  

 

# XML CODE:

SIGN IN PAGE:

*<?***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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity"**>  
  
 <**ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentStart="true"  
 android:layout\_alignParentTop="true"  
 android:layout\_alignParentBottom="true"  
 android:layout\_marginStart="0dp"  
 android:layout\_marginLeft="500px"  
 android:layout\_marginTop="444dp"  
 android:layout\_marginBottom="0dp"  
 app:srcCompat="@drawable/capture2"** />  
  
 <**TextView  
 android:id="@+id/signIn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="50dp"  
 android:text="Sign In"  
 android:textColor="@color/purple\_500"  
 android:textSize="50dp"  
 android:textStyle="bold"** />  
  
 <**EditText  
 android:id="@+id/txtEmail"  
 android:layout\_width="300dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/signIn"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="70dp"  
 android:ems="10"  
 android:hint="Email"  
 android:inputType="textEmailAddress"  
 android:textColor="@color/black"  
 android:textColorHint="@color/black"** />  
  
 <**EditText  
 android:id="@+id/txtPass"  
 android:layout\_width="300dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/txtEmail"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="50dp"  
 android:ems="10"  
 android:hint="Password"  
 android:inputType="textPassword"  
 android:textColor="@color/black"  
 android:textColorHint="@color/black"** />  
  
 <**Button  
 android:id="@+id/btnLogin"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/txtPass"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="50dp"  
 android:backgroundTint="@color/purple\_500"  
 android:onClick="onLoginClicked"  
 android:text="Login"  
 android:textColor="@color/white"  
 android:textStyle="bold"** />  
  
</**RelativeLayout**>

Home Page:

*<?***xml version="1.0" encoding="utf-8"***?>*<**androidx.constraintlayout.widget.ConstraintLayout 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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:background="#FFFFFF"  
 tools:context=".SignInActivity"**>  
  
 <**TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="248dp"  
  
 android:text="TextView"  
 android:textSize="10sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
 <**ImageView  
 android:id="@+id/imageView2"  
 android:layout\_width="381dp"  
 android:layout\_height="405dp"  
 android:layout\_marginTop="4dp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.466"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@drawable/capture2"** />  
  
 <**Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="76dp"  
 android:layout\_marginTop="104dp"  
 android:onClick="onCctvClick"  
 android:text="CCTV"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView2"** />  
  
 <**Button  
 android:id="@+id/button2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="104dp"  
 android:layout\_marginEnd="68dp"  
 android:onClick="onCarClick"  
 android:text="CAR"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView2"** />  
  
 <**Button  
 android:id="@+id/button3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="76dp"  
 android:layout\_marginBottom="104dp"  
 android:onClick="onRoomClick"  
 android:text="ROOM"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
 <**Button  
 android:id="@+id/button4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginEnd="64dp"  
 android:layout\_marginBottom="104dp"  
 android:onClick="onGarageClick"  
 android:text="GARAGE"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"** />  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

CCTV PAGE:

*<?***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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_marginLeft="10dp"  
 android:layout\_marginTop="0dp"  
 tools:context=".CCTVActivity"**>  
  
 <**TextView  
 android:id="@+id/tvRg"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="290dp"  
 android:gravity="center"  
 android:text="CAMERA SURVILLENCE:"  
 android:textAppearance="?android:attr/textAppearanceMedium"** />  
  
  
 <**RadioButton  
 android:id="@+id/rb1"  
 android:layout\_width="103dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="320dp"  
 android:checked="false"  
 android:text="cam1"** />  
  
 <**RadioButton  
 android:id="@+id/rb2"  
 android:layout\_width="87dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="103dp"  
 android:layout\_marginTop="320dp"  
 android:checked="true"  
 android:text="cam2"** />  
  
 <**RadioButton  
 android:id="@+id/rb3"  
 android:layout\_width="117dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginLeft="190dp"  
 android:layout\_marginTop="320dp"  
 android:checked="false"  
 android:text="cam3"** />  
  
 <**RadioButton  
 android:id="@+id/rb4"  
 android:layout\_width="77dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_alignParentTop="true"  
 android:layout\_marginLeft="307dp"  
 android:layout\_marginTop="320dp"  
 android:checked="false"  
 android:text="cam4"** />  
  
  
 <**Button  
 android:id="@+id/btnSubmit"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@+id/rb4"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="10dp"  
 android:text="OVER VIEW"  
 android:textColor="#FBFBFB"** />  
  
  
 <**ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_above="@id/tvRg"  
 android:layout\_marginTop="10dp"  
 android:layout\_marginBottom="-275dp"  
 app:srcCompat="@drawable/camera"** />  
  
</**RelativeLayout**>

GARAGE PAGE:

*<?***xml version="1.0" encoding="utf-8"***?>*<**androidx.constraintlayout.widget.ConstraintLayout 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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".GarageActivity"**>  
  
  
 <**TextView  
 android:id="@+id/textView2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginBottom="60dp"  
 android:text="GARAGE DOOR"  
 app:layout\_constraintBottom\_toTopOf="@+id/switch1"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
 <**Switch  
 android:id="@+id/switch1"  
 android:layout\_width="99dp"  
 android:layout\_height="62dp"  
 android:layout\_gravity="center"  
 android:layout\_marginBottom="24dp"  
 android:checked="true"  
 android:text="Door"  
 android:textOff="CLOSED"  
 android:textOn="OPEN"  
 app:layout\_constraintBottom\_toTopOf="@+id/submitButton"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
 <**Button  
 android:id="@+id/submitButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:layout\_marginBottom="176dp"  
 android:background="#009284"  
 android:padding="10dp"  
 android:text="Submit"  
 android:textColor="#fff"  
 android:textStyle="bold"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
 <**ImageView  
 android:id="@+id/imageView3"  
 android:layout\_width="327dp"  
 android:layout\_height="227dp"  
 android:layout\_marginBottom="64dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/textView2"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:srcCompat="@drawable/door"** />  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

ROOM PAGE:

*<?***xml version="1.0" encoding="utf-8"***?>*<**androidx.constraintlayout.widget.ConstraintLayout 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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".RoomActivity"**>  
  
 <**RadioGroup  
 android:id="@+id/radioGroup"  
 android:layout\_width="153dp"  
 android:layout\_height="142dp"  
 android:layout\_marginTop="52dp"  
 android:layout\_marginBottom="128dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.151"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView3"  
 app:layout\_constraintVertical\_bias="0.0"**>  
  
 <**RadioButton  
 android:id="@+id/radio\_On"  
 android:layout\_width="77dp"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButtonClicked"  
 android:text="On"  
 android:textSize="16sp"** />  
  
 <**RadioButton  
 android:id="@+id/radio\_Off"  
 android:layout\_width="78dp"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButtonClicked"  
 android:text="Off"  
 android:textSize="16sp"** />  
  
  
 </**RadioGroup**>  
  
 <**ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="358dp"  
 android:layout\_height="226dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.057"  
 app:srcCompat="@drawable/smarthome"  
 tools:layout\_editor\_absoluteX="26dp"** />  
  
 <**TextView  
 android:id="@+id/textView3"  
 android:layout\_width="57dp"  
 android:layout\_height="35dp"  
 android:layout\_marginStart="88dp"  
 android:text="AC"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4"  
 app:layout\_constraintVertical\_bias="0.123"** />  
  
 <**TextView  
 android:id="@+id/textView4"  
 android:layout\_width="54dp"  
 android:layout\_height="33dp"  
 android:text="LED"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.627"  
 app:layout\_constraintStart\_toEndOf="@+id/textView3"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4"  
 app:layout\_constraintVertical\_bias="0.123"** />  
  
 <**RadioGroup  
 android:id="@+id/radioGroup2"  
 android:layout\_width="153dp"  
 android:layout\_height="142dp"  
 android:layout\_marginTop="52dp"  
 android:layout\_marginBottom="128dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.937"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4"  
 app:layout\_constraintVertical\_bias="0.0"**>  
  
  
 <**RadioButton  
 android:id="@+id/radio2\_On"  
 android:layout\_width="77dp"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButton2Clicked"  
 android:text="On"  
 android:textSize="16sp"** />  
  
 <**RadioButton  
 android:id="@+id/radio2\_Off"  
 android:layout\_width="78dp"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButton2Clicked"  
 android:text="Off"  
 android:textSize="16sp"** />  
  
 </**RadioGroup**>  
  
 <**Button  
 android:id="@+id/button1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerHorizontal="true"  
 android:layout\_centerVertical="true"  
 android:layout\_marginBottom="68dp"  
 android:onClick="displayToastMsg"  
 android:text="Speech Recognition"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
 <**TextView  
 android:id="@+id/textView5"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="24dp"  
 android:text="All applainces"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4"** />  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

CAR PAGE:

*<?***xml version="1.0" encoding="utf-8"***?>*<**androidx.constraintlayout.widget.ConstraintLayout 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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".CarActivity"**>  
 <**RadioGroup  
 android:id="@+id/radioGroup"  
 android:layout\_width="153dp"  
 android:layout\_height="142dp"  
 android:layout\_marginTop="52dp"  
 android:layout\_marginBottom="128dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.151"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView3"  
 app:layout\_constraintVertical\_bias="0.0"**>  
  
 <**RadioButton  
 android:id="@+id/radio\_On"  
 android:layout\_width="77dp"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButtonClicked"  
 android:text="On"  
 android:textSize="16sp"** />  
  
 <**RadioButton  
 android:id="@+id/radio\_Off"  
 android:layout\_width="78dp"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButtonClicked"  
 android:text="Off"  
 android:textSize="16sp"** />  
  
  
 </**RadioGroup**>  
  
 <**ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="358dp"  
 android:layout\_height="226dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.49"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.097"  
 app:srcCompat="@drawable/door"** />  
  
 <**TextView  
 android:id="@+id/textView3"  
 android:layout\_width="57dp"  
 android:layout\_height="35dp"  
 android:layout\_marginStart="44dp"  
 android:text="AC"  
 app:layout\_constraintBottom\_toTopOf="@+id/button1"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5"  
 app:layout\_constraintVertical\_bias="0.076"** />  
  
 <**TextView  
 android:id="@+id/textView4"  
 android:layout\_width="54dp"  
 android:layout\_height="33dp"  
 android:text="Ignition"  
 app:layout\_constraintBottom\_toTopOf="@+id/button1"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.707"  
 app:layout\_constraintStart\_toEndOf="@+id/textView3"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5"  
 app:layout\_constraintVertical\_bias="0.084"** />  
  
 <**RadioGroup  
 android:id="@+id/radioGroup2"  
 android:layout\_width="153dp"  
 android:layout\_height="142dp"  
 android:layout\_marginTop="52dp"  
 android:layout\_marginBottom="128dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.937"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4"  
 app:layout\_constraintVertical\_bias="0.0"**>  
  
  
 <**RadioButton  
 android:id="@+id/radio2\_On"  
 android:layout\_width="77dp"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButton2Clicked"  
 android:text="On"  
 android:textSize="16sp"** />  
  
 <**RadioButton  
 android:id="@+id/radio2\_Off"  
 android:layout\_width="78dp"  
 android:layout\_height="wrap\_content"  
 android:onClick="onRadioButton2Clicked"  
 android:text="Off"  
 android:textSize="16sp"** />  
  
 </**RadioGroup**>  
  
 <**Button  
 android:id="@+id/button1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_centerHorizontal="true"  
 android:layout\_centerVertical="true"  
 android:layout\_marginBottom="68dp"  
 android:onClick="displayToastMsg"  
 android:text="Automatic Car Park"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"** />  
  
 <**TextView  
 android:id="@+id/textView5"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="24dp"  
 android:text="Smart Car Controls"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4"** />  
</**androidx.constraintlayout.widget.ConstraintLayout**>

# JAVA CODE:

SIGN IN PAGE:

**package** com.example.oel;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
  
  
**public class** MainActivity **extends** AppCompatActivity {  
  
 EditText **email**,**pwd**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **email**= (EditText) findViewById(R.id.***txtEmail***);  
 **pwd**= (EditText) findViewById(R.id.***txtPass***);  
  
 }  
  
 **public void** onLoginClicked(View view) {  
 **if**(**email**.getText().toString().equals(**"abc@gmail.com"**) &&  
 **pwd**.getText().toString().equals(**"12345"**)) {  
 Intent intent = **new** Intent(**this**, SignInActivity.**class**);  
 startActivity(intent);  
 }  
 **else if**(**email**.getText().toString().equals(**""**)||  
 **pwd**.getText().toString().equals(**""**))  
 {  
 Toast.*makeText*(getApplicationContext(), **"Fill the above fields"**,Toast.***LENGTH\_SHORT***).show();  
 }  
 **else** {  
 Toast.*makeText*(getApplicationContext(), **"Invalid Credentials"**,Toast.***LENGTH\_SHORT***).show();  
 }  
 }  
  
}

Home Page:

**package** com.example.oel;  
  
**package** com.example.oel;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
  
**public class** SignInActivity **extends** AppCompatActivity {  
  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_sign\_in***);  
 Intent intent = getIntent();  
  
  
 *// Capture the layout's TextView and set the string as its text* TextView textView = findViewById(R.id.***textView***);  
 textView.setText(**"Sign In Successful"**);  
  
  
  
 }  
 **public void** onCctvClick(View view) {  
  
 Intent intent2 = **new** Intent(**this**, CCTVActivity.**class**);  
 startActivity(intent2);  
  
 }  
 **public void** onRoomClick(View view) {  
  
 Intent intent3 = **new** Intent(**this**, RoomActivity.**class**);  
 startActivity(intent3);  
  
 }  
 **public void** onCarClick(View view) {  
  
 Intent intent4 = **new** Intent(**this**, CarActivity.**class**);  
 startActivity(intent4);  
  
 }  
 **public void** onGarageClick(View view) {  
  
 Intent intent5 = **new** Intent(**this**, GarageActivity.**class**);  
 startActivity(intent5);  
  
 }  
}

CCTV PAGE:

**package** com.example.oel;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.RadioButton;  
**import** android.widget.Toast;  
  
  
**public class** CCTVActivity **extends** AppCompatActivity {  
  
  
 RadioButton **r1**, **r2**,**r3**,**r4**;  
 Button **buttonSubmit**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_cctvactivity***);  
 Intent intent2 = getIntent();  
 *// layout instances* **buttonSubmit** = (Button) findViewById(R.id.***btnSubmit***);  
  
 **r1** = (RadioButton) findViewById(R.id.***rb1***);  
 **r2** = (RadioButton) findViewById(R.id.***rb2***);  
 **r3** = (RadioButton) findViewById(R.id.***rb3***);  
 **r4** = (RadioButton) findViewById(R.id.***rb4***);  
  
  
 **buttonSubmit**.setOnClickListener(**new** View.OnClickListener() {  
  
 @Override  
 **public void** onClick(View v) {  
  
 *// task 1 : multiple radio button selection* String yourVote = **" "**;  
  
 **if** (**r1**.isChecked()) {  
 yourVote += **r1**.getText().toString() + **"\tYES"**;  
 }  
 **else**{  
 yourVote += **r1**.getText().toString() + **"\tNO"**;  
 }  
  
 **if** (**r2**.isChecked()) {  
 yourVote += **r2**.getText().toString() + **"\tYES"**;  
 }  
 **else**{  
 yourVote += **r2**.getText().toString() + **"\tNO"**;  
 }  
  
 **if** (**r3**.isChecked()) {  
 yourVote += **r3**.getText().toString() + **"\tYES"**;  
 }  
 **else**{  
 yourVote += **r3**.getText().toString() + **"\tNO"**;  
 }  
  
 **if** (**r4**.isChecked()) {  
 yourVote += **r4**.getText().toString() + **"\tYES"**;  
 }  
 **else**{  
 yourVote += **r4**.getText().toString() + **"\tNO"**;  
 }  
  
  
  
 *// display it as Toast to the user* Toast.*makeText*(CCTVActivity.**this**, **"Selected Radio Button is:"** + yourVote , Toast.***LENGTH\_LONG***).show();  
  
 }  
 }  
 );  
 }  
 }

GARAGE PAGE:

**package** com.example.oel;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.Switch;  
**import** android.widget.Toast;  
  
**public class** GarageActivity **extends** AppCompatActivity {  
 Switch **switch1**; Button **submit**;  
  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_garage***);  
 Intent intent5 = getIntent();  
 **switch1** = (Switch) findViewById(R.id.***switch1***);  
 **submit** = (Button) findViewById(R.id.***submitButton***);  
 **submit**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 String statusSwitch1, statusSwitch2;  
 **if** (**switch1**.isChecked())  
 statusSwitch1 = **switch1**.getTextOn().toString();  
 **else** statusSwitch1 = **switch1**.getTextOff().toString();  
 **if** (**switch1**.isChecked())  
 statusSwitch2 = **switch1**.getTextOn().toString();  
 **else** statusSwitch2 = **switch1**.getTextOff().toString();  
 Toast.*makeText*(getApplicationContext(), **"Door :"** + statusSwitch1 , Toast.***LENGTH\_LONG***).show(); *// display the current state for switch's* }  
 });  
 }  
  
  
  
  
  
}

ROOM PAGE:

**package** com.example.oel;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.RadioButton;  
**import** android.widget.Button;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
**public class** RoomActivity **extends** AppCompatActivity {  
 RadioButton **radio\_On**;  
 RadioButton **radio\_Off**;  
 RadioButton **radio2\_On**;  
 RadioButton **radio2\_Off**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_room***);  
 Intent intent3 = getIntent();  
 **radio\_On** = (RadioButton) findViewById(R.id.***radio\_On***);  
 **radio\_Off** = (RadioButton) findViewById(R.id.***radio\_Off***);  
 **radio\_On** = (RadioButton) findViewById(R.id.***radio2\_On***);  
 **radio\_Off** = (RadioButton) findViewById(R.id.***radio2\_Off***);  
 }  
 **public void** toastMsg(String msg) {  
 Toast toast = Toast.*makeText*(**this**, msg, Toast.***LENGTH\_LONG***);  
 toast.show();  
 }  
 **public void** displayToastMsg(View v) {  
 toastMsg(**"Speech command recorded!"**);  
 }  
 **public void** onRadioButtonClicked(View view) {  
  
 **boolean** checked = ((RadioButton) view).isChecked();  
 **switch** (view.getId()) {  
 **case** R.id.***radio\_On***:  
 **if** (checked) {  
 Toast.*makeText*(RoomActivity.**this**, **"The AC is ON"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 **break**;  
 **case** R.id.***radio\_Off***:  
 **if** (checked) {  
 Toast.*makeText*(RoomActivity.**this**, **"The AC door is OFF"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 **break**;  
  
 }  
 }  
 **public void** onRadioButton2Clicked(View view) {  
  
 **boolean** checked = ((RadioButton) view).isChecked();  
 **switch** (view.getId()) {  
 **case** R.id.***radio2\_On***:  
 **if** (checked) {  
 Toast.*makeText*(RoomActivity.**this**, **"The led is ON"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 **break**;  
 **case** R.id.***radio2\_Off***:  
 **if** (checked) {  
 Toast.*makeText*(RoomActivity.**this**, **"The led door is OFF"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 **break**;  
  
 }  
 }  
}

CAR PAGE:

**package** com.example.oel;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.content.Intent;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.RadioButton;  
**import** android.widget.Button;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**public class** CarActivity **extends** AppCompatActivity {  
 RadioButton **radio\_On**;  
 RadioButton **radio\_Off**;  
 RadioButton **radio2\_On**;  
 RadioButton **radio2\_Off**;  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_car***);  
 Intent intent4 = getIntent();  
 **radio\_On** = (RadioButton) findViewById(R.id.***radio\_On***);  
 **radio\_Off** = (RadioButton) findViewById(R.id.***radio\_Off***);  
 **radio\_On** = (RadioButton) findViewById(R.id.***radio2\_On***);  
 **radio\_Off** = (RadioButton) findViewById(R.id.***radio2\_Off***);  
 }  
 **public void** toastMsg(String msg) {  
 Toast toast = Toast.*makeText*(**this**, msg, Toast.***LENGTH\_LONG***);  
 toast.show();  
 }  
 **public void** displayToastMsg(View v) {  
 toastMsg(**"Car Parked!"**);  
 }  
 **public void** onRadioButtonClicked(View view) {  
  
 **boolean** checked = ((RadioButton) view).isChecked();  
 **switch** (view.getId()) {  
 **case** R.id.***radio\_On***:  
 **if** (checked) {  
 Toast.*makeText*(CarActivity.**this**, **"The AC is ON"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 **break**;  
 **case** R.id.***radio\_Off***:  
 **if** (checked) {  
 Toast.*makeText*(CarActivity.**this**, **"The AC door is OFF"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 **break**;  
  
 }  
 }  
 **public void** onRadioButton2Clicked(View view) {  
  
 **boolean** checked = ((RadioButton) view).isChecked();  
 **switch** (view.getId()) {  
 **case** R.id.***radio2\_On***:  
 **if** (checked) {  
 Toast.*makeText*(CarActivity.**this**, **"The ignition is ON"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 **break**;  
 **case** R.id.***radio2\_Off***:  
 **if** (checked) {  
 Toast.*makeText*(CarActivity.**this**, **"The ignition door is OFF"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 **break**;  
  
 }  
 }  
}