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## ***PROJECT REPORT ON***

Under Supervision-

Santu Purkait

Director

Netcamp Solutions Private Limited

+91 9331090003

[santu@netcamp.in](mailto:santu@netcamp.in)

[www.netcamp.in](http://www.netcamp.in)

## ***ANDROID***

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***SUBMITTED BY***

NAINA SETHIA

Amity University Chhattisgarh, Raipur

# Acknowledgement

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*I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of them.*

*I am highly indebted to Netcamp Solutions Private Limited. For their guidance and constant supervision as well as for providing necessary information regarding the project and also for their support in completing the project.*

*I would like to express my gratitude towards Mr. Santu Purkait, Director: Netcamp Solutions Private Limited For their kind co-operation and encouragement which help me in completion of this project.*

*I would like to express my special gratitude and thanks to organization persons for giving me such attention and time.*

*My thanks and appreciations also go to my colleagues in developing the project and people who have willingly helped me out with their abilities.*

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Name: Naina Sethia

College ID: A809150824045

Netcamp ID: 4250094

College: Amity University Chhattisgarh, Raipur

Date: 04-10-2025

Signature:

# *Netcamp Solutions Private Limited*

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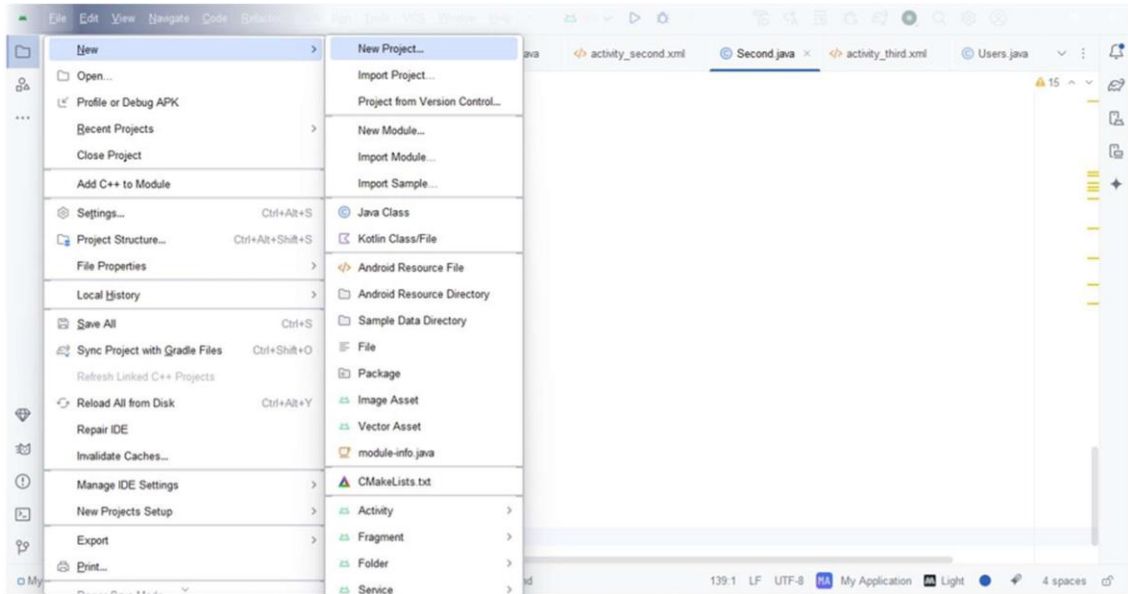
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## *Certificate*

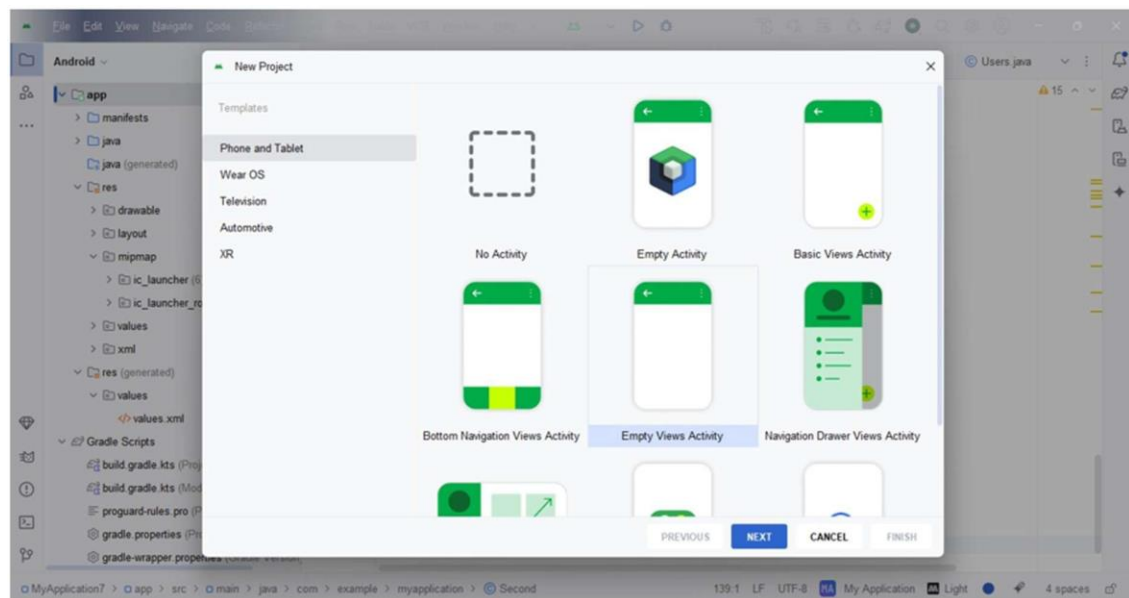
*This is to certify that, Naina Sethia, a student of program, **Android App Development with Java Program** has successfully completed a project on Android App Development under the guidance of **Mr. Santu Purkait** during the Dates: 4<sup>th</sup> August 2025 to 4<sup>th</sup> October 2025 by **Netcamp Solutions Private Limited.***

# Create New Project

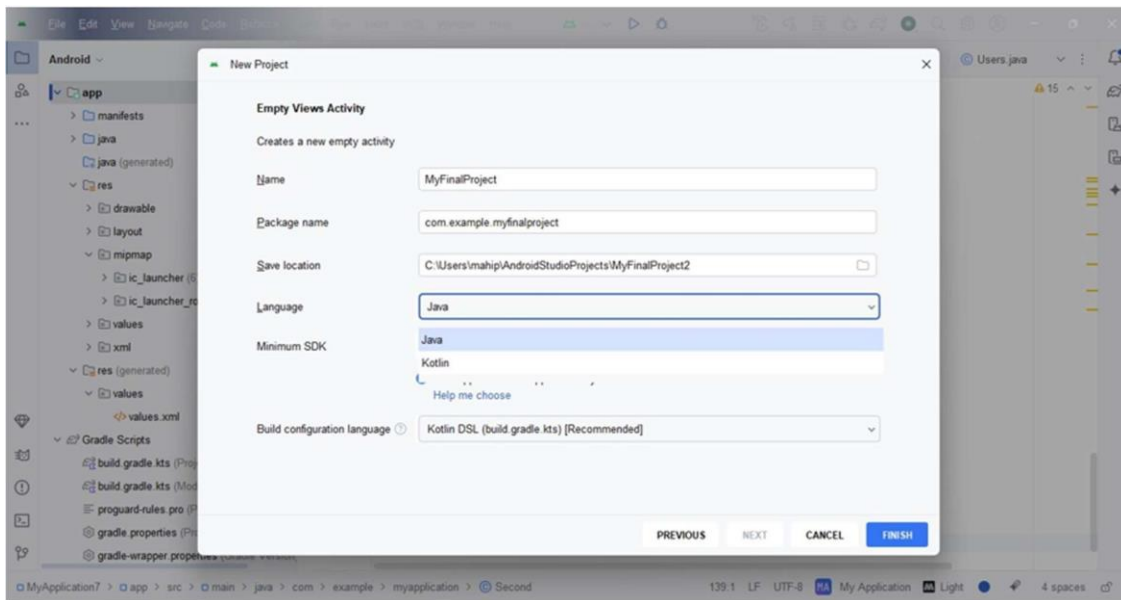
1. Open Android Studio, go to file→New→New Project, to create a new project.



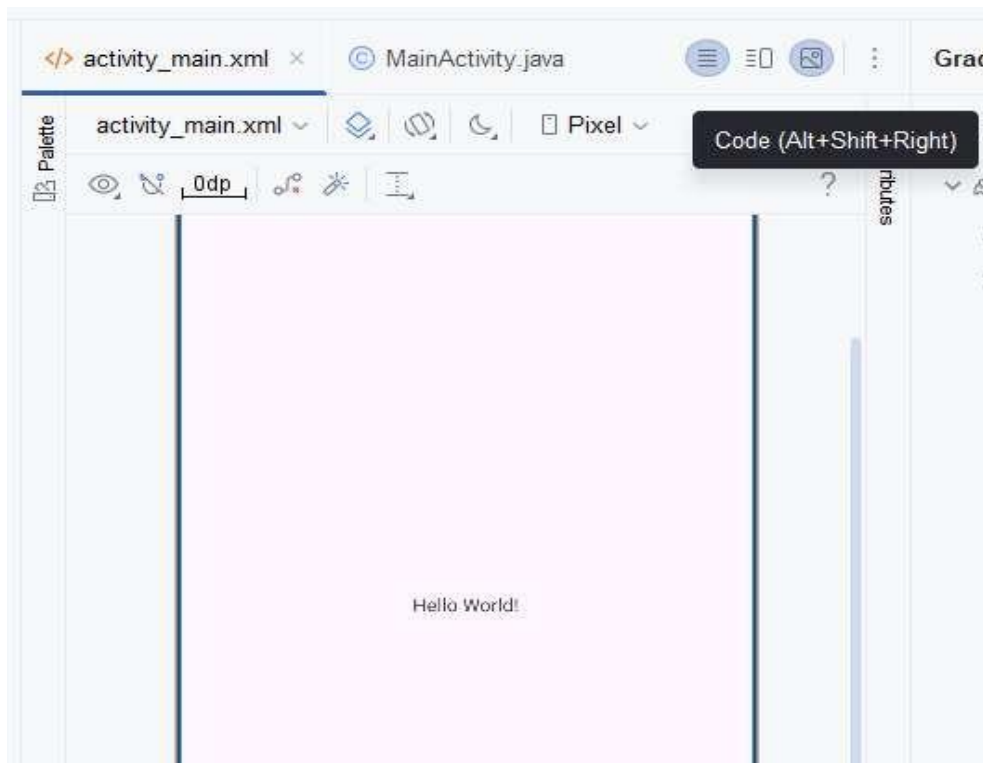
2. Click on Empty Views Activity for creating the main screen. Then next.



3. Name→give the project name. Then select the language as java.



4. To change the layout style, go to code(Alt+Shift+Right)



5. Change the constraint to Relative layout for a better mobile view.



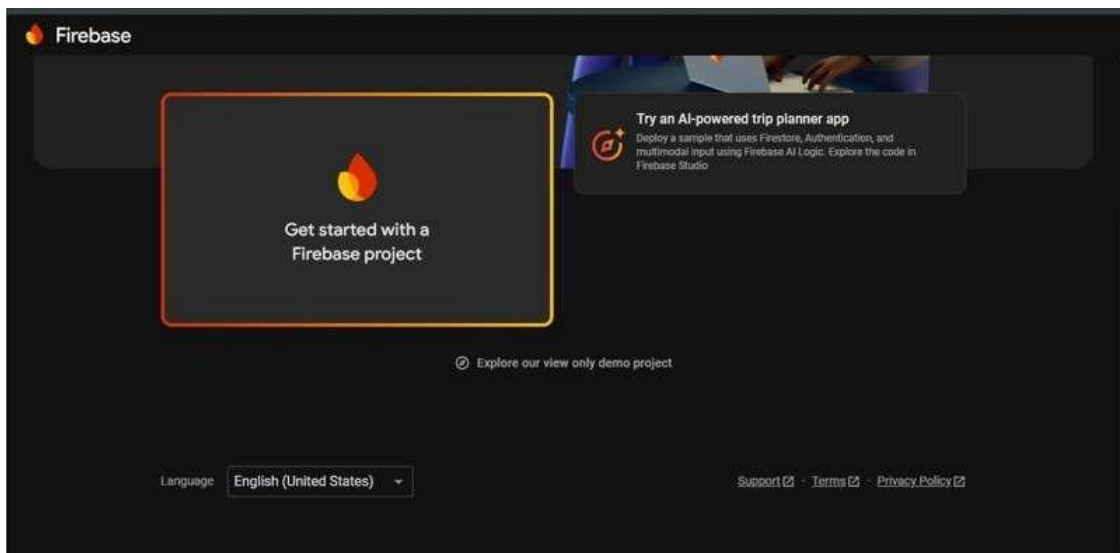
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://
//schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/main"
android:layout_width="match_parent"
```



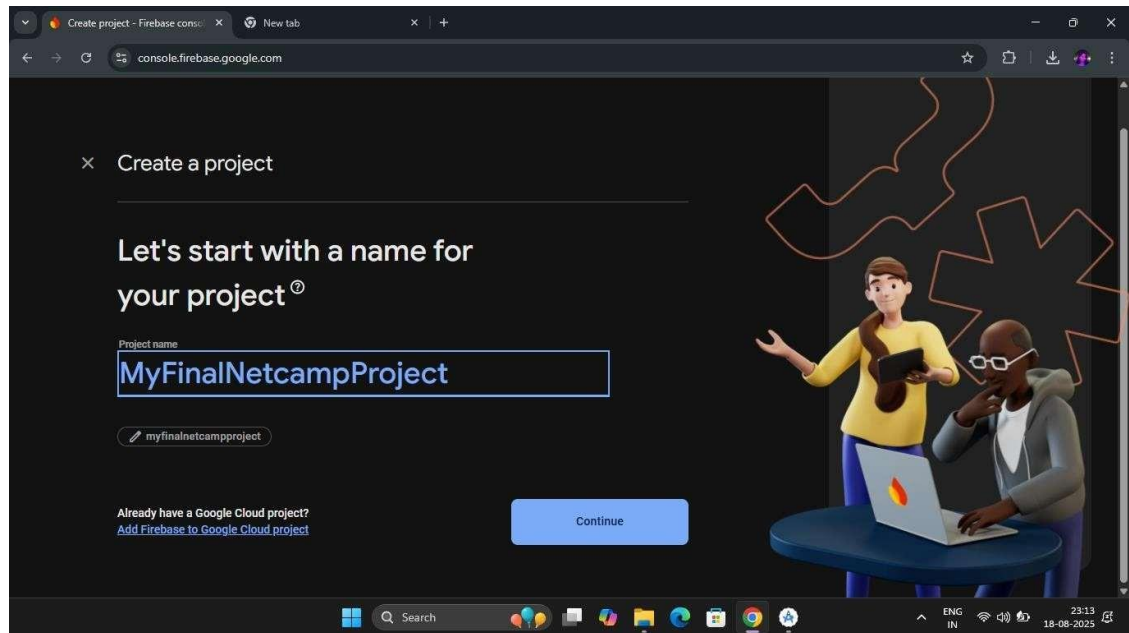
```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.and
xmlns:app="http://schemas.android.com/apk/res
xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/main"
android:layout_width="match_parent"
```

# Firebase Set UP

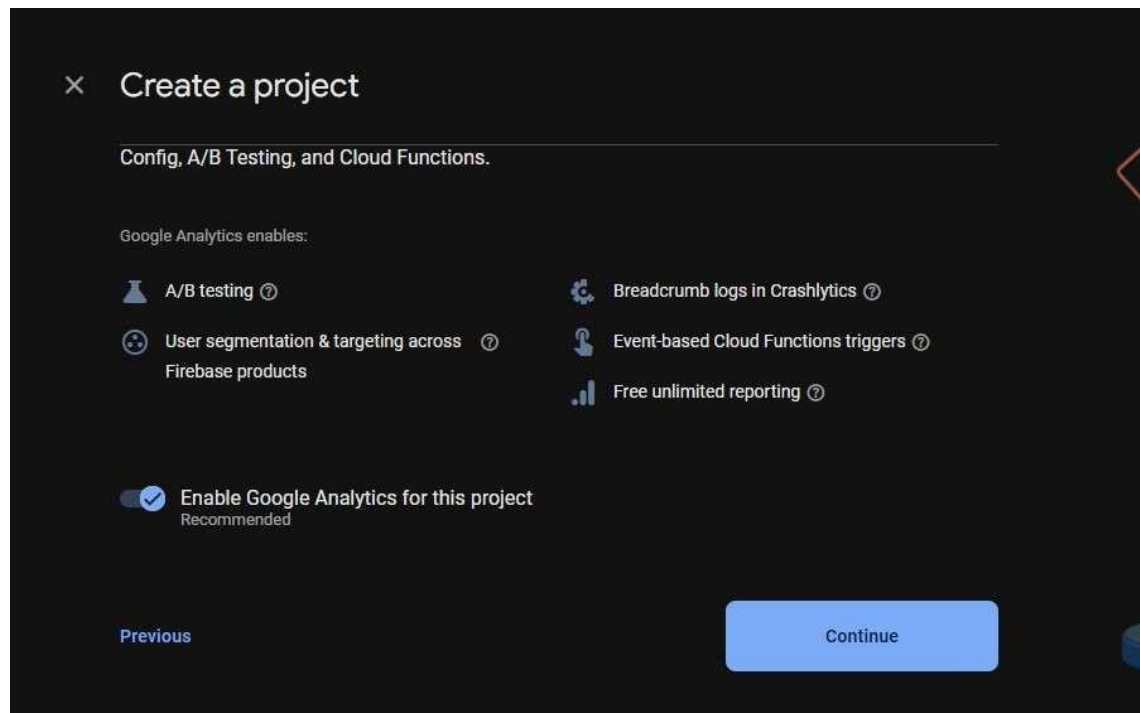
1. Google Search Firebase→login in your gmail→Firebase to Go to Console→ Get started with Firebase



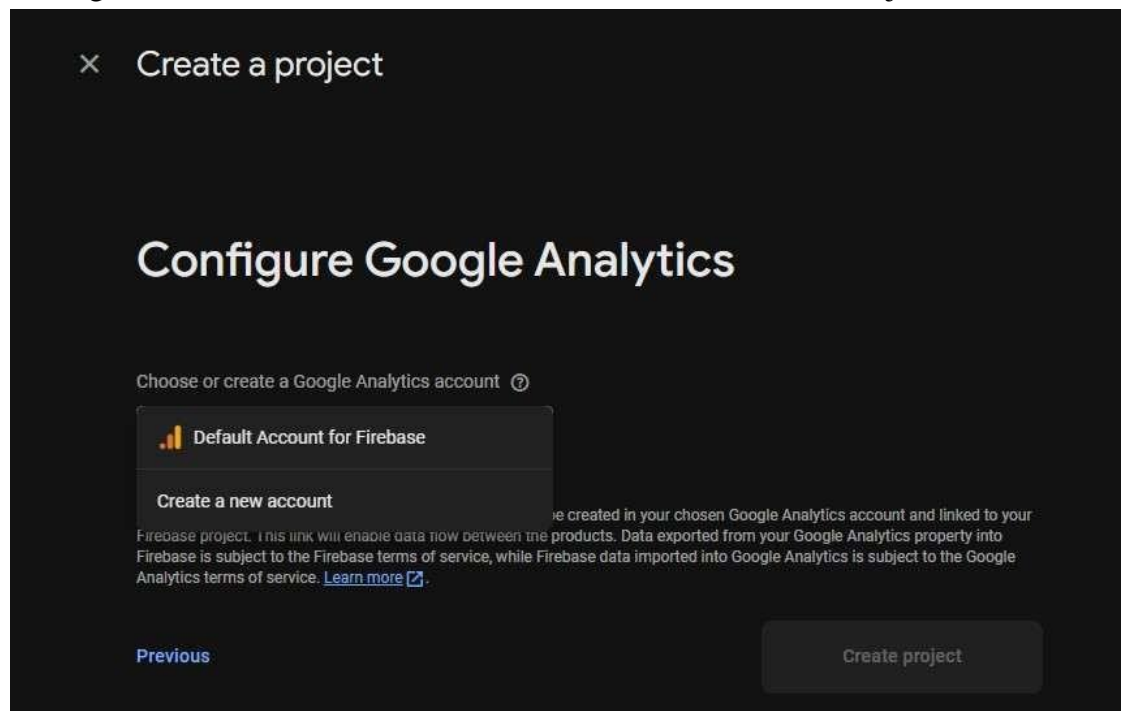
2. Give project name and continue.



3. Enable Google Analytics for AI Assistance and continue.

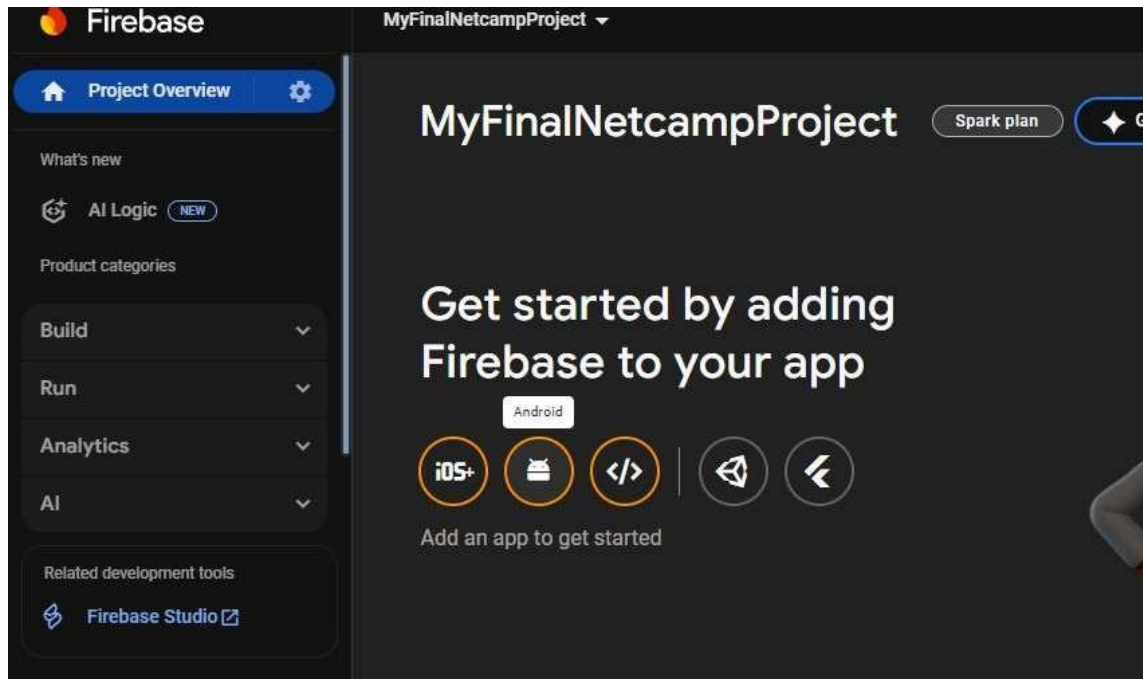


4. Configure → Select Default Account for Firebase → Create Project.





5. Click on the Android icon to get started.





6. Add the android package from Android Studio → MainActivity.java, here.

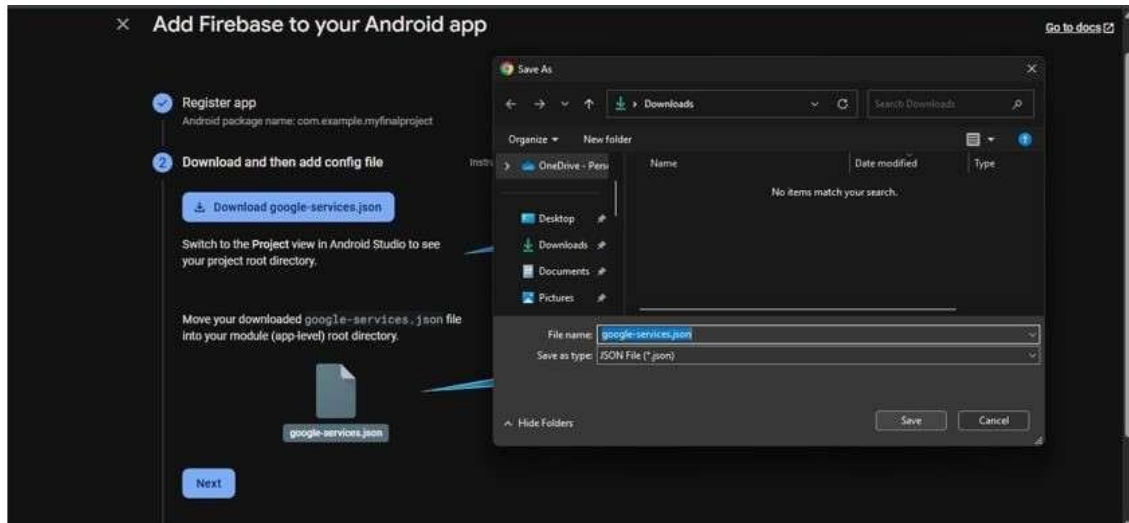
[illegible]

The screenshot shows an IDE with two tabs: `activity_main.xml` and `MainActivity.java`. The `MainActivity.java` tab is active, showing the following code:

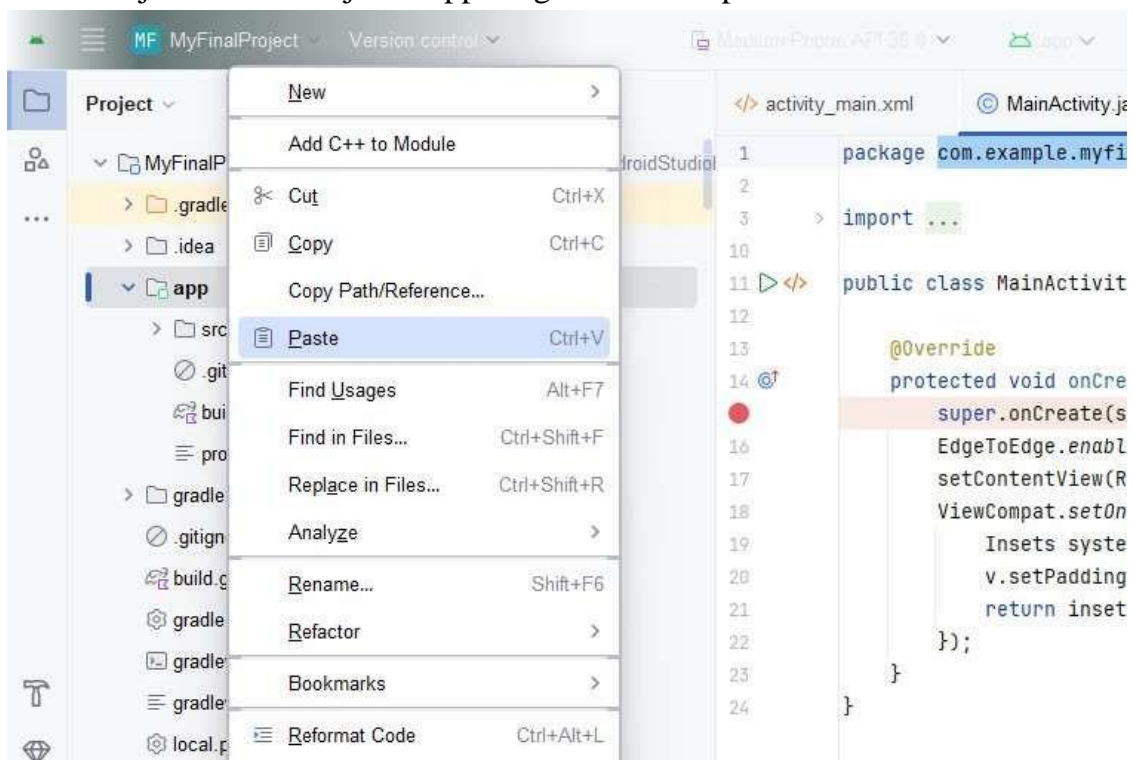
```
1 package com.example.myfinalproject;  
2  
3 import androidx.appcompat.app.AppCompatActivity;  
4  
5  
6  
7  
8  
9  
10  
11 public class MainActivity extends AppCompatActivity {  
12  
13     @Override
```

A context menu is open over the package name `com.example.myfinalproject` on line 1. The menu includes options: , , `Extract`, `Surround`, `//`, , and .

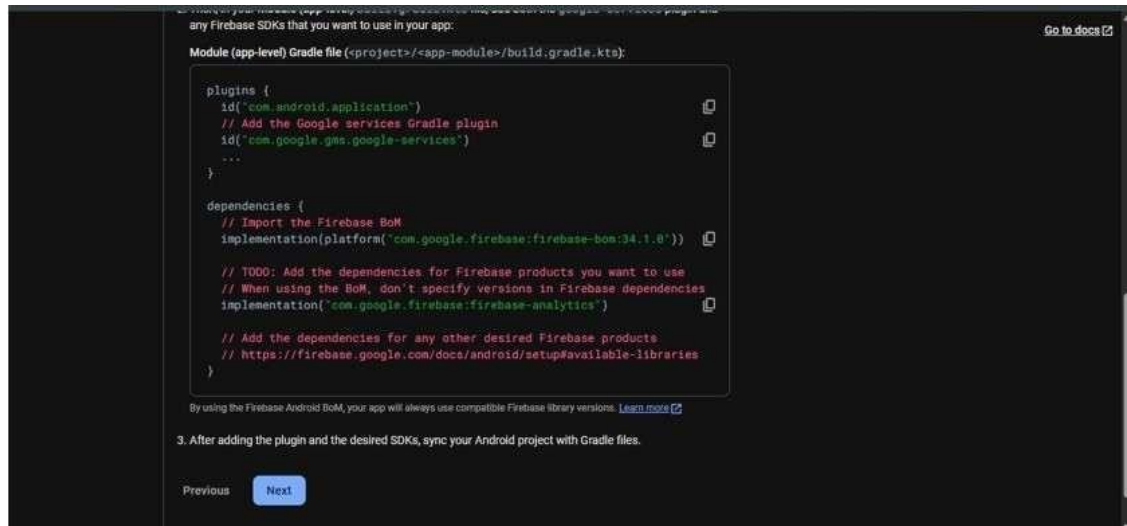
7. Download the json file and add it to Android Studio to add firebase to your android project.



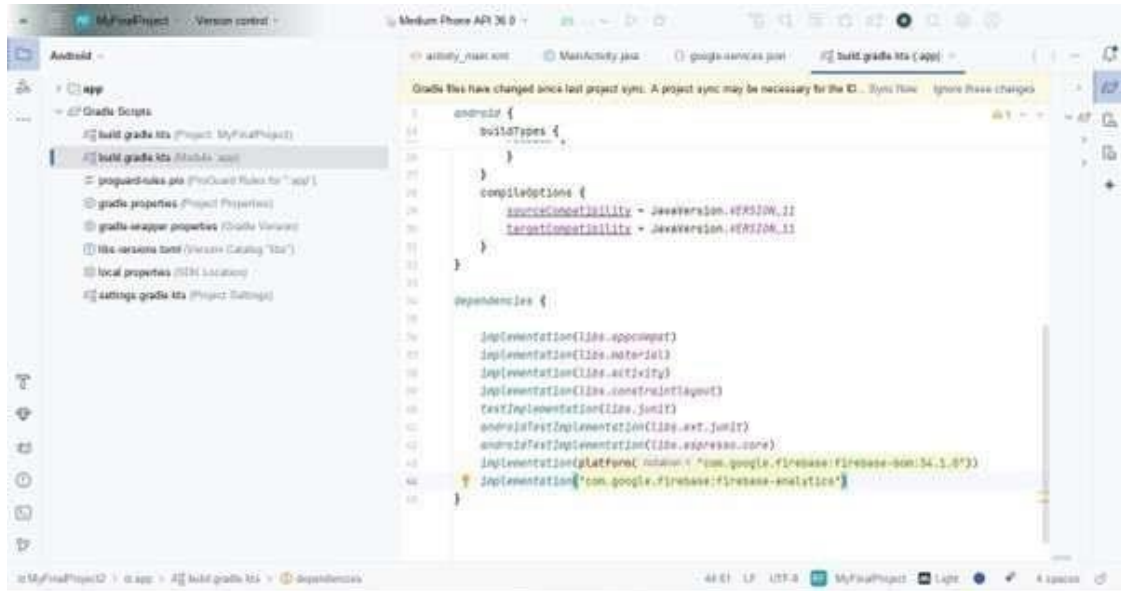
Paste the json file in Project→app→right click and paste



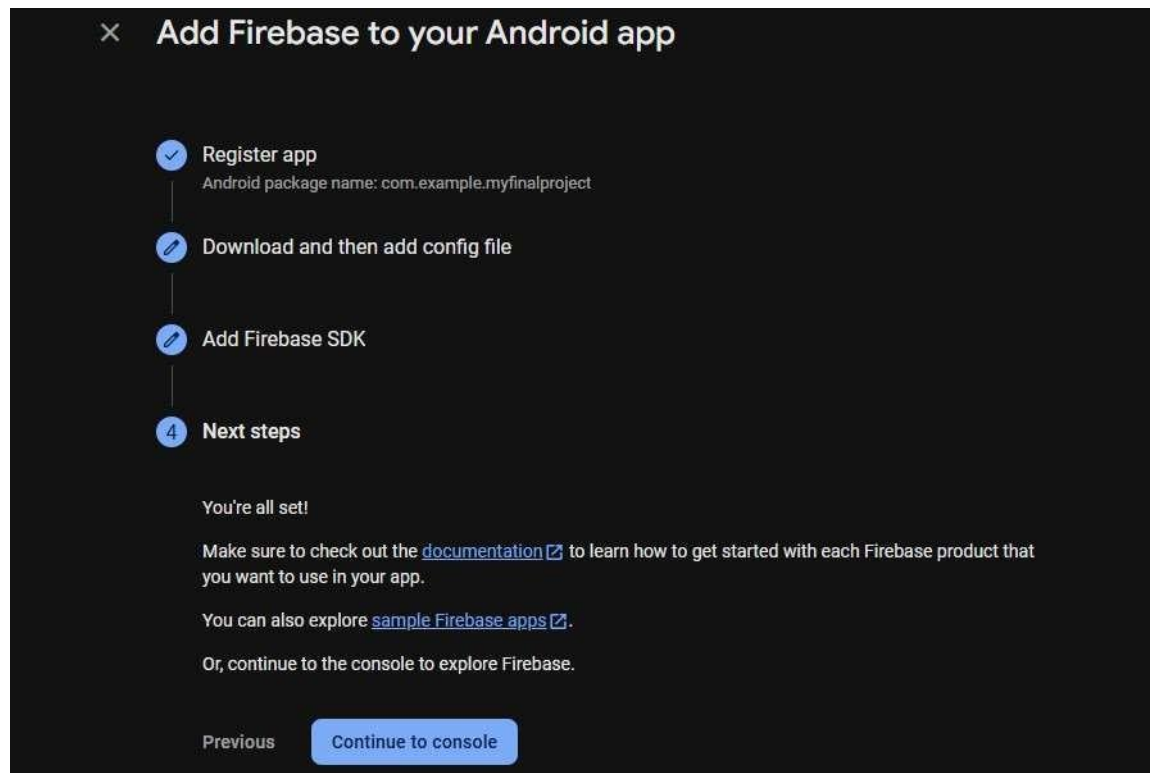
8. Copy both the implementations line from dependencies.



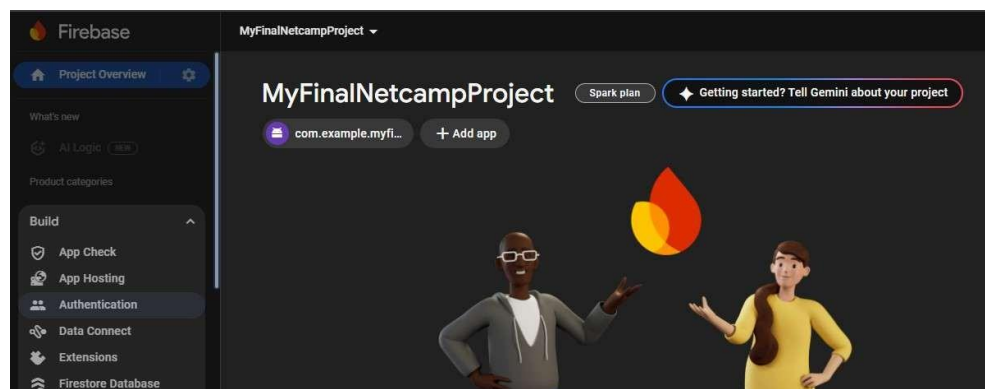
And paste them in the gradle module app file under dependencies Section.



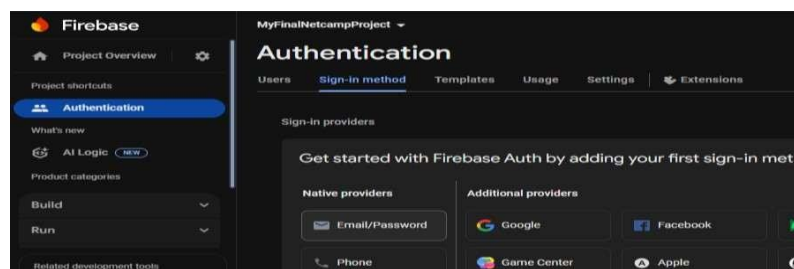
9. Now continue to console.

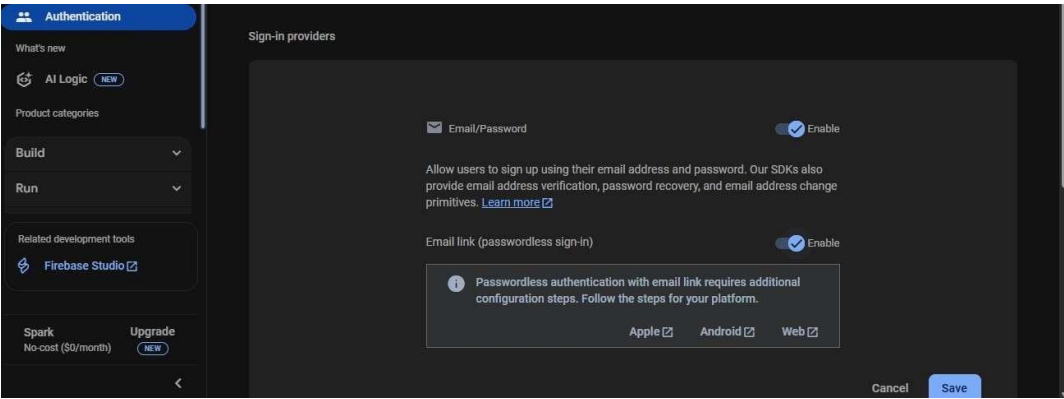


10. Go to build and then click authentication → Get Started.



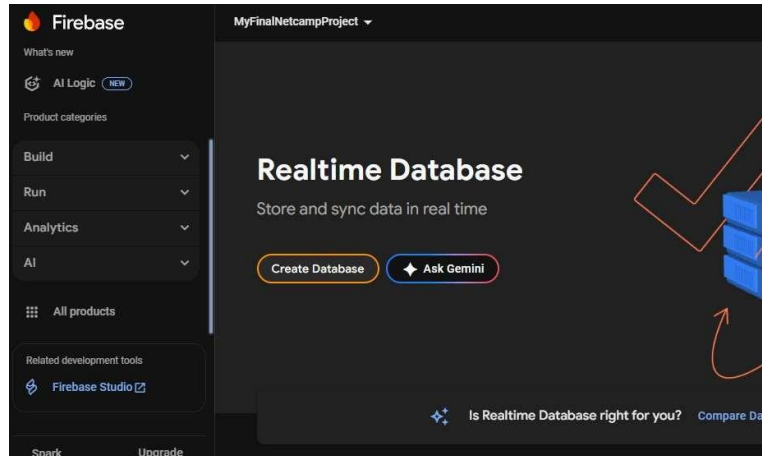
11. Click on email/password and enable both the button to enable this option for sign in.



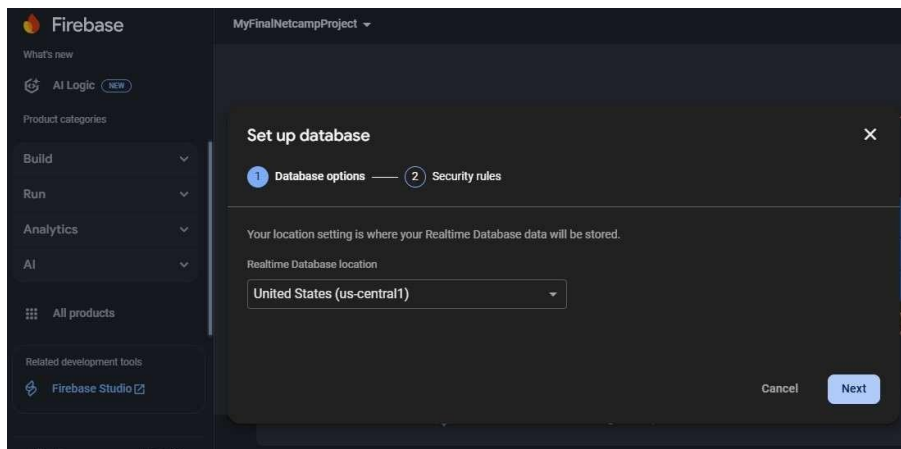


# Firebase Realtime Database

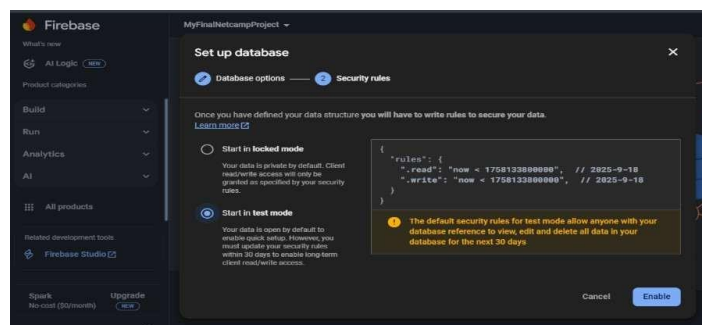
1. Go to build → Realtime Database → Create Database



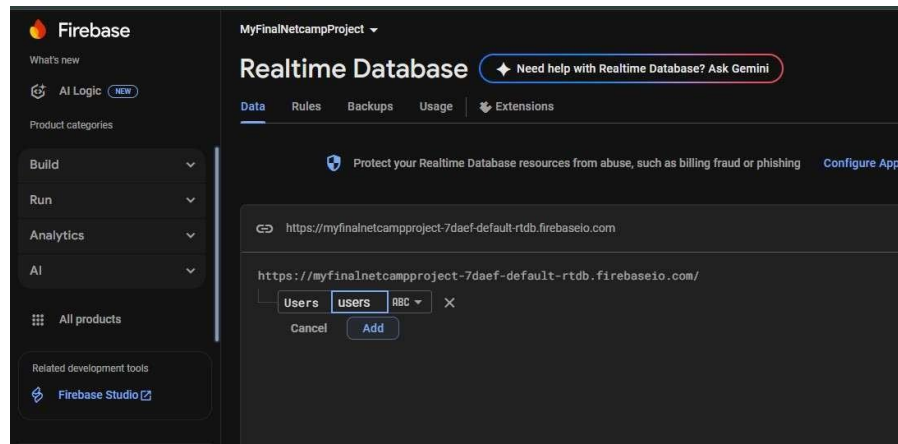
2. Click next with the default location.



3. Select the test mode and click enable.

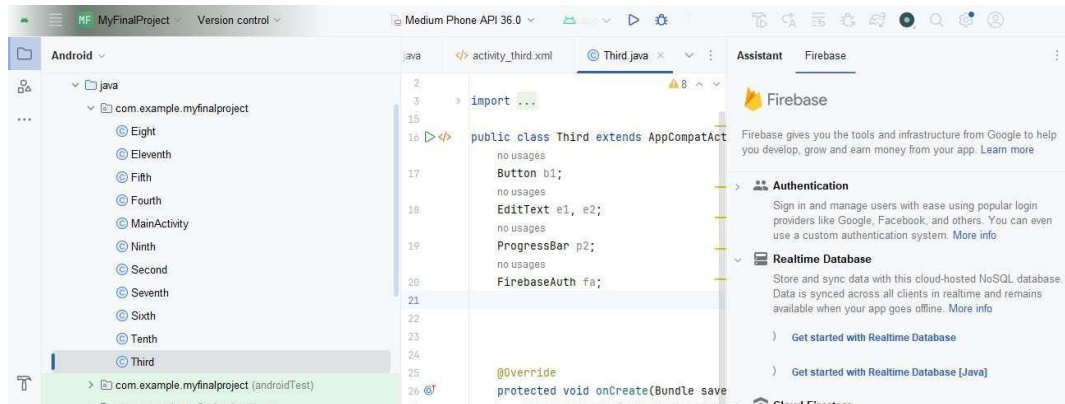


4. Add key value pair and fill Users as key and “users” as value.

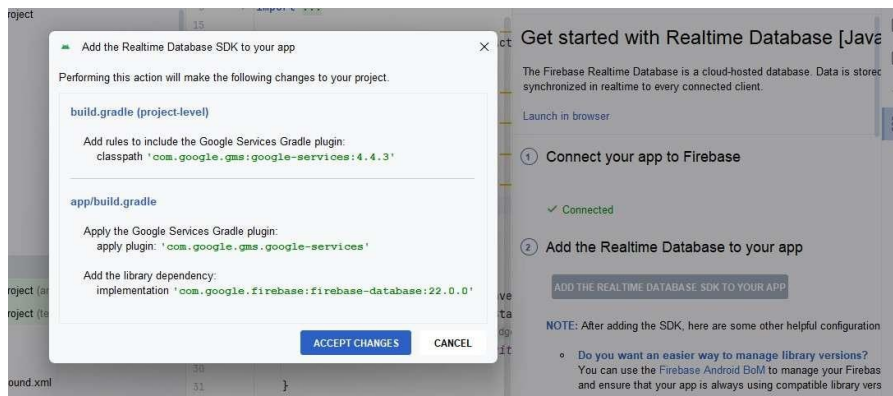


# Firestore-Android Connection

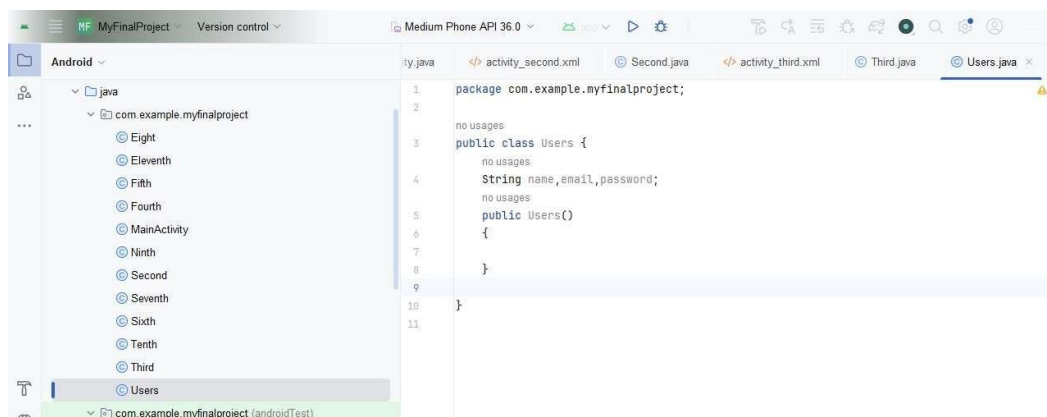
1. Go to main menu → Tools → Firestore → Realtime Database [Java]



2. Then add the realtime database to your app → Accept Changes.

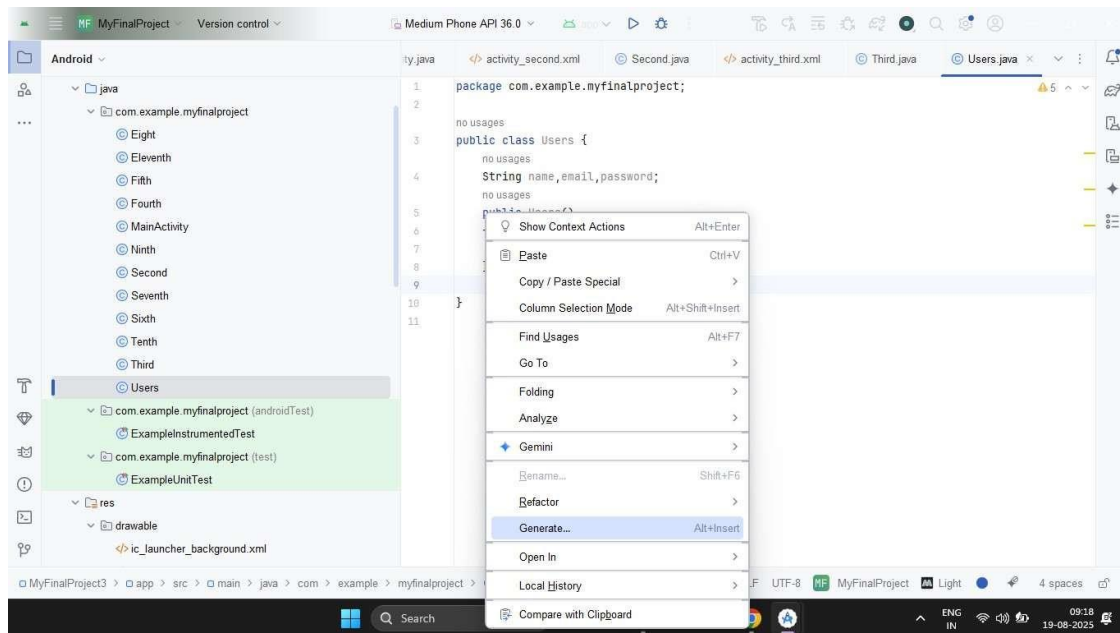


3. Right click com.example.myfinalproject → new → java class → Users and add code

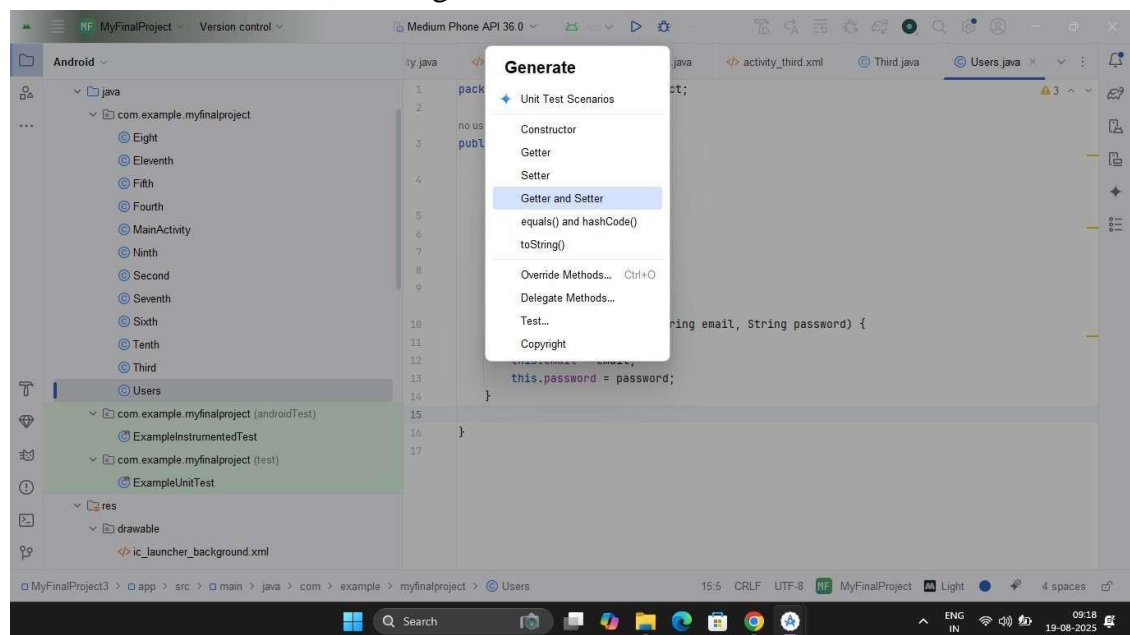




4. Right click after the '}' → Generate→constructor→select all three Methods and click ok

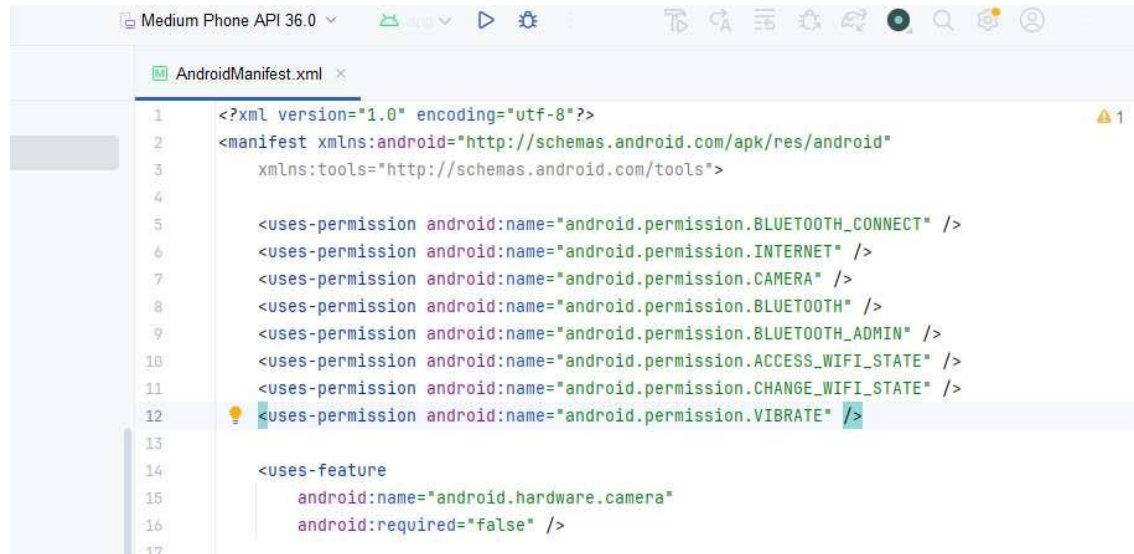


5. Next again, after the last method's "}", right click→generate→Getter and Setter→select three methods again and click ok.



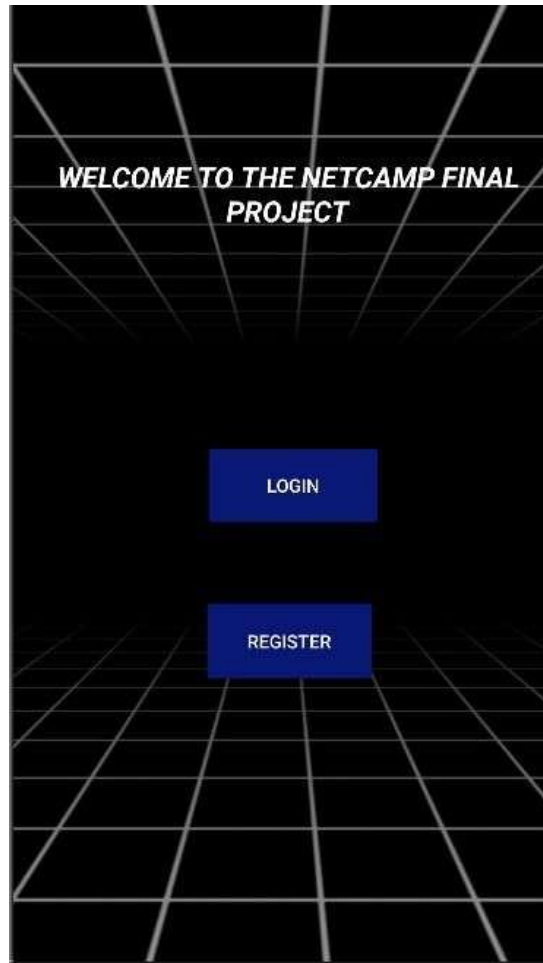
# Setting Up Manifest File in Android.

1. Go to Android→ app→manifests→AndroidManifest.xml and add user permissions.



```
1 <?xml version="1.0" encoding="utf-8"?>
2 <manifest xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:tools="http://schemas.android.com/tools">
4
5     <uses-permission android:name="android.permission.BLUETOOTH_CONNECT" />
6     <uses-permission android:name="android.permission.INTERNET" />
7     <uses-permission android:name="android.permission.CAMERA" />
8     <uses-permission android:name="android.permission.BLUETOOTH" />
9     <uses-permission android:name="android.permission.BLUETOOTH_ADMIN" />
10    <uses-permission android:name="android.permission.ACCESS_WIFI_STATE" />
11    <uses-permission android:name="android.permission.CHANGE_WIFI_STATE" />
12    <uses-permission android:name="android.permission.VIBRATE" />
13
14    <uses-feature
15        android:name="android.hardware.camera"
16        android:required="false" />
17
```

# MainActivity.java and XML



```
<?xml
                                version="1.0"
                                encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    style="@style/Base.Theme.MyFinalProject"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    android:textAlignment="center"
    android:textDirection="firstStrong"
    tools:context=".MainActivity">

<EditText
```

```
android:id="@+id/editTextText3"
android:layout_width="0dp"
android:layout_height="0dp"
android:ems="10"
android:inputType="text"
android:text="Name" />
```

```
<TextView
    android:id="@+id/textView8"
    android:layout_width="379dp"
    android:layout_height="147dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_marginStart="15dp"
    android:layout_marginTop="119dp"
    android:text="Welcome to the Netcamp Final Project"
    android:textAlignment="center"
    android:textAllCaps="true"
    android:textAppearance="@style/TextAppearance.AppCompat.Large"
    android:textColor="@color/white"
    android:textStyle="bold|italic" />
```

```
<Button
    android:id="@+id/button4"
    style="@style/Animation.Design.BottomSheetDialog"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_marginStart="0dp"
    android:layout_marginTop="335dp"
    android:background="@color/material_dynamic_primary20"
    android:text="Login"
    android:textColor="@color/white" />
```

```
<Button
    android:id="@+id/button5"
```

```

        android:layout_width="match_parent"
        android:layout_height="62dp"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="0dp"
        android:layout_marginBottom="231dp"
        android:background="@android:color/holo_purple"
        android:text="Offline"
        android:textColor="@color/white"
    Login"
    />
</RelativeLayout>

```

### ***MainActivity.java:***

```

package com.example.myfinalproject;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

import com.google.firebase.auth.FirebaseAuth;

public class MainActivity extends AppCompatActivity {
    Button b1,b2;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
    }
}

```

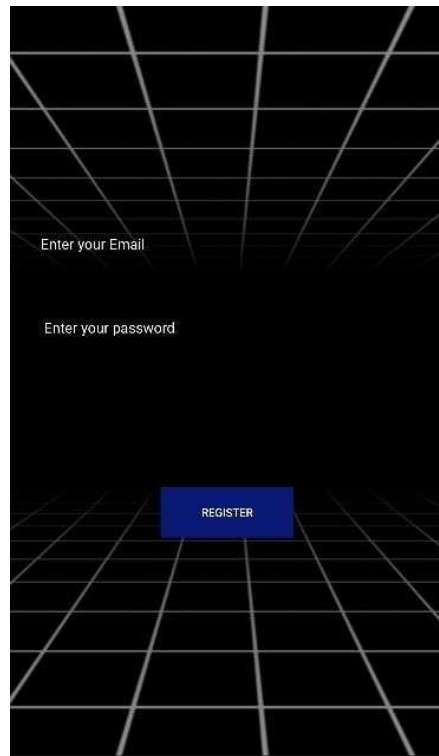
```

EdgeToEdge.enable(this);
setContentView(R.layout.activity_main);
b1=(Button) findViewById(R.id.button4);
b2=(Button) findViewById(R.id.button5);

b1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i=new Intent(MainActivity.this, Third.class);
        startActivity(i);
        finish();
    }
});
b2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i1=new Intent(MainActivity.this, Second.class);
        startActivity(i1);
        finish();
    }
});
}
}

```

# Second.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Second">

    <EditText
        android:id="@+id/editTextText"
        android:layout_width="374dp"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="18dp"
```

```
android:layout_marginTop="104dp"
android:backgroundTint="@color/white"
android:ems="10"
android:hint="enter your email"
android:inputType="text"
android:textColor="@color/white"
android:textColorHighlight="@color/white"
android:textColorHint="@color/white" />
```

<EditText

```
android:id="@+id/editTextText2"
android:layout_width="368dp"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="21dp"
android:layout_marginTop="256dp"
android:backgroundTint="@color/white"
android:ems="10"
android:hint="enter your password"
android:inputType="text"
android:textColorHint="@color/white" />
```

<Button

```
android:id="@+id/button6"
android:layout_width="166dp"
android:layout_height="63dp"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="108dp"
android:layout_marginBottom="136dp"
android:background="@android:color/holo_purple"
android:text=" Login (Offline)"
android:textColor="@color/white" />
```

<ProgressBar

```
android:id="@+id/progressBar"
```



```
style="?android:attr/progressBarStyle"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="180dp"
android:layout_marginBottom="283dp"
android:backgroundTint="@color/white"
android:indeterminateTint="@color/white"
android:progressBackgroundTint="@color/white"
android:visibility="invisible"
tools:visibility="invisible" />
</RelativeLayout>
```

### ***Second.java:***

```
package com.example.myfinalproject;

import static android.view.View.INVISIBLE;
import static android.view.View.VISIBLE;

import android.annotation.SuppressLint;
import android.content.Intent;
import android.os.Bundle;
import android.text.InputType;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;
```

```

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;

public class Second extends AppCompatActivity {
    Button b1;
    EditText e1,e2;
    FirebaseAuth fa;
    ProgressBar p1;

    @SuppressWarnings("MissingInflatedId")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_second);
        b1=(Button) findViewById(R.id.button6);
        e1=(EditText) findViewById(R.id.editTextText);
        e2=(EditText) findViewById(R.id.editTextText2);

        e2.setInputType(InputType.TYPE_CLASS_TEXT|InputType.TYPE_TEXT_VARIATION_PASSWORD);
        p1=(ProgressBar) findViewById(R.id.progressBar);
        fa= FirebaseAuth.getInstance();
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String s1=e1.getText().toString();
                String s2=e2.getText().toString();
                if(s1.isEmpty())
                {
                    e1.setError("Please fill email");
                    return;
                }
                else

```

```

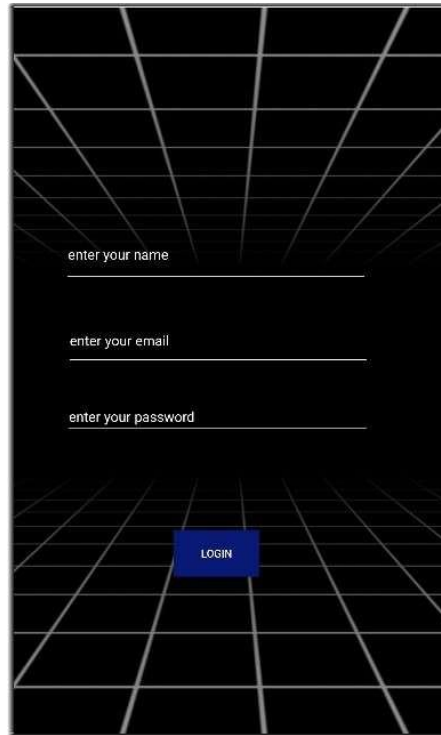
        {
            if (s2.isEmpty()) {
                e2.setError("Please fill password");
                return;
            } else {
                p1.setVisibility(VISIBLE);

fa.createUserWithEmailAndPassword(s1,s2).addOnCompleteListener(new
OnCompleteListener<AuthResult>() {
    @Override
    public void onComplete(@NonNull Task<AuthResult> task) {
        if(task.isSuccessful())
        {
            p1.setVisibility(INVISIBLE);
            Toast.makeText(Second.this, "Login Successful",
Toast.LENGTH_SHORT).show();
            Intent i3=new Intent(Second.this, Fourth.class);
            startActivity(i3);
            finish();
        }
        else
        {
            p1.setVisibility(INVISIBLE);
            Toast.makeText(Second.this, "Database not updated",
Toast.LENGTH_SHORT).show();
        }
    }
});
    }
}

    }
});
} }

```

# Third.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Third">

    <EditText
        android:id="@+id/editTextText4"
        android:layout_width="390dp"
        android:layout_height="65dp"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="178dp"
```

```
android:layout_marginEnd="14dp"
android:backgroundTint="@color/white"
android:ems="10"
android:hint="enter your email"
android:inputType="text"
android:textColorHint="@color/white" />
```

<EditText

```
android:id="@+id/editTextText5"
android:layout_width="391dp"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="13dp"
android:layout_marginTop="282dp"
android:backgroundTint="@color/white"
android:ems="10"
android:hint="enter your password"
android:inputType="text"
android:textColorHint="@color/white" />
```

<ProgressBar

```
android:id="@+id/progressBar2"
style="?android:attr/progressBarStyle"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="178dp"
android:layout_marginBottom="293dp"
android:progressBackgroundTint="@color/white"
android:progressTint="@color/white"
android:secondaryProgressTint="@color/white"
android:visibility="invisible"
tools:visibility="invisible" />
```

<Button

```

        android:id="@+id/button3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginEnd="157dp"
        android:layout_marginBottom="124dp"
        android:background="@android:color/holo_purple"
        android:text="Login"
        android:textColor="@color/white" />

<EditText
    android:id="@+id/editTextText6"
    android:layout_width="390dp"
    android:layout_height="72dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_marginStart="13dp"
    android:layout_marginTop="84dp"
    android:backgroundTint="@color/white"
    android:ems="10"
    android:hint="enter your name"
    android:inputType="text"
    android:textColorHint="@color/white" />
</RelativeLayout>

```

### ***Third.java:***

```
package com.example.myfinalproject;
```

```

import android.content.Intent;
import android.os.Bundle;
import android.text.InputType;
import android.view.View;
import android.widget.Button;

```

```

import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;

public class Third extends AppCompatActivity {
    Button b1;
    EditText e1, e2,e3;
    ProgressBar p2;
    FirebaseAuth fa;
    DatabaseReference db;
    FirebaseDatabase fd;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_third);
        b1=(Button) findViewById(R.id.button3);
        e1=(EditText) findViewById(R.id.editTextText6);
        e2=(EditText) findViewById(R.id.editTextText4);
        e3=(EditText) findViewById(R.id.editTextText5);

        e3.setInputType(InputType.TYPE_CLASS_TEXT|InputType.TYPE_TEXT_VARI

```

```

    ATION_PASSWORD);
    p2=(ProgressBar) findViewById(R.id.progressBar2);
    fa= FirebaseAuth.getInstance();
    fd=FirebaseDatabase.getInstance();
    b1.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            db= fd.getReference("users");
            String s1=e1.getText().toString();
            String s2=e2.getText().toString();
            String s3=e3.getText().toString();
            if(s1.isEmpty())
            {
                e1.setError("Please fill your name");
                return;
            }
            else {
                if (s2.isEmpty()) {
                    e2.setError("Please fill your email");
                    return;
                } else if (s3.isEmpty()) {
                    e3.setError(("Please fill your password"));
                    return;
                } else {
                    Users users = new Users(s1, s2, s3);
                    db.child(s3).setValue(users);
                    Intent i=new Intent(Third.this, Fourth.class);
                    startActivity(i);
                    finish();
                    Toast.makeText(Third.this, "database updated",
Toast.LENGTH_SHORT).show();
                }
            }
        }
    });

```



# Fourth.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Fourth">

    <TextView
        android:id="@+id/textView6"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="7dp"
```

```
android:layout_marginTop="23dp"
android:text="Select the action you want to perform"
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="34sp" />
```

<Button

```
android:id="@+id/button7"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="0dp"
android:layout_marginTop="207dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Calci"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button8"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="163dp"
android:layout_marginTop="202dp"
android:backgroundTint="@android:color/holo_purple"
android:text="torch"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button9"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentTop="true"
android:layout_alignParentEnd="true"
android:layout_marginTop="207dp"
```

```
android:layout_marginEnd="-2dp"
android:backgroundTint="@android:color/holo_purple"
android:text="wifi"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button10"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="0dp"
android:layout_marginTop="145dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Camera"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button11"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_alignParentTop="true"
android:layout_alignParentEnd="true"
android:layout_marginTop="323dp"
android:layout_marginEnd="-3dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Video"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button12"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_alignParentTop="true"
android:layout_alignParentEnd="true"
android:layout_marginTop="259dp"
android:layout_marginEnd="0dp"
```

```
android:backgroundTint="@android:color/holo_purple"
android:text="Bluetooth"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button13"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="0dp"
android:layout_marginBottom="297dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Media Player"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button14"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="0dp"
android:layout_marginBottom="238dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Vibrate"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button15"
android:layout_width="412dp"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="0dp"
android:layout_marginBottom="176dp"
android:backgroundTint="@android:color/holo_purple"
```

```
android:text="Accelerometer"
android:textColor="@color/white" />
```

```
<Button
    android:id="@+id/button16"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="0dp"
    android:layout_marginBottom="112dp"
    android:backgroundTint="@android:color/holo_purple"
    android:text="Light Sensor"
    android:textColor="@color/white" />
```

```
<Button
    android:id="@+id/button17"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="0dp"
    android:layout_marginBottom="45dp"
    android:backgroundTint="@color/black"
    android:text="Logout"
    android:textColor="@color/white" />
```

```
</RelativeLayout>
```

#### ***Fourth.java:***

```
package com.example.myfinalproject;
```

```
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
```

```

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

import com.google.firebase.auth.FirebaseAuth;

public class Fourth extends AppCompatActivity {
    Button b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,b11;
    FirebaseAuth fa;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_fourth);
        b1=(Button) findViewById(R.id.button7);
        b2=(Button) findViewById(R.id.button8);
        b3=(Button) findViewById(R.id.button9);
        b4=(Button) findViewById(R.id.button10);
        b5=(Button) findViewById(R.id.button11);
        b6=(Button) findViewById(R.id.button12);
        b7=(Button) findViewById(R.id.button13);
        b8=(Button) findViewById(R.id.button14);
        b9=(Button) findViewById(R.id.button15);
        b10=(Button) findViewById(R.id.button16);
        b11=(Button) findViewById(R.id.button17);
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent i5= new Intent(Fourth.this, Fifth.class);
                startActivity(i5);
                finish();
            }
        });
    }
}

```

```
b2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i6= new Intent(Fourth.this, Sixth.class);
        startActivity(i6);
        finish();
    }
});
b3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i7= new Intent(Fourth.this, Thirteenth.class);
        startActivity(i7);
        finish();
    }
});
b4.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i8= new Intent(Fourth.this, Eight.class);
        startActivity(i8);
        finish();
    }
});
b5.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i9= new Intent(Fourth.this, Ninth.class);
        startActivity(i9);
        finish();
    }
});
b6.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i10= new Intent(Fourth.this, Seventh.class);
        startActivity(i10);
    }
});
```

```

        finish();
    }
});
b7.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i11= new Intent(Fourth.this, Twelfth.class);
        startActivity(i11);
        finish();

    }
});
b8.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i12= new Intent(Fourth.this, Tenth.class);
        startActivity(i12);
        finish();

    }
});
b9.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i13= new Intent(Fourth.this, Eleventh.class);
        startActivity(i13);
        finish();

    }
});
b10.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i14= new Intent(Fourth.this, Fourteenth.class);
        startActivity(i14);
        finish();

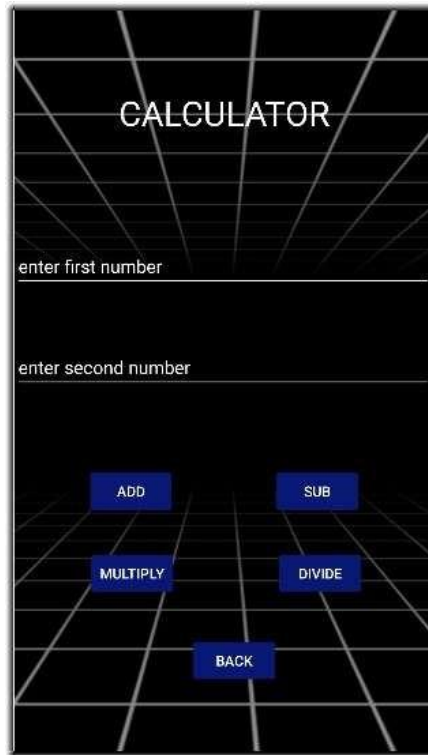
    }
});
b11.setOnClickListener(new View.OnClickListener() {

```



```
@Override
public void onClick(View v) {
    fa.signOut();
    Intent i15= new Intent(Fourth.this, MainActivity.class);
    startActivity(i15);
    finish();
}
});
}
```

# Fifth.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Fifth" >

    <TextView
        android:id="@+id/textView7"
        android:layout_width="213dp"
        android:layout_height="91dp"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="103dp"
```

```
android:layout_marginTop="78dp"
android:text="CALCULATOR"
android:textColor="@color/white"
android:textSize="34sp" />
```

<EditText

```
android:id="@+id/editTextText7"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="0dp"
android:layout_marginTop="230dp"
android:backgroundTint="@color/white"
android:ems="10"
android:inputType="text"
android:text="enter first number"
android:textColor="@color/white" />
```

<EditText

```
android:id="@+id/editTextText8"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_alignParentTop="true"
android:layout_alignParentEnd="true"
android:layout_marginTop="330dp"
android:layout_marginEnd="0dp"
android:backgroundTint="@color/white"
android:ems="10"
android:inputType="text"
android:text="enter second number"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button2"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
```

```
android:layout_alignParentStart="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="71dp"
android:layout_marginBottom="233dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Add"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button18"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="69dp"
android:layout_marginBottom="233dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Sub"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button19"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="72dp"
android:layout_marginBottom="152dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Multiply"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button20"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
```

```

        android:layout_alignParentBottom="true"
        android:layout_marginEnd="66dp"
        android:layout_marginBottom="152dp"
        android:backgroundTint="@android:color/holo_purple"
        android:text="Divide"
        android:textColor="@color/white" />

<Button
    android:id="@+id/button21"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="151dp"
    android:layout_marginBottom="66dp"
    android:backgroundTint="@color/black"
    android:text="Back"
    android:textColor="@color/white" />
</RelativeLayout>

```

### ***Fifth.java:***

```

package com.example.myfinalproject;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

```

```

public class Fifth extends AppCompatActivity {
    EditText e2, e1;
    Button b1, b2, b3, b4, b5;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_fifth);
        e1 = (EditText) findViewById(R.id.editTextText7);
        e2 = (EditText) findViewById(R.id.editTextText8);
        b1 = (Button) findViewById(R.id.button2);
        b2 = (Button) findViewById(R.id.button18);
        b3 = (Button) findViewById(R.id.button19);
        b4 = (Button) findViewById(R.id.button20);
        b5 = (Button) findViewById(R.id.button21);
        b5.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent i10 = new Intent(Fifth.this, Fourth.class);
                startActivity(i10);
                finish();
            }
        });
        b1.setOnClickListener((view) -> {
            String s1 = e1.getText().toString();
            String s2 = e2.getText().toString();
            Float j1 = Float.parseFloat(s1);
            Float j2 = Float.parseFloat(s2);
            Float j3 = j1 + j2;
            String s3 = Float.toString(j3);
            Toast.makeText(Fifth.this, "the result is " + j3,
                Toast.LENGTH_SHORT).show();
        });

        // Subtraction button
        b2.setOnClickListener((view) -> {
            String s1 = e1.getText().toString();

```

```

        String s2 = e2.getText().toString();
        Float j1 = Float.parseFloat(s1);
        Float j2 = Float.parseFloat(s2);
        Float j3 = j1 - j2;
        String s3 = Float.toString(j3);
        Toast.makeText(Fifth.this, "the result is " + j3,
Toast.LENGTH_SHORT).show();
    });
    // Multiplication button
    b3.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            String s1 = e1.getText().toString();
            String s2 = e2.getText().toString();
            Float j1 = Float.parseFloat(s1);
            Float j2 = Float.parseFloat(s2);
            Float j3 = j1 * j2;
            String s3 = Float.toString(j3);
            Toast.makeText(Fifth.this, "the result is " + j3,
Toast.LENGTH_SHORT).show();
        }
    });

    // Division button
    b4.setOnClickListener((view) -> {
        String s1 = e1.getText().toString();
        String s2 = e2.getText().toString();
        Float j1 = Float.parseFloat(s1);
        Float j2 = Float.parseFloat(s2);
        Float j3 = j1 / j2;
        String s3 = Float.toString(j3);
        Toast.makeText(Fifth.this, "the result is " + j3,
Toast.LENGTH_SHORT).show();
    });
}
}

```

# Sixth.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Sixth">

    <Button
        android:id="@+id/button"
        android:layout_width="158dp"
        android:layout_height="58dp"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="123dp"
```



```
android:layout_marginTop="269dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Torch ON"
android:textColor="@color/white"
android:textSize="16sp"
tools:layout_editor_absoluteX="224dp"
tools:layout_editor_absoluteY="292dp" />
```

<Button

```
android:id="@+id/button22"
android:layout_width="116dp"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="152dp"
android:layout_marginBottom="315dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Torch OFF"
android:textColor="@color/white"
android:textSize="16sp" />
```

<Button

```
android:id="@+id/button23"
android:layout_width="172dp"
android:layout_height="62dp"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="117dp"
android:layout_marginBottom="134dp"
android:backgroundTint="@color/black"
android:text="Back"
android:textColor="@color/white"
android:textSize="16sp" />
```

<TextView

```
android:id="@+id/textView9"
android:layout_width="237dp"
```

```

        android:layout_height="137dp"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="82dp"
        android:layout_marginTop="63dp"
        android:text="Torch"
        android:textAlignment="center"
        android:textColor="@color/white"
        android:textSize="34sp" />
</RelativeLayout>

```

### ***Sixth.java:***

```

package com.example.myfinalproject;

import android.content.Intent;
import android.hardware.camera2.CameraAccessException;
import android.hardware.camera2.CameraManager;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class Sixth extends AppCompatActivity {
    Button b1,b2,b3;
    CameraManager cm;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_sixth);
    }
}

```

```

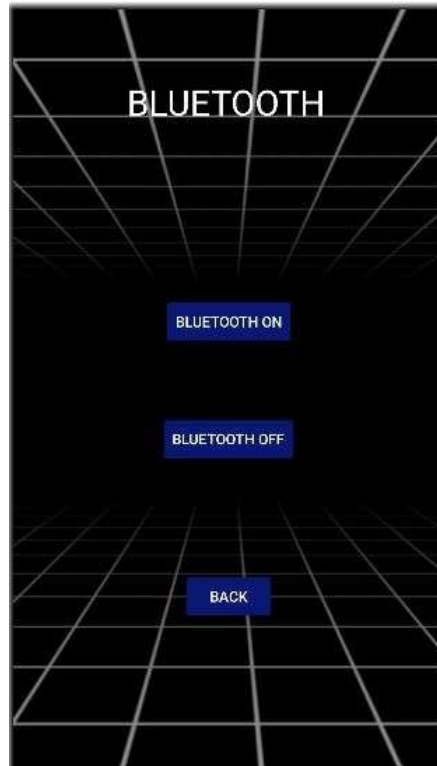
        b1=(Button) findViewById(R.id.button);
        b2=(Button) findViewById(R.id.button22);
        b3=(Button) findViewById(R.id.button23);
        cm=(CameraManager) getSystemService(CAMERA_SERVICE);
        b3.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent i11= new Intent(Sixth.this, Fourth.class);
                startActivity(i11);
                finish();
            }
        });
        b1.setOnClickListener(v -> {
            try {
                String s1=cm.getCameraIdList()[0];
                cm.setTorchMode(s1,true);
            }
            catch (CameraAccessException e)
            {

            }
        });
        b2.setOnClickListener(v -> {
            try {
                String s2=cm.getCameraIdList()[0];
                cm.setTorchMode(s2,false);
            }
            catch (CameraAccessException e)
            {

            }
        });
    }
}

```

# Seventh.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Seventh">

    <TextView
        android:id="@+id/textView5"
        android:layout_width="197dp"
        android:layout_height="122dp"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="106dp"
```

```
android:layout_marginTop="66dp"
android:text="BLUETOOTH"
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="34sp" />
```

<Button

```
android:id="@+id/button24"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentTop="true"
android:layout_alignParentEnd="true"
android:layout_marginTop="275dp"
android:layout_marginEnd="141dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Bluetooth ON"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button25"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="139dp"
android:layout_marginBottom="296dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Bluetooth OFF"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button26"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="163dp"
```

```
        android:layout_marginBottom="145dp"
        android:backgroundTint="@color/black"
        android:text="Back"
        android:textColor="@color/white" />
</RelativeLayout>
```

### ***Seventh.java:***

```
package com.example.myfinalproject;

import android.Manifest;
import android.bluetooth.BluetoothAdapter;
import android.content.pm.PackageManager;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.annotation.RequiresPermission;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class Seventh extends AppCompatActivity {
    Button b1,b2,b3;
    BluetoothAdapter ba;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_seventh);
        b1=(Button) findViewById(R.id.button24);
```

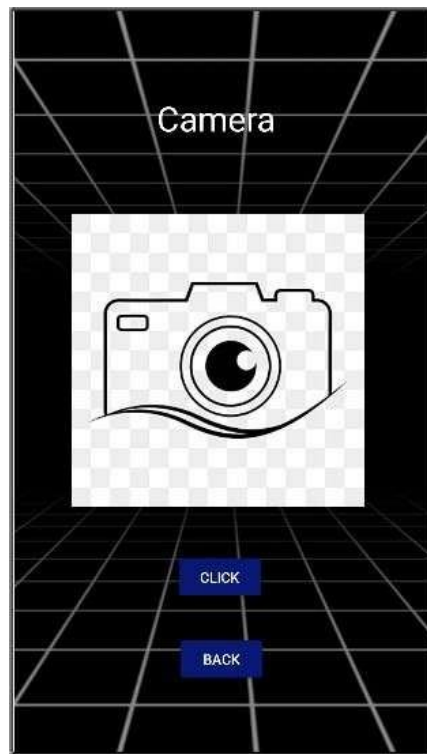
```

b2=(Button) findViewById(R.id.button25);
b3=(Button) findViewById(R.id.button26);
ba = BluetoothAdapter.getDefaultAdapter();

if (ba == null) {
    Toast.makeText(this, "Bluetooth not supported",
Toast.LENGTH_SHORT).show();
    return;
}
b1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        if (PackageManager.PERMISSION_GRANTED !=
ActivityCompat.checkSelfPermission(Seventh.this,
Manifest.permission.BLUETOOTH_CONNECT)) {
            // TODO: Consider calling
            // ActivityCompat#requestPermissions
            // here to request the missing permissions, and then overriding
            // public void onRequestPermissionsResult(int requestCode,
String[] permissions,
            //                                     int[] grantResults)
            // to handle the case where the user grants the permission. See the
documentation
            // for ActivityCompat#requestPermissions for more details.
            return;
        }
        ba.enable();
    }
});
b2.setOnClickListener(new View.OnClickListener() {
    @RequiresPermission(Manifest.permission.BLUETOOTH_CONNECT)
    @Override
    public void onClick(View v) {
        ba.disable();
    }
});
} }

```

# Eight.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Eight" >

    <TextView
        android:id="@+id/textView4"
        android:layout_width="272dp"
        android:layout_height="112dp"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
```



```
android:layout_marginStart="63dp"
android:layout_marginTop="83dp"
android:text="Camera"
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="34sp" />
```

<Button

```
android:id="@+id/button27"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="159dp"
android:layout_marginBottom="149dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Click"
android:textColor="@color/white" />
```

<ImageView

```
android:id="@+id/imageView"
android:layout_width="370dp"
android:layout_height="289dp"
android:layout_alignParentTop="true"
android:layout_alignParentEnd="true"
android:layout_marginTop="200dp"
android:layout_marginEnd="26dp"
app:srcCompat="@drawable/camera" />
```

<Button

```
android:id="@+id/button28"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="163dp"
android:layout_marginBottom="68dp"
```

```
        android:backgroundTint="@color/black"
        android:text="Back"
        android:textColor="@color/white" />
</RelativeLayout>
```

### ***Eight.java:***

```
package com.example.myfinalproject;

import android.content.Intent;
import android.graphics.Bitmap;
import android.os.Bundle;
import android.provider.MediaStore;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.Toast;

import androidx.activity.EdgeToEdge;
import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class Eight extends AppCompatActivity {
    Button b1,b2;
    ImageView iv;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_eight);
        b1=(Button)findViewById(R.id.button27);
        b2=(Button) findViewById(R.id.button28);
```

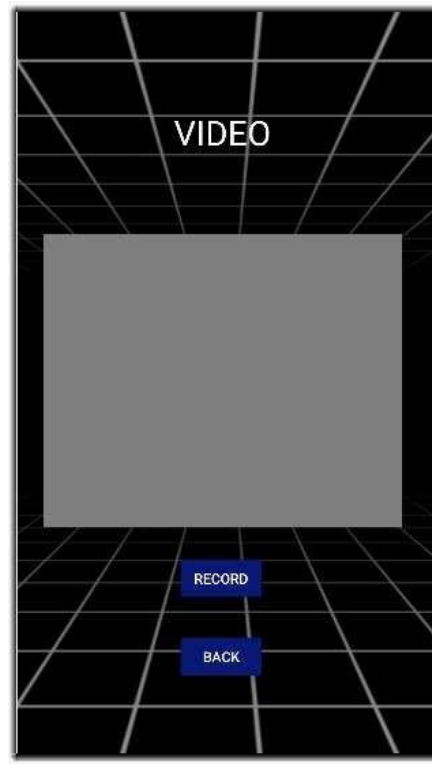
```

iv=(ImageView) findViewById(R.id.imageView);
b2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i10= new Intent(Eight.this, Fourth.class);
        startActivity(i10);
        finish();
    }
});
b1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i= new Intent(MediaStore.ACTION_IMAGE_CAPTURE);
        startActivityForResult(i,99);
    }
});
}

@Override
protected void onActivityResult(int requestCode, int resultCode, @Nullable
Intent data) {
    super.onActivityResult(requestCode, resultCode, data);
    if(requestCode==99)
    {
        Bitmap bmp=(Bitmap) data.getExtras().get("data");
        iv.setImageBitmap(bmp);
    }
    else
    {
        Toast.makeText(this, "Sorry, Your phone doesn't support this",
Toast.LENGTH_SHORT).show();
    }
}
}
}

```

# Ninth.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Ninth" >

    <TextView
        android:id="@+id/textView3"
        android:layout_width="198dp"
        android:layout_height="67dp"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="103dp"
```

```
android:layout_marginTop="96dp"
android:text="VIDEO"
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="34sp" />
```

```
<VideoView
    android:id="@+id/videoView"
    android:layout_width="353dp"
    android:layout_height="289dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_marginStart="26dp"
    android:layout_marginTop="219dp" />
```

```
<Button
    android:id="@+id/button29"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="157dp"
    android:layout_marginBottom="149dp"
    android:backgroundTint="@android:color/holo_purple"
    android:text="Record"
    android:textColor="@color/white" />
```

```
<Button
    android:id="@+id/button30"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="157dp"
    android:layout_marginBottom="72dp"
    android:backgroundTint="@color/black"
    android:text="Back"
```

```
        android:textColor="@color/white" />
</RelativeLayout>
```

### ***Ninth.java:***

```
package com.example.myfinalproject;

import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.provider.MediaStore;
import android.view.View;
import android.widget.Button;
import android.widget.MediaController;
import android.widget.Toast;
import android.widget.VideoView;

import androidx.activity.EdgeToEdge;
import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class Ninth extends AppCompatActivity {
    Button b1,b2;
    VideoView v;
    Uri u1;
    MediaController m1;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_ninth);
        b1=(Button) findViewById(R.id.button29);
        b2=(Button) findViewById(R.id.button30);
```

```

v=(VideoView) findViewById(R.id.videoView);
m1=new MediaController(this);
b2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i10= new Intent(Ninth.this, Fourth.class);
        startActivity(i10);
        finish();
    }
});
b1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent i= new Intent(MediaStore.ACTION_VIDEO_CAPTURE);
        startActivityForResult(i,99);

    }
});
}

@Override
protected void onActivityResult(int requestCode, int resultCode, @Nullable
Intent data) {
    super.onActivityResult(requestCode, resultCode, data);
    if(requestCode==99)
    {
        u1=data.getData();
        v.setVideoURI(u1);
        v.setMediaController(m1);
        m1.setAnchorView(v);
        v.start();
    }
    else {
        Toast.makeText(this, "Your phone doesn't support this",
Toast.LENGTH_SHORT).show();
    }
} }

```

# Tenth.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Tenth">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="216dp"
        android:layout_height="117dp"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
```



```
android:layout_marginStart="101dp"
android:layout_marginTop="74dp"
android:text="VIBRATION"
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="34sp"
tools:layout_editor_absoluteX="272dp"
tools:layout_editor_absoluteY="277dp" />
```

<Button

```
android:id="@+id/button31"
android:layout_width="235dp"
android:layout_height="117dp"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="94dp"
android:layout_marginTop="290dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Vibrate "
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="24sp" />
```

<Button

```
android:id="@+id/button33"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="160dp"
android:layout_marginBottom="159dp"
android:backgroundTint="@color/black"
android:text="Back"
android:textColor="@color/white" />
```

</RelativeLayout>

***Tenth.java:***

```
package com.example.myfinalproject;

import android.content.Intent;
import android.os.Build;
import android.os.Bundle;
import android.os.Vibrator;
import android.view.View;
import android.widget.Button;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class Tenth extends AppCompatActivity {
    Button b1,b2;
    Vibrator v1;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_tenth);
        b1 = findViewById(R.id.button31);
        b2 = findViewById(R.id.button33);
        v1 = (Vibrator) getSystemService(VIBRATOR_SERVICE);
        b1.setOnClickListener(v -> {
            if (Build.VERSION.SDK_INT>24)
                v1.vibrate(5000);
            else
                v1.vibrate(5000);

        });
        b2.setOnClickListener(new View.OnClickListener() {
            @Override
```

```
public void onClick(View v) {  
    Intent i10= new Intent(Tenth.this, Fourth.class);  
    startActivity(i10);  
    finish();  
}  
});  
  
}  
}
```

# Eleventh.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Eleventh" >

    <TextView
        android:id="@+id/textView"
        android:layout_width="299dp"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="59dp"
```

```
    android:layout_marginTop="86dp"
    android:text="ACCELEROMETER"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="34sp" />
```

```
<ImageView
    android:id="@+id/imageView2"
    android:layout_width="308dp"
    android:layout_height="216dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_marginStart="49dp"
    android:layout_marginTop="195dp"
    app:srcCompat="@drawable/tilta" />
```

```
<Button
    android:id="@+id/button34"
    android:layout_width="126dp"
    android:layout_height="68dp"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="141dp"
    android:layout_marginBottom="152dp"
    android:backgroundTint="@color/black"
    android:text="Back"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="20sp" />
```

```
</RelativeLayout>
```

### ***Eleventh.java:***

```
package com.example.myfinalproject;

import android.hardware.Sensor;
import android.hardware.SensorEvent;
```

```
import android.hardware.SensorEventListener;
import android.hardware.SensorManager;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.widget.Button;
```

```
import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;
```

```
public class Eleventh extends AppCompatActivity implements
SensorEventListener {
```

```
    Button b1;
    Sensor s;
    SensorManager sm;
    MediaPlayer mp;
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_eleventh);
        b1=(Button) findViewById(R.id.button34);
        mp=MediaPlayer.create(this, R.raw.y);
        sm=(SensorManager) getSystemService(SENSOR_SERVICE);
        s=sm.getDefaultSensor(Sensor.TYPE_ACCELEROMETER);
        sm.registerListener(this,s,SensorManager.SENSOR_DELAY_NORMAL);
```

```
    }
```

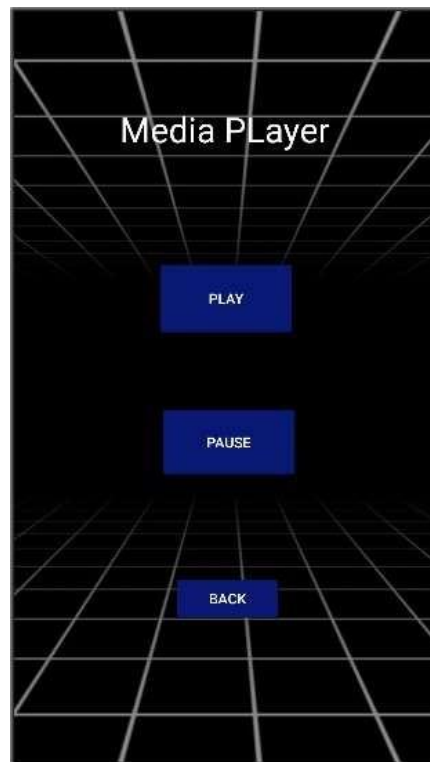
```
    @Override
```

```
    public void onAccuracyChanged(Sensor sensor, int accuracy) {

    }
```

```
@Override
public void onSensorChanged(SensorEvent event) {
    float x= event.values[0];
    float y= event.values[1];
    float z= event.values[2];
    int x1=(int)x;
    int x2=(int)y;
    int x3=(int)z;
    if(x1!=0)
    {
        mp.start();
    }
    else {
        mp.pause();
    }
}
}
```

# Twelfth.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Twelfth" >

    <TextView
        android:id="@+id/textView11"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_marginStart="103dp"
```



```
android:layout_marginTop="92dp"
android:text="Media PLayer"
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="34sp" />
```

<Button

```
android:id="@+id/button35"
android:layout_width="135dp"
android:layout_height="77dp"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="139dp"
android:layout_marginTop="241dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Play"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button36"
android:layout_width="136dp"
android:layout_height="74dp"
android:layout_alignParentStart="true"
android:layout_alignParentBottom="true"
android:layout_marginStart="141dp"
android:layout_marginBottom="275dp"
android:backgroundTint="@android:color/holo_purple"
android:text="Pause"
android:textColor="@color/white" />
```

<Button

```
android:id="@+id/button37"
android:layout_width="106dp"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="151dp"
```

```
        android:layout_marginBottom="136dp"
        android:backgroundTint="@color/black"
        android:text="Back"
        android:textColor="@color/white" />
</RelativeLayout>
```

### ***Twelfth.java:***

```
package com.example.myfinalproject;

import android.media.MediaPlayer;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

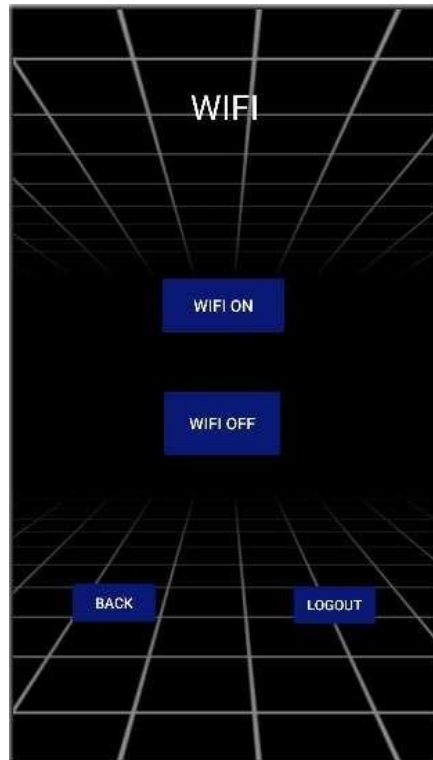
public class Twelfth extends AppCompatActivity {
    MediaPlayer mediaPlayer;
    Button Play, Pause, Back;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_twelfth);
        Play = findViewById(R.id.button35);
        Pause = findViewById(R.id.button36);
        Back = findViewById(R.id.button37);
    }
}
```

```
mediaPlayer = MediaPlayer.create(this, R.raw.y);
```

```
Play.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View v) {  
        if (!mediaPlayer.isPlaying()) {  
            mediaPlayer.start();  
        }  
    }  
});  
  
}  
}
```

# Thirteenth.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Thirteenth">

    <TextView
        android:id="@+id/textView10"
        android:layout_width="match_parent"
        android:layout_height="70dp"
        android:layout_alignParentStart="true"
```

```
android:layout_alignParentTop="true"
android:layout_marginStart="0dp"
android:layout_marginTop="72dp"
android:text="WIFI"
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="34sp"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
tools:layout_editor_absoluteY="132dp" />
```

<Button

```
android:id="@+id/button38"
android:layout_width="126dp"
android:layout_height="64dp"
android:layout_alignParentTop="true"
android:layout_alignParentEnd="true"
android:layout_marginTop="256dp"
android:layout_marginEnd="144dp"
android:backgroundTint="@android:color/holo_purple"
android:text="WIFI ON"
android:textColor="@color/white"
android:textSize="16sp" />
```

<Button

```
android:id="@+id/button39"
android:layout_width="120dp"
android:layout_height="73dp"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="148dp"
android:layout_marginBottom="292dp"
android:backgroundTint="@android:color/holo_purple"
android:text="WIFI OFF"
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="16sp" />
```

```

<Button
    android:id="@+id/button40"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="54dp"
    android:layout_marginBottom="130dp"
    android:backgroundTint="@color/black"
    android:text="Back"
    android:textColor="@color/white" />

<Button
    android:id="@+id/button41"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="55dp"
    android:layout_marginBottom="128dp"
    android:backgroundTint="@color/black"
    android:text="Logout"
    android:textColor="@color/white" />
</RelativeLayout>

```

### ***Thirteenth.java:***

```

package com.example.myfinalproject;

import android.content.Intent;
import android.net.wifi.WifiManager;
import android.os.Build;
import android.os.Bundle;
import android.provider.Settings;
import android.view.View;
import android.widget.Button;

```

```

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

import com.google.firebase.auth.FirebaseAuth;

public class Thirteenth extends AppCompatActivity {
    Button b1,b2,b3,b4;
    WifiManager wm;
    FirebaseAuth fa;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_thirteenth);
        b1=(Button) findViewById(R.id.button38);
        b2=(Button) findViewById(R.id.button39);
        b3=(Button) findViewById(R.id.button40);
        b4=(Button) findViewById(R.id.button41);
        wm = (WifiManager) getSystemService(WIFI_SERVICE);
        b4.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {

                Intent i4= new Intent(Thirteenth.this, MainActivity.class);
                startActivity(i4);
                finish();
                fa.signOut();
            }
        });
        b3.setOnClickListener(new View.OnClickListener() {

```

```

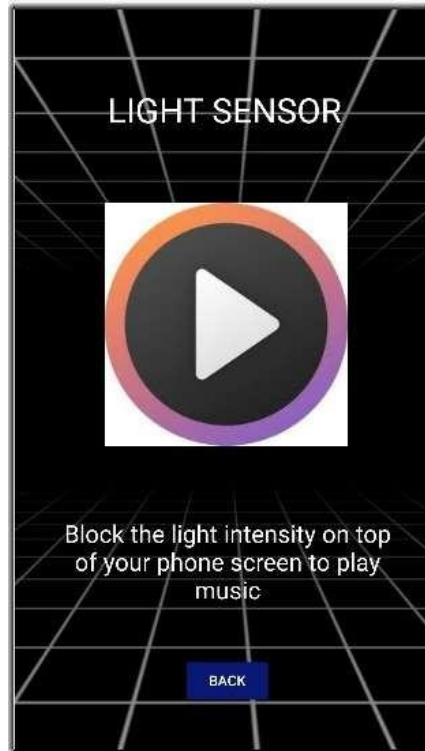
        @Override
        public void onClick(View v) {
            Intent i5= new Intent(Thirteenth.this, Fourth.class);
            startActivity(i5);
            finish();

        }
    });
    b1.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.Q) {
                Intent panelIntent = new Intent(Settings.Panel.ACTION_WIFI);
                startActivityForResult(panelIntent, 0);
            } else {
                wm.setWifiEnabled(true);
            }
        }
    });
    b2.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            wm.setWifiEnabled(false);
        }
    });
}
}

```



# Fourteenth.java and XML



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@drawable/img"
    tools:context=".Fourteenth">

    <TextView
        android:id="@+id/textView12"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
```

```
android:layout_alignParentEnd="true"
android:layout_marginTop="76dp"
android:layout_marginEnd="-2dp"
android:text="LIGHT SENSOR"
android:textAlignment="center"
android:textColor="@color/white"
android:textSize="34sp"
tools:layout_editor_absoluteX="159dp"
tools:layout_editor_absoluteY="71dp" />
```

```
<TextView
    android:id="@+id/textView13"
    android:layout_width="349dp"
    android:layout_height="109dp"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_marginStart="35dp"
    android:layout_marginTop="501dp"
    android:text="Block the light intensity on top of your phone screen to play
music"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="24sp" />
```

```
<Button
    android:id="@+id/button42"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginEnd="158dp"
    android:layout_marginBottom="45dp"
    android:backgroundTint="@color/black"
    android:text="Back"
    android:textColor="@color/white" />
```

```
<ImageView
```

```

        android:id="@+id/imageView3"
        android:layout_width="240dp"
        android:layout_height="336dp"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_marginTop="143dp"
        android:layout_marginEnd="83dp"
        app:srcCompat="@drawable/media" />
    </RelativeLayout>

```

### ***Fourteenth.java:***

```

package com.example.myfinalproject;

import android.annotation.SuppressLint;
import android.hardware.Sensor;
import android.hardware.SensorEvent;
import android.hardware.SensorEventListener;
import android.hardware.SensorManager;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.provider.ContactsContract;
import android.webkit.WebView;
import android.widget.Button;
import android.widget.ImageView;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class Fourteenth extends AppCompatActivity implements
SensorEventListener{
    ImageView iv;
    MediaPlayer mp;
    Button b1;

```

```
Sensor s;  
SensorManager sm;
```

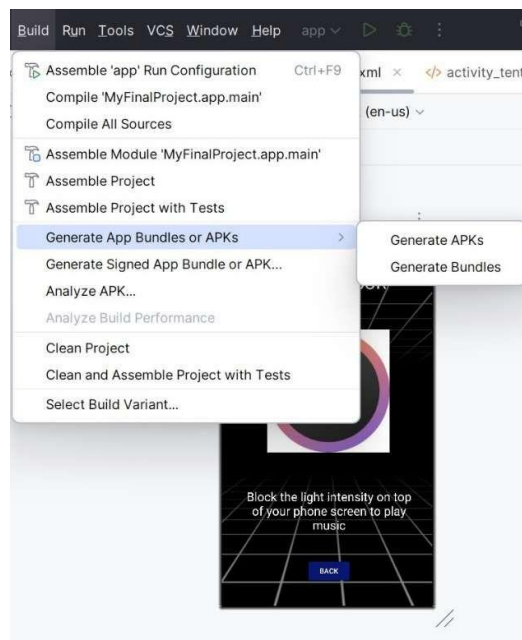
```
@SuppressWarnings("MissingInflatedId")  
@Override  
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    EdgeToEdge.enable(this);  
    setContentView(R.layout.activity_fourteenth);  
    iv=(ImageView) findViewById(R.id.imageView3);  
    mp=MediaPlayer.create(this, R.raw.y);  
    sm=(SensorManager) getSystemService(SENSOR_SERVICE);  
    s=sm.getDefaultSensor(Sensor.TYPE_LIGHT);  
    sm.registerListener(this,s,SensorManager.SENSOR_DELAY_NORMAL);  
    b1=(Button) findViewById(R.id.button42);  
}
```

```
@Override  
public void onAccuracyChanged(Sensor sensor, int accuracy) {
```

```
    }  
    @Override  
    public void onSensorChanged(SensorEvent event) {  
        if (event.values[0]>1)  
        {  
            mp.start();  
            iv.setImageResource(R.drawable.media);  
        }  
        else {  
            mp.pause();  
        }  
    }  
}
```

# Build the app and Generate the APK

1. Go to main menu → Build → Generate APK Bundles and APKs → Generate APKs



2. Click on locate to view the apk on the device.

# Realtime Database and Authentication User Logins Shown in Firebase

The screenshot displays the Firebase console interface. The left sidebar contains navigation options: Project Overview, Authentication (selected), Build, Run, Analytics, and Related development tools (Firebase Studio). The main content area is split into two panels. The top panel, titled 'Authentication', shows a table of users with columns for Identifier, Providers, Created, Signed In, and User UID. A single user is listed with the email 'naina@gmail.com'. The bottom panel, titled 'Realtime Database', shows the database structure with a 'Users' node containing a 'users' array. The array contains a single object for the user with UID '123456', including their email, name, and password.

**Authentication Users Table:**

Identifier	Providers	Created	Signed In	User UID
naina@gmail.com	📧	12 Aug 2025	12 Aug 2025	BMjYZkZZdUR6y8j0jd7QDCe4...

**Realtime Database Structure:**

```
https://myfinalnetcampproject-7daef-default-rtdb.firebaseio.com/  
└─ Users: "users"  
   └─ users  
      └─ 123456  
         ├── email: "naina@gmail.com"  
         ├── name: "naina"  
         └─ password: "123456"
```

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