Practical-9 Create an android application to list all the contacts stored in device into a list view.

import android.Manifest;

import android.content.pm.PackageManager;

import android.database.Cursor;

import android.provider.ContactsContract;

import android.support.v4.app.ActivityCompat;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.ArrayAdapter;

import android.widget.Button;

import android.widget.ListView;

import android.widget.Toast;

import java.util.ArrayList;

public class MainActivity extends AppCompatActivity {

ListView listView ;

ArrayList<String> StoreContacts ;

ArrayAdapter<String> arrayAdapter ;

Cursor cursor ;

String name, phonenumber ;

public static final int RequestPermissionCode = 1 ;

Button button;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

listView = (ListView)findViewById(R.id.listview1);

button = (Button)findViewById(R.id.button1);

StoreContacts = new ArrayList<String>();

EnableRuntimePermission();

button.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

GetContactsIntoArrayList();

arrayAdapter = new ArrayAdapter<String>(

MainActivity.this,

R.layout.contact\_items\_listview,

R.id.textView, StoreContacts

);

listView.setAdapter(arrayAdapter);

}

});

}

public void GetContactsIntoArrayList(){

cursor = getContentResolver().query(ContactsContract.CommonDataKinds.Phone.CONTENT\_URI, null,null, null, null);

while (cursor.moveToNext()) {

name = cursor.getString(cursor.getColumnIndex(ContactsContract.CommonDataKinds.Phone.DISPLAY\_NAME));

phonenumber = cursor.getString(cursor.getColumnIndex(ContactsContract.CommonDataKinds.Phone.NUMBER));

StoreContacts.add(name + " " + ":" + " " + phonenumber);

}

cursor.close();

}

public void EnableRuntimePermission(){

if (ActivityCompat.shouldShowRequestPermissionRationale(

MainActivity.this,

Manifest.permission.READ\_CONTACTS))

{

Toast.makeText(MainActivity.this,"CONTACTS permission allows us to Access CONTACTS app", Toast.LENGTH\_LONG).show();

} else {

ActivityCompat.requestPermissions(MainActivity.this,new String[]{

Manifest.permission.READ\_CONTACTS}, RequestPermissionCode);

}

}

@Override

public void onRequestPermissionsResult(int RC, String per[], int[] PResult) {

switch (RC) {

case RequestPermissionCode:

if (PResult.length > 0 && PResult[0] == PackageManager.PERMISSION\_GRANTED) {

Toast.makeText(MainActivity.this,"Permission Granted, Now your application can access CONTACTS.", Toast.LENGTH\_LONG).show();

} else {

Toast.makeText(MainActivity.this,"Permission Canceled, Now your application cannot access CONTACTS.", Toast.LENGTH\_LONG).show();

}

break;

}

}

}