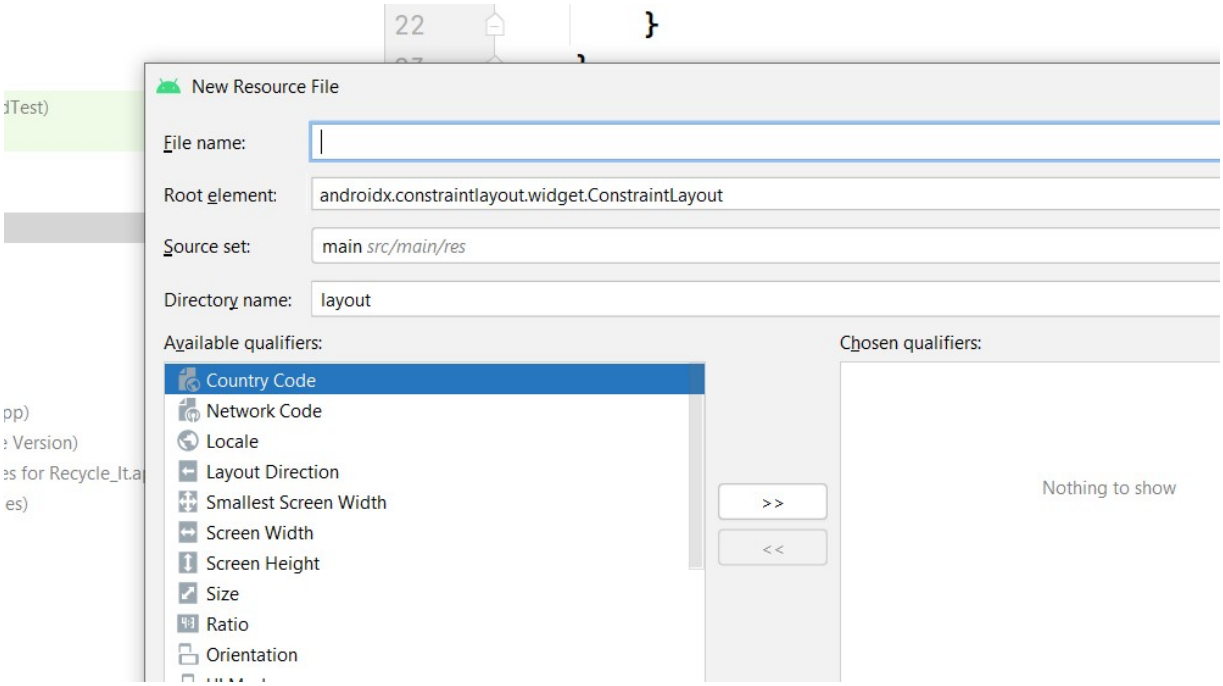


Create xml file as follows:

Right click on Layout file and the below procedure:



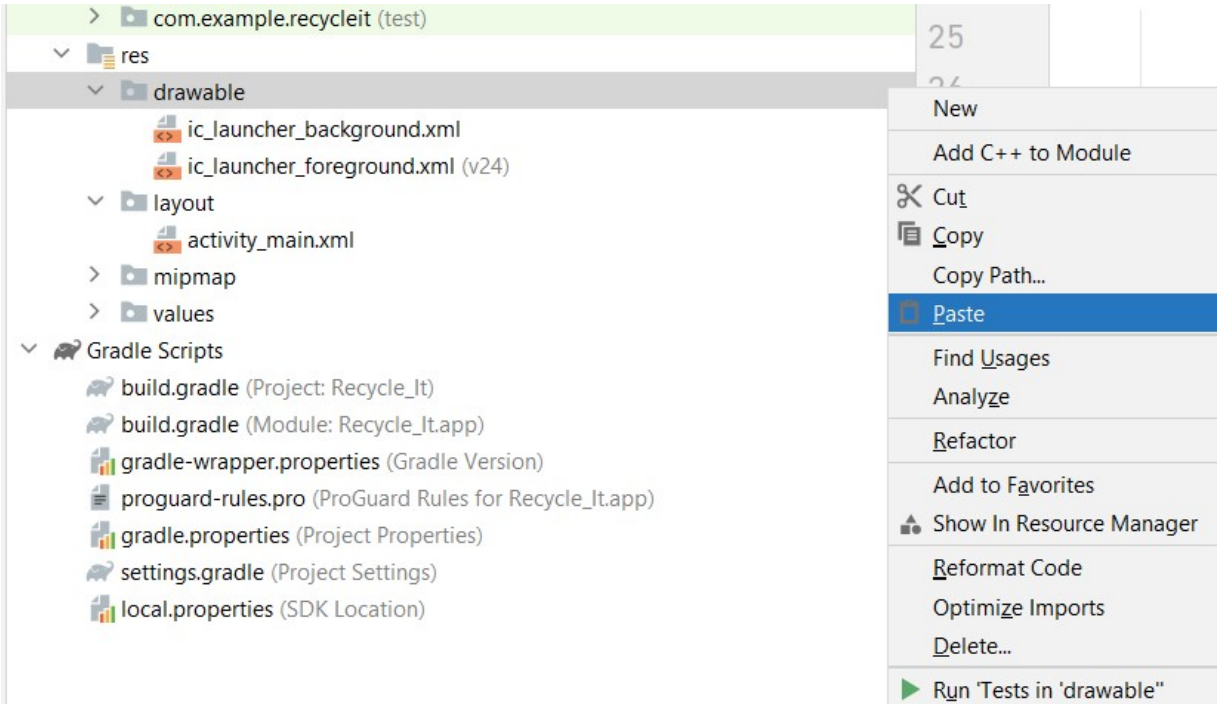
Name the file as required:



Copy and paste all the images in drawable in our code and paste them in drawable folder:

To locate drawable follow the below path:

\RecycleIt\app\src\main\res\drawable

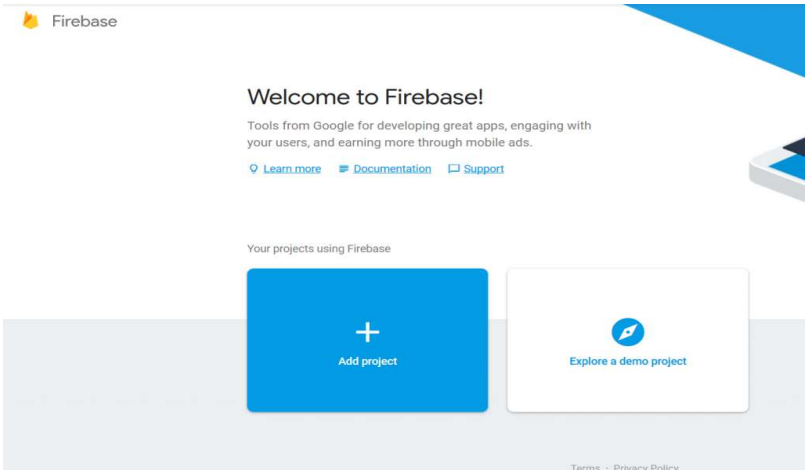


If there are any errors in the code, Click “Alt + Enter” on the error and it will show suggestions and act according to the suggestions.

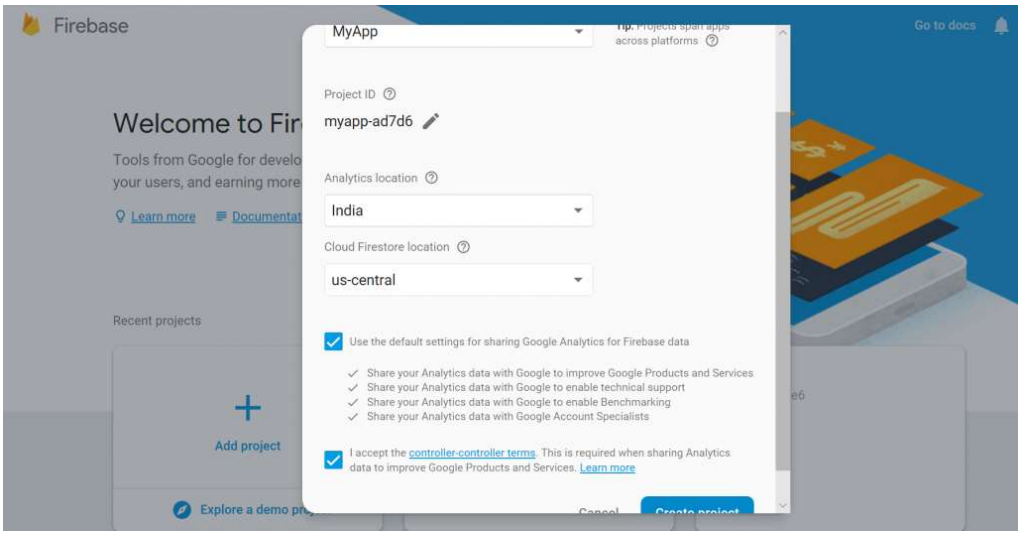
Now the next step is to connect our project to firebase.

How to connect an app to FireBase:

1. Create a firebase project
    - Create a project by clicking on **create project** in the firebase console.

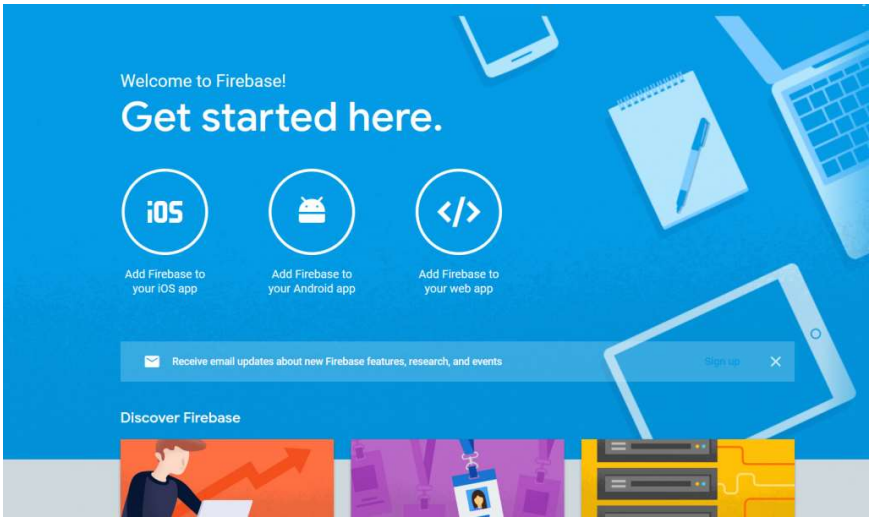


    - Fill the necessary details in the pop up window about the project. Edit the project ID if required.



    - Click on create project to finally create it.

2. Now add this project to the android app
    - Click on the **Add firebase to your android app** option on the starting window.



    - A prompt will open where to enter the package name of the app.
    - Now the app is connected to the Firebase. Now all the cloud based as well server based services can be easily used in the app.
    - Now the app will be registered with firebase.
3. Also, the SHA1 certificate, can be given, of the app by following steps:
4. Go to android studio project

↳ gradle

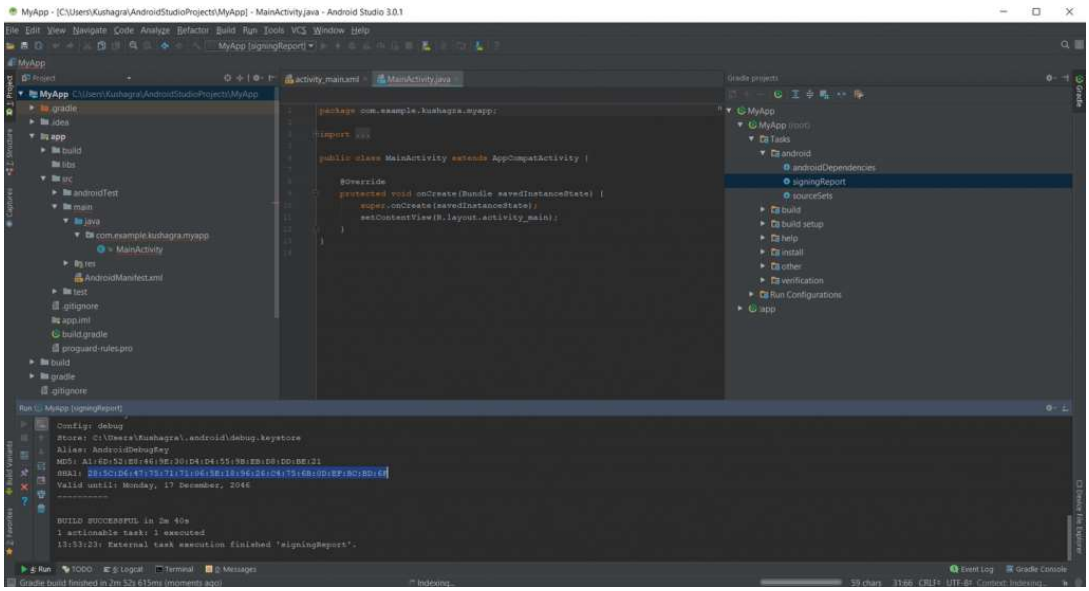
↳ root folder

↳ Tasks

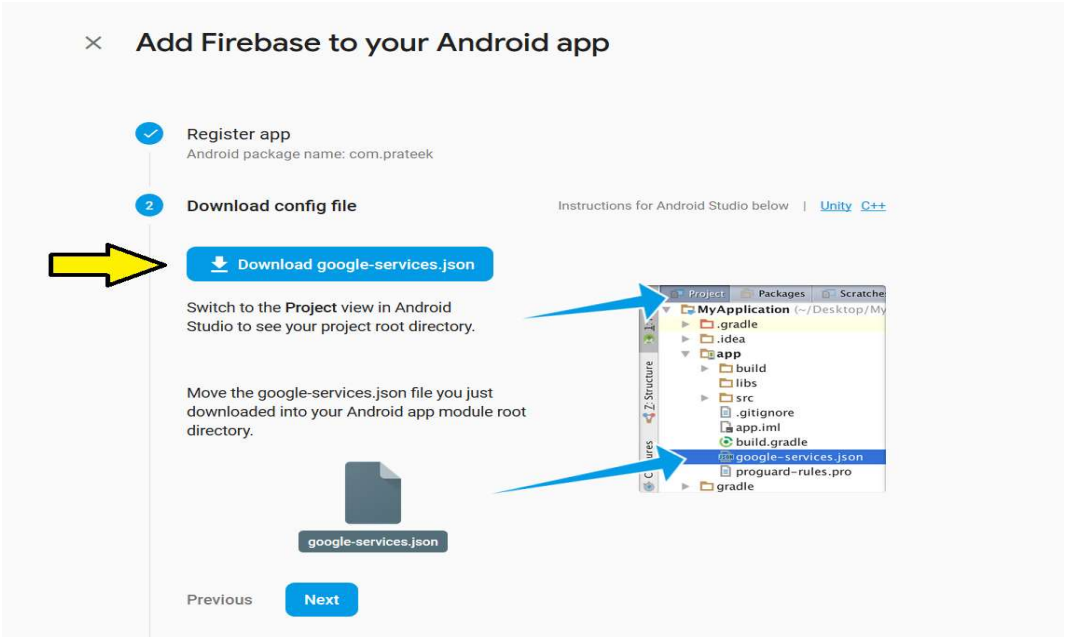
↳ Android

↳ signingReport

↳ copy paste SHA1 from console



5. Now download the **google-services.json** file and place it in the root directory of the android app.



6. Now add the following in the project.
    - Adding the sdk in the project.
      Add the following code to the PROJECT-LEVEL*build.gradle* of the app.

      buildscript {

       dependencies {

         classpath 'com.google.gms:google-services:4.0.0'

       }

      }

    - Add the following code to APP-LEVEL *build.gradle* of the app.

      dependencies {

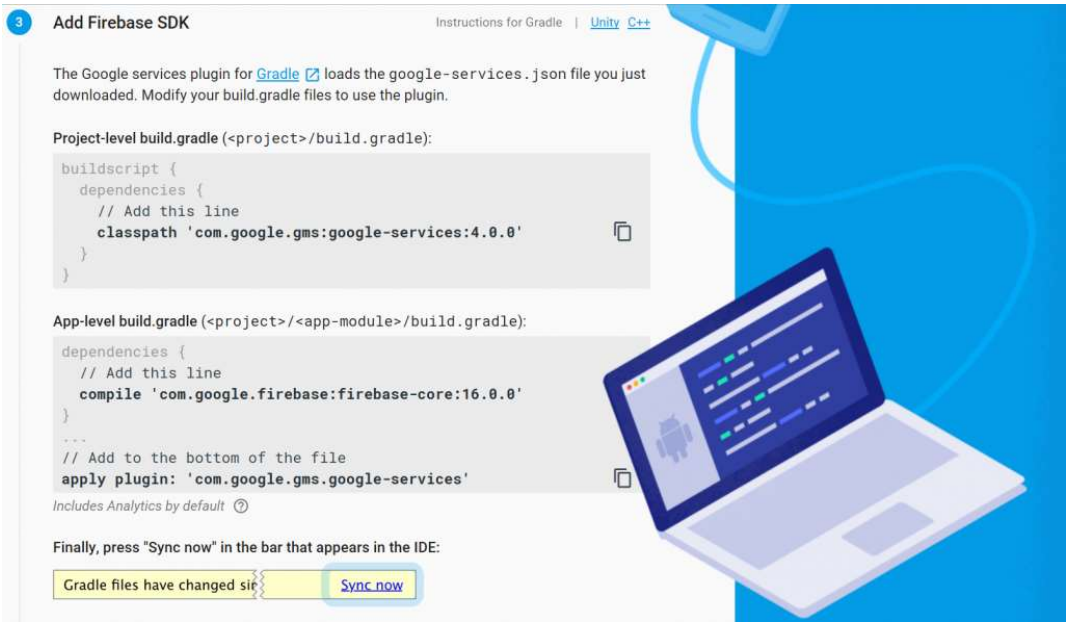
       compile 'com.google.firebase:firebase-core:16.0.0'

      }

      ...

      // Add to the bottom of the file

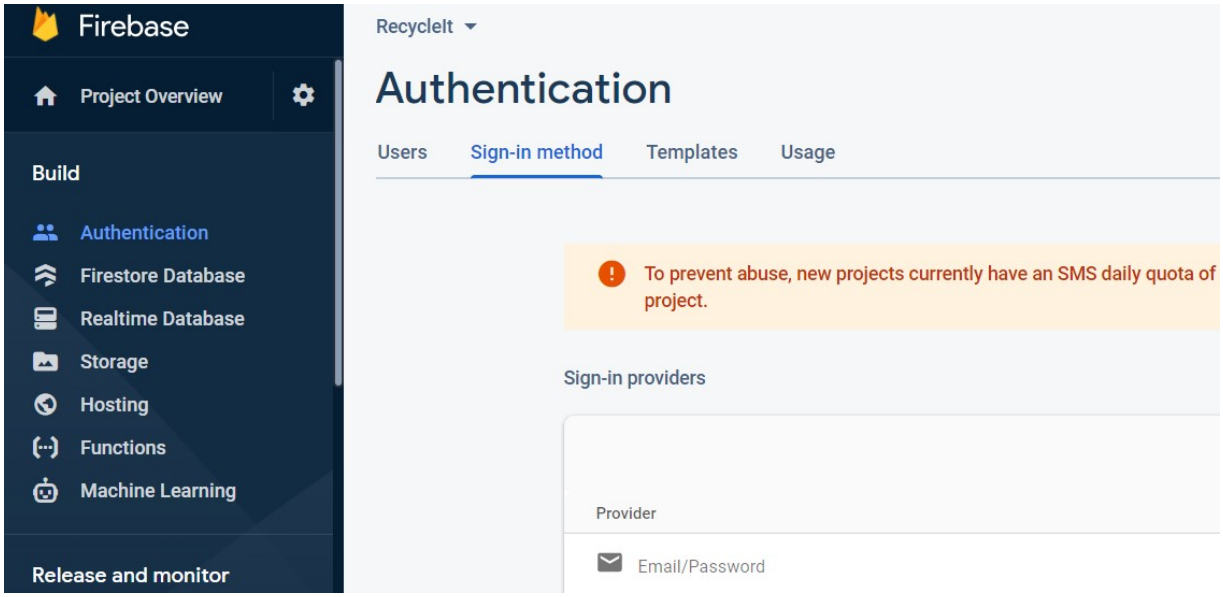
      apply plugin: 'com.google.gms.google-services'



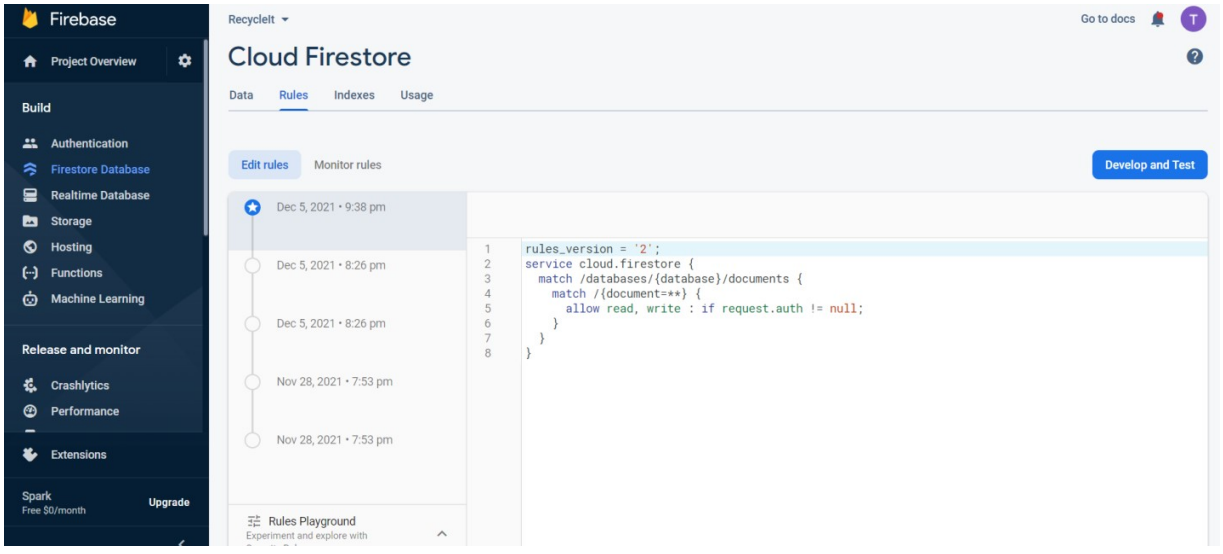
7. Now **Sync** the gradle by clicking on sync now.
8. After adding the above code(sdk), run the app to send the verification to the Firebase console.

Firebase is now successfully installed.

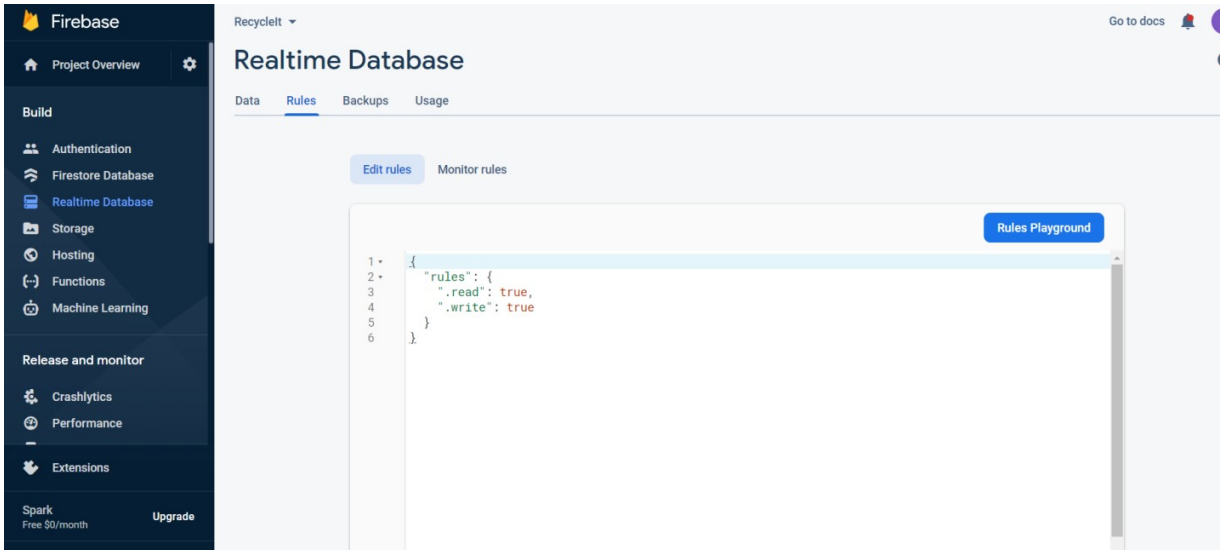
Enable Email/Password and Phone in authentication in firebase.



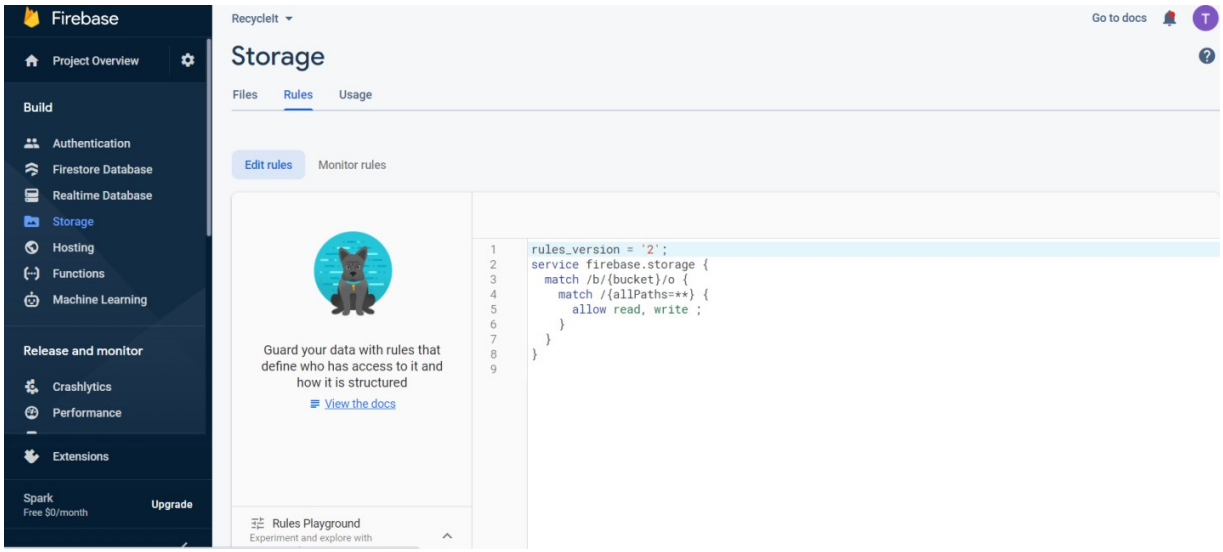
Create FireStore database and edit the rules as follows and click on develop and test:



Create Realtime database and edit the rules as follows:



Enable the storage and edit the rules as follows:



Now our project is successfully done and you can run the project and see the result as app running on your mobile.

You can see the code in this Cd or from the following Github link: