**PR-26**

**26. Develop a program to for SMS.**

**MainActivity.java**

package com.example.smsapp;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.app.ActivityCompat;

import android.Manifest;

import android.content.pm.PackageManager;

import android.database.Cursor;

import android.net.Uri;

import android.os.Bundle;

import android.telephony.SmsManager;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

EditText edtPhone, edtMsg;

Button sendBtn, readBtn;

TextView txtAddress, txtContent;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

edtPhone = findViewById(R.id.edtphone);

edtMsg = findViewById(R.id.edtmsg);

sendBtn = findViewById(R.id.btnSend);

readBtn = findViewById(R.id.btnRead);

txtAddress = findViewById(R.id.txtAddress);

txtContent = findViewById(R.id.txtContent);

ActivityCompat.requestPermissions(this,

new String[]{Manifest.permission.SEND\_SMS, Manifest.permission.READ\_SMS},

PackageManager.PERMISSION\_GRANTED);

sendBtn.setOnClickListener(v -> {

String number = edtPhone.getText().toString().trim();

String message = edtMsg.getText().toString().trim();

if (!number.isEmpty() && !message.isEmpty()) {

SmsManager sms = SmsManager.getDefault();

sms.sendTextMessage(number, null, message, null, null);

Toast.makeText(getApplicationContext(), "Message Sent",

Toast.LENGTH\_SHORT).show();

} else {

Toast.makeText(getApplicationContext(), "Enter number and message",

Toast.LENGTH\_SHORT).show();

}

});

readBtn.setOnClickListener(v -> {

Cursor c = getContentResolver().query(Uri.parse("content://sms"), null, null, null,

null);

if (c != null && c.moveToFirst()) {

txtAddress.setText("From: " + c.getString(c.getColumnIndexOrThrow("address")));

txtContent.setText("Message: " + c.getString(c.getColumnIndexOrThrow("body")));

c.close();

} else {

txtAddress.setText("No SMS found");

txtContent.setText("");

}

});

}

}

**activity\_main.xml**

<ScrollView xmlns:android="http://schemas.android.com/apk/res/android"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:orientation="vertical"

android:padding="20dp">

<EditText

android:id="@+id/edtphone"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter Phone Number"

android:inputType="phone"/>

<EditText

android:id="@+id/edtmsg"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:hint="Enter Message"

android:minLines="4"

android:inputType="textMultiLine"/>

<Button

android:id="@+id/btnSend"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Send SMS"

android:layout\_marginTop="10dp"/>

<Button

android:id="@+id/btnRead"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Read Last SMS"

android:layout\_marginTop="10dp"/>

<TextView

android:id="@+id/txtAddress"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="From:"

android:textSize="16sp"

android:paddingTop="10dp"/>

<TextView

android:id="@+id/txtContent"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Message:"

android:textSize="16sp"/>

</LinearLayout>

</ScrollView>

**AndroidManifest.xml**

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

package="com.example.smsapp">

<uses-permission android:name="android.permission.SEND\_SMS"/>

<uses-permission android:name="android.permission.READ\_SMS"/>

<application

android:allowBackup="true"

android:label="SMS App"

android:supportsRtl="true"

android:theme="@style/Theme.AppCompat.Light.NoActionBar">

<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>