**Cycle -3**

1. design a simple login page using relative layout.

**Program**

<RelativeLayout

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

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

android:id="@+id/activity\_main"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:background="#00CC99">

<EditText

android:id="@+id/text1"

android:hint="Username"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="150dp"

android:layout\_marginLeft="18dp"

android:layout\_marginRight="18dp"

android:padding="8dp"

android:background="#fff" />

<EditText

android:id="@+id/text2"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginLeft="18dp"

android:layout\_marginRight="18dp"

android:padding="8dp"

android:background="#fff"

android:hint="Password"

android:layout\_marginTop="12dp"

android:layout\_below="@+id/text1" />

<Button

android:id="@+id/b1"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Login"

android:textColor="#00CC99"

android:layout\_below="@+id/text2"

android:layout\_marginTop="17dp"

android:layout\_alignStart="@+id/text2"

android:layout\_alignEnd="@+id/text2" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:id="@+id/text3"

android:textColor="#fff"

android:text="Not a member?Sign up now"

android:layout\_below="@+id/b1"

android:layout\_centerHorizontal="true"

android:layout\_marginTop="34dp" />

</RelativeLayout>

1. array adapter using list view.

# Program

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

<RelativeLayout

    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=".MainActivity">

    <ListView

        android:id="@+id/simpleListView"

        android:layout\_width="match\_parent"

        android:layout\_height="wrap\_content" />

</RelativeLayout>

2nd xml

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

<LinearLayout

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

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical">

<TextView

android:id="@+id/itemTextView"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_gravity="center" />

</LinearLayout>

Java

import android.os.Bundle;

import android.widget.ArrayAdapter;

import android.widget.ListView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

ListView simpleListView;

// array objects

String courseList[] = {"C-Programming", "Data Structure", "Database", "Python",

"Java", "Operating System", "Compiler Design", "Android Development"};

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

simpleListView = (ListView) findViewById(R.id.simpleListView);

ArrayAdapter<String> arrayAdapter = new ArrayAdapter<String>(this,

R.layout.item\_view, R.id.itemTextView, courseList);

simpleListView.setAdapter(arrayAdapter);

}

}

1. develop an application that toggle image using frame format.

**Program**

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

android:layout\_width="fill\_parent"

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

<ImageView

android:id="@+id/imageview"

android:layout\_width="fill\_parent"

android:layout\_height="fill\_parent"

android:scaleType="fitCenter"

android:src="@drawable/piq1" />

<Button

android:id="@+id/next"

android:layout\_width="wrap\_content"

android:layout\_height="30dp"

android:layout\_marginBottom="15dp"

android:layout\_marginRight="10dp"

android:layout\_gravity="bottom|right"

android:paddingTop="2dp"

android:paddingBottom="2dp"

android:background="@drawable/buttonback"

android:textColor="#000000"

android:text="Next" />

</FrameLayout>

Javva

import android.app.Activity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.ImageView;

public class Piqlout extends Activity {

@Override

protected void onCreate(Bundle savedInstanceState) {

// TODO Auto-generated method stub

super.onCreate(savedInstanceState);

setContentView(R.layout.piq);

Button next= (Button) findViewById(R.id.next);

if (next.getText().equals("Next")) {

next.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

// TODO Auto-generated method stub

ImageView img = (ImageView) findViewById(R.id.imageview);

img.setImageResource(R.drawable.piq2);

Button next= (Button) findViewById(R.id.next);

next.setText("Prev");

}

});

}

if (next.getText().equals("Prev")){

next.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

// TODO Auto-generated method stub

ImageView img = (ImageView) findViewById(R.id.imageview);

img.setImageResource(R.drawable.piq1);

Button next= (Button) findViewById(R.id.next);

next.setText("Next");

}

});

}

}

1. demonstrate activity life cycle.

**Program**

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

<android.support.constraint.ConstraintLayout 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="example.javatpoint.com.activitylifecycle.MainActivity">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Hello World!"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

</android.support.constraint.ConstraintLayout>

Java

package example.javatpoint.com.activitylifecycle;

import android.app.Activity;

import android.os.Bundle;

import android.util.Log;

public class MainActivity extends Activity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

Log.d("lifecycle","onCreate invoked");

}

@Override

protected void onStart() {

super.onStart();

Log.d("lifecycle","onStart invoked");

}

@Override

protected void onResume() {

super.onResume();

Log.d("lifecycle","onResume invoked");

}

@Override

protected void onPause() {

super.onPause();

Log.d("lifecycle","onPause invoked");

}

@Override

protected void onStop() {

super.onStop();

Log.d("lifecycle","onStop invoked");

}

@Override

protected void onRestart() {

super.onRestart();

Log.d("lifecycle","onRestart invoked");

}

@Override

protected void onDestroy() {

super.onDestroy();

Log.d("lifecycle","onDestroy invoked");

}

}

1. taking camera and saving the picture.

**Program**

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

package="com.chhavi.uploadingandviewimage"

android:versionCode="1"

android:versionName="1.0" >

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

<uses-feature android:name="android.hardware.camera" />

<uses-feature android:name="android.hardware.camera.autofocus" />

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

<uses-sdk

android:minSdkVersion="7"

android:targetSdkVersion="16" />

<application

android:allowBackup="true"

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

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

android:theme="@style/AppTheme" >

<activity

android:name="com.chhavi.uploadingandviewimage.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>

</application>

</manifest>

**activity\_main**

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

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

android:id="@+id/LinearLayout1"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

android:padding="10dp" >

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:gravity="center"

android:padding="5dp" >

<Button

android:id="@+id/btnSelectPhoto"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Select Photo" />

</LinearLayout>

<LinearLayout

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

android:padding="10dp" >

<ImageView

android:id="@+id/viewImage"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:src="@drawable/camera" />

</LinearLayout>

</LinearLayout>

MainActivity

package com.chhavi.uploadingandviewimage;

import android.app.AlertDialog;

import android.content.DialogInterface;

import android.content.Intent;

import android.database.Cursor;

import android.graphics.Bitmap;

import android.graphics.BitmapFactory;

import android.net.Uri;

import android.os.Bundle;

import android.app.Activity;

import android.os.Environment;

import android.provider.MediaStore;

import android.util.Log;

import android.view.Menu;

import android.view.View;

import android.widget.Button;

import android.widget.ImageView;

import java.io.File;

import java.io.FileNotFoundException;

import java.io.FileOutputStream;

import java.io.IOException;

import java.io.OutputStream;

public class MainActivity extends Activity {

ImageView viewImage;

Button b;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

b=(Button)findViewById(R.id.btnSelectPhoto);

viewImage=(ImageView)findViewById(R.id.viewImage);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

selectImage();

}

});

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds options to the action bar if it is present.

getMenuInflater().inflate(R.menu.main, menu);

return true;

}

private void selectImage() {

final CharSequence[] options = { "Take Photo", "Choose from Gallery","Cancel" };

AlertDialog.Builder builder = new AlertDialog.Builder(MainActivity.this);

builder.setTitle("Add Photo!");

builder.setItems(options, new DialogInterface.OnClickListener() {

@Override

public void onClick(DialogInterface dialog, int item) {

if (options[item].equals("Take Photo"))

{

Intent intent = new Intent(MediaStore.ACTION\_IMAGE\_CAPTURE);

File f = new File(android.os.Environment.getExternalStorageDirectory(), "temp.jpg");

intent.putExtra(MediaStore.EXTRA\_OUTPUT, Uri.fromFile(f));

startActivityForResult(intent, 1);

}

else if (options[item].equals("Choose from Gallery"))

{

Intent intent = new Intent(Intent.ACTION\_PICK,android.provider.MediaStore.Images.Media.EXTERNAL\_CONTENT\_URI);

startActivityForResult(intent, 2);

}

else if (options[item].equals("Cancel")) {

dialog.dismiss();

}

}

});

builder.show();

}

@Override

protected void onActivityResult(int requestCode, int resultCode, Intent data) {

super.onActivityResult(requestCode, resultCode, data);

if (resultCode == RESULT\_OK) {

if (requestCode == 1) {

File f = new File(Environment.getExternalStorageDirectory().toString());

for (File temp : f.listFiles()) {

if (temp.getName().equals("temp.jpg")) {

f = temp;

break;

}

}

try {

Bitmap bitmap;

BitmapFactory.Options bitmapOptions = new BitmapFactory.Options();

bitmap = BitmapFactory.decodeFile(f.getAbsolutePath(),

bitmapOptions);

viewImage.setImageBitmap(bitmap);

String path = android.os.Environment

.getExternalStorageDirectory()

+ File.separator

+ "Phoenix" + File.separator + "default";

f.delete();

OutputStream outFile = null;

File file = new File(path, String.valueOf(System.currentTimeMillis()) + ".jpg");

try {

outFile = new FileOutputStream(file);

bitmap.compress(Bitmap.CompressFormat.JPEG, 85, outFile);

outFile.flush();

outFile.close();

} catch (FileNotFoundException e) {

e.printStackTrace();

} catch (IOException e) {

e.printStackTrace();

} catch (Exception e) {

e.printStackTrace();

}

} catch (Exception e) {

e.printStackTrace();

}

} else if (requestCode == 2) {

Uri selectedImage = data.getData();

String[] filePath = { MediaStore.Images.Media.DATA };

Cursor c = getContentResolver().query(selectedImage,filePath, null, null, null);

c.moveToFirst();

int columnIndex = c.getColumnIndex(filePath[0]);

String picturePath = c.getString(columnIndex);

c.close();

Bitmap thumbnail = (BitmapFactory.decodeFile(picturePath));

Log.w("path of image from gallery......\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*.........", picturePath+"");

viewImage.setImageBitmap(thumbnail);

}

}

}

}