**Practical no.-**29

**Title: Write a program to send and receive SMS**

**Roll No.:**15 **Batch-** A **Date of Performance:** 25/03/2024

**activity\_main.xml**

<?xml version="1.0" encoding="utf-8"?>

<AbsoluteLayout 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">

<EditText

android:id="@+id/name"

android:layout\_width="match\_parent"

android:layout\_height="50dp"

android:layout\_x="0dp"

android:layout\_y="89dp"

android:gravity="center"

android:hint="Phono"

android:inputType="phone"

android:textSize="20dp" />

<EditText

android:id="@+id/email"

android:layout\_width="match\_parent"

android:layout\_height="50dp"

android:layout\_x="0dp"

android:layout\_y="182dp"

android:gravity="center"

android:hint="Message"

android:textSize="20dp" />

<androidx.appcompat.widget.AppCompatButton

android:id="@+id/submit"

android:layout\_width="match\_parent"

android:layout\_height="50dp"

android:layout\_x="-6dp"

android:layout\_y="383dp"

android:text="Send" />

</AbsoluteLayout>

**MainActivity.java**

package com.example.sms\_ash;

import androidx.appcompat.app.AppCompatActivity;

import android.content.IntentFilter;

import android.os.Bundle;

import android.telephony.SmsManager;

import android.util.Log;

import android.view.View;

import android.widget.\*;

public class MainActivity extends AppCompatActivity {

Receive sms=new Receive();

EditText E1,E2;

Button B;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

E1=findViewById(R.id.name);

E2=findViewById(R.id.email);

B=findViewById(R.id.submit);

B.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

sms();

}

});

}

public void sms()

{

String Mob=E1.getText().toString();

String Msg=E2.getText().toString();

try

{

SmsManager smsM=SmsManager.getDefault();

smsM.sendTextMessage(Mob,null,Msg,null,null);

Toast.makeText(getApplicationContext(), "SMS sent successfully.", Toast.LENGTH\_SHORT).show();

}catch (Exception e) {

Log.e("SMS\_SEND\_ERROR", "Error sending SMS: " + e.getMessage());

Toast.makeText(getApplicationContext(), "Failed to send SMS.", Toast.LENGTH\_SHORT).show();

} }

public void onStart()

{

super.onStart();

IntentFilter in=new IntentFilter("android.provider.Telephony.SMS\_RECEIVED");

registerReceiver(sms,in);

}

public void onStop()

{

super.onStop();

unregisterReceiver(sms);

}

}

**Manifest.xml**

<uses-permission android:name="android.permission.INTERNET"/>

<uses-permission android:name="android.permission.ACCESS\_FINE\_LOCATION"/>

<uses-permission android:name="android.permission.ACCESS\_COARSE\_LOCATION"/>

**Receive.java**

package com.example.sms\_ash;

import android.content.BroadcastReceiver;

import android.content.Context;

import android.content.Intent;

import android.os.Bundle;

import android.telephony.SmsMessage;

import android.widget.Toast;

public class Receive extends BroadcastReceiver {

Receive(){}

@Override

public void onReceive(Context context, Intent intent) {

Bundle b=intent.getExtras();

if(b!=null)

{

Object[] sms=(Object[]) b.get("pdus");

for(int i=0;i<sms.length;i++)

{

SmsMessage sm=SmsMessage.createFromPdu((byte[]) sms[i]);

String phno=sm.getOriginatingAddress();

String msg=sm.getMessageBody().toString();

Toast.makeText(context,"Received from"+phno+" : "+msg,Toast.LENGTH\_LONG).show();

} } } }

