***Main Activity***

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

**<LinearLayout android:layout\_height="match\_parent"**

**android:layout\_width="match\_parent"**

**xmlns:tools="http://schemas.android.com/tools"**

**android:orientation="horizontal"**

**tools:context=".MainActivity"**

**xmlns:android="http://schemas.android.com/apk/res/android">**

**<fragment**

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

**android:layout\_weight="1"**

**class="edu.eval.evaluation2.Fragment1"**

**android:id="@+id/fragment1"**

**android:layout\_width="match\_parent" />**

**<FrameLayout**

**android:id="@+id/container1"**

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

**android:layout\_weight="1"**

**android:layout\_width="match\_parent" />**

**<fragment**

**android:id="@+id/fragment3"**

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

**android:layout\_weight="1"**

**class="edu.eval.evaluation2.Fragment3"**

**android:layout\_width="match\_parent" />**

**</LinearLayout>**

**package** edu.eval.evaluation2;

**import** androidx.appcompat.app.AppCompatActivity;

**import** androidx.fragment.app.Fragment;

**import** androidx.fragment.app.FragmentManager;

**import** androidx.fragment.app.FragmentTransaction;

**import** android.os.Bundle;

**import** android.util.Log;

**public class** MainActivity **extends** AppCompatActivity **implements** LoadComm,IntentInterface {

Fragment **fragment2**,**fragment3**;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**fragment2**=(Fragment)**new** Fragment2();

**fragment3**=(Fragment)**new** Fragment3();

}

@Override

**public void** connectMain() {

FragmentManager fragmentManager=getSupportFragmentManager();

FragmentTransaction fragmentTransaction=fragmentManager.beginTransaction();

fragmentTransaction.replace(R.id.***container1***, **fragment2**);

fragmentTransaction.commit();

}

@Override

**protected void** onStart() {

**super**.onStart();

}

@Override

**public void** sms(String number, String name) {

FragmentManager fragmentManager=getSupportFragmentManager();

Fragment3 fragment3= (Fragment3)fragmentManager.findFragmentById(R.id.***fragment3***);

fragment3.changeData(number,name);

}

}

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

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

**xmlns:tools="http://schemas.android.com/tools"**

**android:layout\_width="match\_parent"**

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

**android:gravity="center"**

**tools:context=".Fragment1"**>

*<!--* ***TODO: Update blank fragment layout*** *-->*

<**Button**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:text="LoadContacts"**

**android:id="@+id/button"**

**android:layout\_gravity="center|center\_horizontal"**/>

</**LinearLayout**>

**package** edu.eval.evaluation2;

**import** android.os.Bundle;

**import** android.view.LayoutInflater;

**import** android.view.View;

**import** android.view.ViewGroup;

**import** android.widget.Button;

**import** androidx.fragment.app.Fragment;

**public class** Fragment1 **extends** Fragment {

Button **button**;

**public** Fragment1() {

*// Required empty public constructor*

}

@Override

**public** View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

*// Inflate the layout for this fragment*

View view= inflater.inflate(R.layout.***fragment\_fragment1***, container, **false**);

**button**=view.findViewById(R.id.***button***);

**button**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

LoadComm loadComm=(LoadComm)getActivity();

loadComm.connectMain();

}

});

**return** view;

}

}

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

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

**xmlns:tools="http://schemas.android.com/tools"**

**android:layout\_width="match\_parent"**

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

**tools:context=".Fragment2"**>

*<!--* ***TODO: Update blank fragment layout*** *-->*

<**ListView**

**android:layout\_width="match\_parent"**

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

**android:id="@+id/lv"**/>

</**LinearLayout**>

**package** edu.eval.evaluation2;

**import** android.content.ContentResolver;

**import** android.content.Context;

**import** android.content.Intent;

**import** android.database.Cursor;

**import** android.net.Uri;

**import** android.os.Bundle;

**import** android.provider.ContactsContract;

**import** android.view.ContextMenu;

**import** android.view.LayoutInflater;

**import** android.view.MenuInflater;

**import** android.view.MenuItem;

**import** android.view.View;

**import** android.view.ViewGroup;

**import** android.widget.AdapterView;

**import** android.widget.ListView;

**import** android.widget.SimpleAdapter;

**import** android.widget.TextView;

**import** android.widget.Toast;

**import** androidx.fragment.app.Fragment;

**import** java.util.ArrayList;

**import** java.util.HashMap;

**import** java.util.List;

**import** java.util.Map;

**public class** Fragment2 **extends** Fragment {

IntentInterface **intentInterface**;

ListView **lv**;

String **number**,**name**;

**int pos**=0;

MenuInflater **menuInflater**;

List<Map<String, String>> **list** = **new** ArrayList<>();

HashMap<String,String> **map** ;

List<String> **tempList**=**new** ArrayList<String>();

**public** Fragment2() {

*// Required empty public constructor*

}

@Override

**public** View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

*// Inflate the layout for this fragment*

View view= inflater.inflate(R.layout.***fragment\_fragment2***, container, **false**);

**lv**=view.findViewById(R.id.***lv***);

ContentResolver cr = getActivity().getContentResolver();

Cursor c = cr.query(ContactsContract.CommonDataKinds.Phone.***CONTENT\_URI***, **null**, **null**, **null**, **null**);

**map** = **new** HashMap<String, String>();

**map**.put(**"numbers"**, **"7339065577"**);

**map**.put(**"contacts"**,**"Test Number"**);

**tempList**.add(**"7339065577"**);

**list**.add(**map**);

**if** (c.moveToFirst()) {

**do** {

*// numbers.add(c.getString(c.getColumnIndex(ContactsContract.CommonDataKinds.Phone.NUMBER)));*

*// contacts.add(c.getString((c.getColumnIndex(ContactsContract.CommonDataKinds.Phone.DISPLAY\_NAME))));*

**map** = **new** HashMap<String, String>();

**map**.put(**"numbers"**, c.getString(c.getColumnIndex(ContactsContract.CommonDataKinds.Phone.***NUMBER***)));

**map**.put(**"contacts"**, c.getString((c.getColumnIndex(ContactsContract.CommonDataKinds.Phone.***DISPLAY\_NAME***))));

**tempList**.add(c.getString(c.getColumnIndex(ContactsContract.CommonDataKinds.Phone.***NUMBER***)));

**list**.add(**map**);

} **while** (c.moveToNext());

}

String [] from = {**"contacts"**, **"numbers"**};

**int** [] to = {android.R.id.***text1***,

android.R.id.***text2***};

SimpleAdapter ad = **new** SimpleAdapter(getActivity(), **list**,android.R.layout.***simple\_list\_item\_2***, from,to);

**lv**.setAdapter(ad);

registerForContextMenu(**lv**);

**intentInterface**=(IntentInterface)getActivity();

**lv**.setOnItemClickListener(**new** AdapterView.OnItemClickListener() {

@Override

**public void** onItemClick(AdapterView<?> adapterView, View view, **int** i, **long** l) {

**pos**=i;

**name**=**list**.get(**pos**).get((Object)**"numbers"**);

**number**=**list**.get(**pos**).get((Object)**"contacts"**);

**intentInterface**.sms(**name**,**number**);

Toast.*makeText*(getActivity(),i+**""**,Toast.***LENGTH\_SHORT***).show();

}

});

*// lv.setOnItemLongClickListener(new AdapterView.OnItemLongClickListener() {*

*// @Override*

*// public boolean onItemLongClick(AdapterView<?> adapterView, View view, int i, long l) {*

*// pos=i;*

*// name=list.get(pos).get((Object)"numbers");*

*// number=list.get(pos).get((Object)"contacts");*

*// intentInterface.sms(name,number);*

*// return false;*

*// }*

*// });*

**return** view;

}

@Override

**public void** onCreateContextMenu(ContextMenu menu, View v, ContextMenu.ContextMenuInfo menuInfo) {

**super**.onCreateContextMenu(menu, v, menuInfo);

**menuInflater**=getActivity().getMenuInflater();

**menuInflater**.inflate(R.menu.***mainmenu***,menu);

}

@Override

**public boolean** onContextItemSelected(MenuItem item) {

**if**(item.getItemId()==R.id.***call***)

{

**number**=**list**.get(**pos**).get((Object)**"numbers"**);

Intent intent=**new** Intent(Intent.***ACTION\_DIAL***,Uri.*parse*(**"tel:"**+**number**));

startActivity(intent);

}

**else if**(item.getItemId()==R.id.***sms***){

*// name=list.get(pos).get((Object)"numbers");*

*// number=list.get(pos).get((Object)"contacts");*

**intentInterface**.sms(**name**,**number**);

}

**return super**.onContextItemSelected(item);

}

}

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

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

**xmlns:tools="http://schemas.android.com/tools"**

**android:layout\_width="match\_parent"**

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

**android:orientation="vertical"**

**tools:context=".Fragment3">**

***<!-- TODO: Update blank fragment layout -->***

**<EditText**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:id="@+id/number"**

**android:text="" />**

**<EditText**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:id="@+id/message"**

**android:text="" />**

**<Button**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:id="@+id/button"/>**

**</LinearLayout>**

**package** edu.eval.evaluation2;

**import** android.content.Context;

**import** android.net.Uri;

**import** android.os.Build;

**import** android.os.Bundle;

**import** android.telephony.SmsManager;

**import** android.view.LayoutInflater;

**import** android.view.View;

**import** android.view.ViewGroup;

**import** android.widget.Button;

**import** android.widget.EditText;

**import** androidx.fragment.app.Fragment;

**public class** Fragment3 **extends** Fragment {

EditText **et1**,**et2**;

Button **button**;

String **numbervar**;

@Override

**public** View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

*// Inflate the layout for this fragment*

View view= inflater.inflate(R.layout.***fragment\_fragment3***, container, **false**);

**et1**=view.findViewById(R.id.***number***);

**et2**=view.findViewById(R.id.***message***);

**button**=view.findViewById(R.id.***button***);

**button**.setOnClickListener(**new** View.OnClickListener() {

@Override

**public void** onClick(View view) {

SmsManager sms = SmsManager.*getDefault*();

sms.sendTextMessage(**numbervar**, **null**, **et2**.getText().toString(), **null**, **null**);

}

});

**return** view;

}

**public void** changeData(String number,String name)

{

**et1**.setText(number);

**numbervar**=number;

}

}

**package** edu.eval.evaluation2;

**import** android.content.BroadcastReceiver;

**import** android.content.Context;

**import** android.content.Intent;

**import** android.os.Build;

**import** android.os.Bundle;

**import** android.provider.Telephony;

**import** android.telephony.SmsMessage;

**import** android.widget.Toast;

**public class** MyReceiver **extends** BroadcastReceiver {

@Override

**public void** onReceive(Context context, Intent intent) {

Bundle bundle = intent.getExtras();

SmsMessage smsMessage;

**if** (Build.VERSION.***SDK\_INT*** >= 19) { *//KITKAT*

SmsMessage[] msgs =

Telephony.Sms.Intents.*getMessagesFromIntent*(intent);

smsMessage = msgs[0];

}

**else** {

Object pdus[] =

(Object[]) bundle.get(**"pdus"**);

smsMessage = SmsMessage.*createFromPdu*((**byte**[]) pdus[0]);

}

String messageBody =

smsMessage.getMessageBody();

Toast.*makeText*

(context.getApplicationContext(),

**"Msg from BroadcastReceiver - "** +messageBody,Toast.***LENGTH\_LONG***).show();

}

}

Manifest

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

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

**package="edu.eval.evaluation2"**>

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

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

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

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

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

<**application**

**android:allowBackup="true"**

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

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

**android:roundIcon="@mipmap/ic\_launcher\_round"**

**android:supportsRtl="true"**

**android:theme="@style/AppTheme"**>

<**receiver**

**android:name=".MyReceiver"**

**android:enabled="true"**

**android:exported="true"**>

<**intent-filter**>

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

</**intent-filter**>

</**receiver**>

<**activity android:name=".MainActivity"**>

<**intent-filter**>

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

<**action android:name="android.intent.action.VIEW"**/>

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

</**intent-filter**>

</**activity**>

</**application**>

</**manifest**>