MainActivity.java

import android.content.Intent;

import android.os.Bundle;

import android.support.v7.app.ActionBarActivity;

import android.view.View;

public class MainActivity extends ActionBarActivity {

 @Override

 protected void onCreate(Bundle savedInstanceState) {

 super.onCreate(savedInstanceState);

 setContentView(R.layout.activity\_main);

 }

 public void goToInbox(View view) {

 Intent intent = new Intent(MainActivity.this, ReceiveSmsActivity.class);

 startActivity(intent);

 }

 public void goToCompose(View view) {

 Intent intent = new Intent(MainActivity.this, SendSmsActivity.class);

 startActivity(intent);

 }

}

SendSmsActivity.java

import android.app.Activity;

import android.content.Intent;

import android.os.Bundle;

import android.telephony.SmsManager;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class SendSmsActivity extends Activity {

 Button sendSMSBtn;

 EditText toPhoneNumberET;

 EditText smsMessageET;

 @Override

 protected void onCreate(Bundle savedInstanceState) {

 super.onCreate(savedInstanceState);

 setContentView(R.layout.activity\_send\_sms);

 sendSMSBtn = (Button) findViewById(R.id.btnSendSMS);

 toPhoneNumberET = (EditText) findViewById(R.id.editTextPhoneNo);

 smsMessageET = (EditText) findViewById(R.id.editTextSMS);

 sendSMSBtn.setOnClickListener(new View.OnClickListener() {

 public void onClick(View view) {

 sendSMS();

 }

 });

 }

 protected void sendSMS() {

 String toPhoneNumber = toPhoneNumberET.getText().toString();

 String smsMessage = smsMessageET.getText().toString();

 try {

 SmsManager smsManager = SmsManager.getDefault();

 smsManager.sendTextMessage(toPhoneNumber, null, smsMessage, null, null);

 Toast.makeText(getApplicationContext(), "SMS sent.",

 Toast.LENGTH\_LONG).show();

 } catch (Exception e) {

 Toast.makeText(getApplicationContext(),

 "Sending SMS failed.",

 Toast.LENGTH\_LONG).show();

 e.printStackTrace();

 }

 }

 public void goToInbox(View view) {

 Intent intent = new Intent(SendSmsActivity.this, ReceiveSmsActivity.class);

 startActivity(intent);

 }

}

ReceiveSmsActivity.java

import android.app.Activity;

import android.content.ContentResolver;

import android.content.Intent;

import android.database.Cursor;

import android.net.Uri;

import android.os.Bundle;

import android.view.View;

import android.widget.AdapterView;

import android.widget.AdapterView.OnItemClickListener;

import android.widget.ArrayAdapter;

import android.widget.ListView;

import android.widget.Toast;

import java.text.SimpleDateFormat;

import java.util.ArrayList;

import java.util.Date;

public class ReceiveSmsActivity extends Activity implements OnItemClickListener {

 private static ReceiveSmsActivity inst;

 ArrayList<String> smsMessagesList = new ArrayList<String>();

 ListView smsListView;

 ArrayAdapter arrayAdapter;

 public static ReceiveSmsActivity instance() {

 return inst;

 }

 @Override

 public void onStart() {

 super.onStart();

 inst = this;

 }

 @Override

 protected void onCreate(Bundle savedInstanceState) {

 super.onCreate(savedInstanceState);

 setContentView(R.layout.activity\_receive\_sms);

 smsListView = (ListView) findViewById(R.id.SMSList);

 arrayAdapter = new ArrayAdapter<String>(this, android.R.layout.simple\_list\_item\_1, smsMessagesList);

 smsListView.setAdapter(arrayAdapter);

 smsListView.setOnItemClickListener(this);

 refreshSmsInbox();

 }

 public void refreshSmsInbox() {

 ContentResolver contentResolver = getContentResolver();

 Cursor smsInboxCursor = contentResolver.query(Uri.parse("content://sms/inbox"), null, null, null, null);

 int indexBody = smsInboxCursor.getColumnIndex("body");

 int indexAddress = smsInboxCursor.getColumnIndex("address");

 long timeMillis = smsInboxCursor.getColumnIndex("date");

 Date date = new Date(timeMillis);

 SimpleDateFormat format = new SimpleDateFormat("dd/MM/yy");

 String dateText = format.format(date);

 if (indexBody < 0 || !smsInboxCursor.moveToFirst()) return;

 arrayAdapter.clear();

 do {

 String str = smsInboxCursor.getString(indexAddress) +" at "+

 "\n" + smsInboxCursor.getString(indexBody) +dateText+ "\n";

 arrayAdapter.add(str);

 } while (smsInboxCursor.moveToNext());

 }

 public void updateList(final String smsMessage) {

 arrayAdapter.insert(smsMessage, 0);

 arrayAdapter.notifyDataSetChanged();

 }

 public void onItemClick(AdapterView<?> parent, View view, int pos, long id) {

 try {

 String[] smsMessages = smsMessagesList.get(pos).split("\n");

 String address = smsMessages[0];

 String smsMessage = "";

 for (int i = 1; i < smsMessages.length; ++i) {

 smsMessage += smsMessages[i];

 }

 String smsMessageStr = address + "\n";

 smsMessageStr += smsMessage;

 Toast.makeText(this, smsMessageStr, Toast.LENGTH\_SHORT).show();

 } catch (Exception e) {

 e.printStackTrace();

 }

 }

 public void goToCompose(View view) {

 Intent intent = new Intent(ReceiveSmsActivity.this, SendSmsActivity.class);

 startActivity(intent);

 }

}

smsReceiverBroadast.java

import android.content.BroadcastReceiver;

import android.content.Context;

import android.content.Intent;

import android.os.Bundle;

import android.telephony.SmsMessage;

import android.widget.Toast;

import java.text.SimpleDateFormat;

import java.util.Date;

public class SmsBroadcastReceiver extends BroadcastReceiver {

 public static final String SMS\_BUNDLE = "pdus";

 public void onReceive(Context context, Intent intent) {

 Bundle intentExtras = intent.getExtras();

 if (intentExtras != null) {

 Object[] sms = (Object[]) intentExtras.get(SMS\_BUNDLE);

 String smsMessageStr = "";

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

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

 String smsBody = smsMessage.getMessageBody().toString();

 String address = smsMessage.getOriginatingAddress();

 long timeMillis = smsMessage.getTimestampMillis();

 Date date = new Date(timeMillis);

 SimpleDateFormat format = new SimpleDateFormat("dd/MM/yy");

 String dateText = format.format(date);

 smsMessageStr += address +" at "+"\t"+ dateText + "\n";

 smsMessageStr += smsBody + "\n";

 }

 Toast.makeText(context, smsMessageStr, Toast.LENGTH\_SHORT).show();

 //this will update the UI with message

 ReceiveSmsActivity inst = ReceiveSmsActivity.instance();

 inst.updateList(smsMessageStr);

 }

 }

}

Manifest file:

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

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

 package="com.javapapers.android.androidsmsapp">

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

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

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

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

 <application

 android:allowBackup="true"

 android:icon="@mipmap/ic\_launcher"

 android:label="@string/app\_name"

 android:theme="@style/AppTheme">

 <activity

 android:name=".MainActivity"

 android:label="@string/app\_name">

 <intent-filter>

 <action android:name="android.intent.action.MAIN" />

 <category android:name="android.intent.category.LAUNCHER" />

 </intent-filter>

 </activity>

 <activity

 android:name=".ReceiveSmsActivity"

 android:label="@string/app\_name"></activity>

 <activity

 android:name=".SendSmsActivity"

 android:label="@string/app\_name"></activity>

 <receiver

 android:name=".SmsBroadcastReceiver"

 android:exported="true">

 <intent-filter android:priority="999">

 <action android:name="android.provider.Telephony.SMS\_RECEIVED" />

 </intent-filter>

 </receiver>

 </application>

</manifest>