**PROJECT-3-VOICE CALLING APP**

Activity\_main.xml:-

*<?***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="com.example.voicecallingapp.MainActivity"**>  
  
    <**EditText  
        android:id="@+id/mobnum"  
        android:layout\_width="277dp"  
        android:layout\_height="59dp"  
        android:layout\_centerInParent="true"  
        android:hint="Enter Number for call"  
        android:inputType="number"  
        app:layout\_constraintBottom\_toBottomOf="parent"  
        app:layout\_constraintEnd\_toEndOf="parent"  
        app:layout\_constraintHorizontal\_bias="0.432"  
        app:layout\_constraintStart\_toStartOf="parent"  
        app:layout\_constraintTop\_toTopOf="parent"  
        app:layout\_constraintVertical\_bias="0.215"** />  
  
    <**Button  
        android:layout\_width="167dp"  
        android:layout\_height="57dp"  
        android:layout\_below="@id/mobnum"  
        android:layout\_centerHorizontal="true"  
        android:onClick="dialCall"  
        android:text="Make Call"  
        app:layout\_constraintBottom\_toBottomOf="parent"  
        app:layout\_constraintEnd\_toEndOf="parent"  
        app:layout\_constraintHorizontal\_bias="0.405"  
        app:layout\_constraintStart\_toStartOf="parent"  
        app:layout\_constraintTop\_toTopOf="parent"  
        app:layout\_constraintVertical\_bias="0.465"** />  
  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

MainActivity.java

**package** com.example.voicecallingapp;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
**import** androidx.core.app.ActivityCompat;  
**import** androidx.core.content.ContextCompat;  
  
**import** android.os.Bundle;  
**import** android.Manifest;  
**import** android.content.Intent;  
**import** android.content.pm.PackageManager;  
**import** android.net.Uri;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
**import** java.util.ArrayList;  
**import** java.util.List;  
**public class** MainActivity **extends** AppCompatActivity {  
    **private static final** String ***TAG*** = MainActivity.**class**.getSimpleName();  
    **public static final int *MULTIPLE\_PERMISSIONS*** = 101;  
  
    EditText **number**;  
  
    @Override  
    **protected void** onCreate(Bundle savedInstanceState) {  
        **super**.onCreate ( savedInstanceState );  
        setContentView ( R.layout.***activity\_main*** );  
        **number** =(EditText)findViewById(R.id.***mobnum***);  
  
        *//asl for runtime permission* checkPermissions();  
    }  
  
    @Override  
    **public void** onRequestPermissionsResult(**int** requestCode, String permissions[], **int**[] grantResults) {  
  
        **switch** (requestCode) {  
            **case *MULTIPLE\_PERMISSIONS***:  
                **if** (grantResults.**length** > 0 && grantResults[0] == PackageManager.***PERMISSION\_GRANTED***) {  
                    Toast.*makeText* ( **this**, **"Permission Granted"**, Toast.***LENGTH\_SHORT*** ).show ();  
                }  
                **break**;  
        }  
    }  
  
    @Override  
    **public void** onResume() {  
        **super**.onResume();  
  
    }  
  
    *//Call on Button click* **public void** dialCall(View view){  
        String num = **number**.getText().toString();  
        **if**(num!=**null** && !num.equals(**""**)){  
            String noToDial = **"tel:"**+num;  
            Uri number = Uri.*parse*(noToDial);  
            Intent callIntent = **new** Intent(Intent.***ACTION\_CALL***, number);  
            **if**(checkPermissions()){  
                startActivity(callIntent);  
            }  
        }  
        **else**{  
            Toast.*makeText*(**this**,**"Please enter number"**,Toast.***LENGTH\_SHORT***).show();  
        }  
  
    }  
  
    *// For runtime Permission* **private  boolean** checkPermissions() {  
        **int** result;  
        String[] permissions= **new** String[]{  
                Manifest.permission.***CALL\_PHONE***};  
  
        List<String> listPermissionsNeeded = **new** ArrayList<>();  
        **for** (String p:permissions) {  
            result = ContextCompat.*checkSelfPermission*(**this**,p);  
            **if** (result != PackageManager.***PERMISSION\_GRANTED***) {  
                Log.*d*(***TAG***,**"Ask Permissions : "**+p);  
                listPermissionsNeeded.add(p);  
            }  
        }  
        **if** (!listPermissionsNeeded.isEmpty()) {  
            ActivityCompat.*requestPermissions*(**this**, listPermissionsNeeded.toArray(**new** String[listPermissionsNeeded.size()]),***MULTIPLE\_PERMISSIONS*** );  
            **return false**;  
        }  
        **return true**;  
    }  
}

AndroidManifest.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**manifest xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:tools="http://schemas.android.com/tools"  
      package="com.example.voicecallingapp"**>  
    <**uses-permission android:name="android.permission.CALL\_PHONE"**/>  
    <**application  
        android:allowBackup="true"  
        android:dataExtractionRules="@xml/data\_extraction\_rules"  
        android:fullBackupContent="@xml/backup\_rules"  
        android:icon="@mipmap/ic\_launcher"  
        android:label="@string/app\_name"  
        android:roundIcon="@mipmap/ic\_launcher\_round"  
        android:supportsRtl="true"  
        android:theme="@style/Theme.VOICECALLINGAPP"  
        tools:targetApi="31"**>  
        <**activity  
            android:name=".MainActivity"  
            android:exported="true"**>  
            <**intent-filter**>  
                <**action android:name="android.intent.action.MAIN"** />  
  
                <**category android:name="android.intent.category.LAUNCHER"** />  
            </**intent-filter**>  
        </**activity**>  
    </**application**>  
  
</**manifest**>



