Name : Sanket Bhikoba Deshmane

Roll No : 332012

GR No : 21810492

Subject : Mobile Application Devalopment

....

Assignment 3

Aim : Create application for demonstration of android activity life cycle 2
Create Registration page to demonstration of Basic widgets available in
android.

Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout 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"
    android:paddingLeft="30dp"
    android:paddingRight="30dp"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:text="REGISTRATION"
        android:id="@+id/registration"
        android:fontFamily="serif"
        android:textSize="35dp"
        android:layout_marginTop="10dp"
        android:textColor="#0A86F3"></TextView>

    <ImageView
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="10dp"
        android:layout_below="@+id/registration"
        android:id="@+id/image1"
        android:src="@drawable/ic_baseline_account_box_24"
        ></ImageView>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginTop="20dp"
        android:drawableLeft="@drawable/ic_baseline_add_circle_outline_24"
```

```xml
        android:hint="First Name"
        android:layout_below="@+id/image1"
        android:drawablePadding="20dp"
        android:id="@+id/fname"
        android:singleLine="true"></EditText>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/fname"
        android:layout_marginTop="20dp"
        android:hint="Last Name"
        android:drawablePadding="20dp"
        android:id="@+id/lname"
        android:drawableLeft="@drawable/ic_baseline_add_circle_outline_24"
        android:singleLine="true"></EditText>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/lname"
        android:layout_marginTop="20dp"
        android:hint="Mobile No"
        android:drawablePadding="20dp"
        android:id="@+id/mobile"
        android:drawableLeft="@drawable/ic_baseline_add_ic_call_24"
        android:singleLine="true"></EditText>
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/mobile"
        android:layout_marginTop="20dp"
        android:hint="Email Adress"
        android:drawablePadding="20dp"
        android:id="@+id/email"
        android:drawableLeft="@drawable/ic_baseline_mail_outline_24"
        android:singleLine="true"></EditText>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/mobile"
        android:layout_marginTop="20dp"
        android:hint="Email Adress"
        android:drawablePadding="20dp"
        android:id="@+id/email"
        android:drawableLeft="@drawable/ic_baseline_mail_outline_24"
        android:singleLine="true"></EditText>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/email"
        android:layout_marginTop="20dp"
        android:hint="Username"
        android:drawablePadding="20dp"
        android:id="@+id/user"
        android:drawableLeft="@drawable/ic_baseline_supervised_user_circle_24"
        android:singleLine="true"></EditText>
```

```xml
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/user"
        android:layout_marginTop="20dp"
        android:hint="Password"
        android:drawablePadding="20dp"
        android:id="@+id/pwd"
        android:drawableLeft="@drawable/ic_baseline_check_box_24"
        android:singleLine="true"></EditText>

    <Button
        android:layout_width="100dp"
        android:textColor="#FFF"
        android:layout_marginTop="20dp"
        android:layout_centerHorizontal="true"
        android:layout_height="wrap_content"
        android:layout_below="@+id/pwd"
        android:text="SUBMIT"
        android:background="#0C1E8F"
        android:id="@+id/reg"
        ></Button>

</RelativeLayout>
```

main_activity.java

```java
package com.example.login;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    EditText f_name;
    EditText l_name;
    EditText mob;
    EditText email;
    EditText user;
    EditText password;
    Button reg;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        Log.d("lifecycle","onCreate invoked");
        Toast.makeText(this, "Activity Created", Toast.LENGTH_SHORT).show();

        f_name = (EditText) findViewById(R.id.fname);
```

```java
        l_name = (EditText) findViewById(R.id.lname);
        mob = (EditText) findViewById(R.id.mobile);
        email = (EditText) findViewById(R.id.email);
        user = (EditText) findViewById(R.id.user);
        password = (EditText) findViewById(R.id.pwd);

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

        reg.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent = new
Intent(MainActivity.this,MainActivity.class);
                if (f_name.getText().toString().trim().length() == 0){
                    f_name.setError("Required!");
                }
                else {
                    if (l_name.getText().toString().trim().length() == 0){
                        l_name.setError("Required!");
                    }
                    else {
                        if (mob.getText().toString().trim().length() == 0){
                            mob.setError("Required!");
                        }
                        else {
                            if (email.getText().toString().trim().length() ==
0){

                                email.setError("Required!");
                            }
                            else {
                                if (user.getText().toString().trim().length() ==
0){

                                    user.setError("Required!");
                                }
                                else {
                                    if
(password.getText().toString().trim().length() == 0){
                                        password.setError("Required!");
                                    }
                                    else {

Toast.makeText(MainActivity.this,"Registered
Successfully",Toast.LENGTH_LONG).show();
                                        startActivity(intent);
                                    }
                                }
                            }
                        }
                    }
                }
            }
        });
    }

    @Override
    protected void onStart() {
        super.onStart();

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

```java
            Toast.makeText(this, "Activity Start", Toast.LENGTH_SHORT).show();
    }


    @Override
    protected void onResume() {
        super.onResume();

        Log.d("lifecycle","onResume Invoked");
        Toast.makeText(this, "Activity Resume", Toast.LENGTH_SHORT).show();
    }

    @Override
    protected void onPause() {
        super.onPause();

        Log.d("lifecycle","onPause Invoked");
        Toast.makeText(this, "Activity Paused", Toast.LENGTH_SHORT).show();
    }

    @Override
    protected void onRestart() {
        super.onRestart();

        Log.d("lifecycle","onRestart Invoked");
        Toast.makeText(this, "Activity Restart", Toast.LENGTH_SHORT).show();
    }

    @Override
    protected void onStop() {
        super.onStop();

        Log.d("lifecycle","onStop Invoked");
        Toast.makeText(this, "Activity Stop", Toast.LENGTH_SHORT).show();
    }

    @Override
    protected void onDestroy() {
        super.onDestroy();

        Log.d("lifecycle","onDestroy Invoked");
        Toast.makeText(this, "Activity Destroyed", Toast.LENGTH_SHORT).show();


    }
}
```
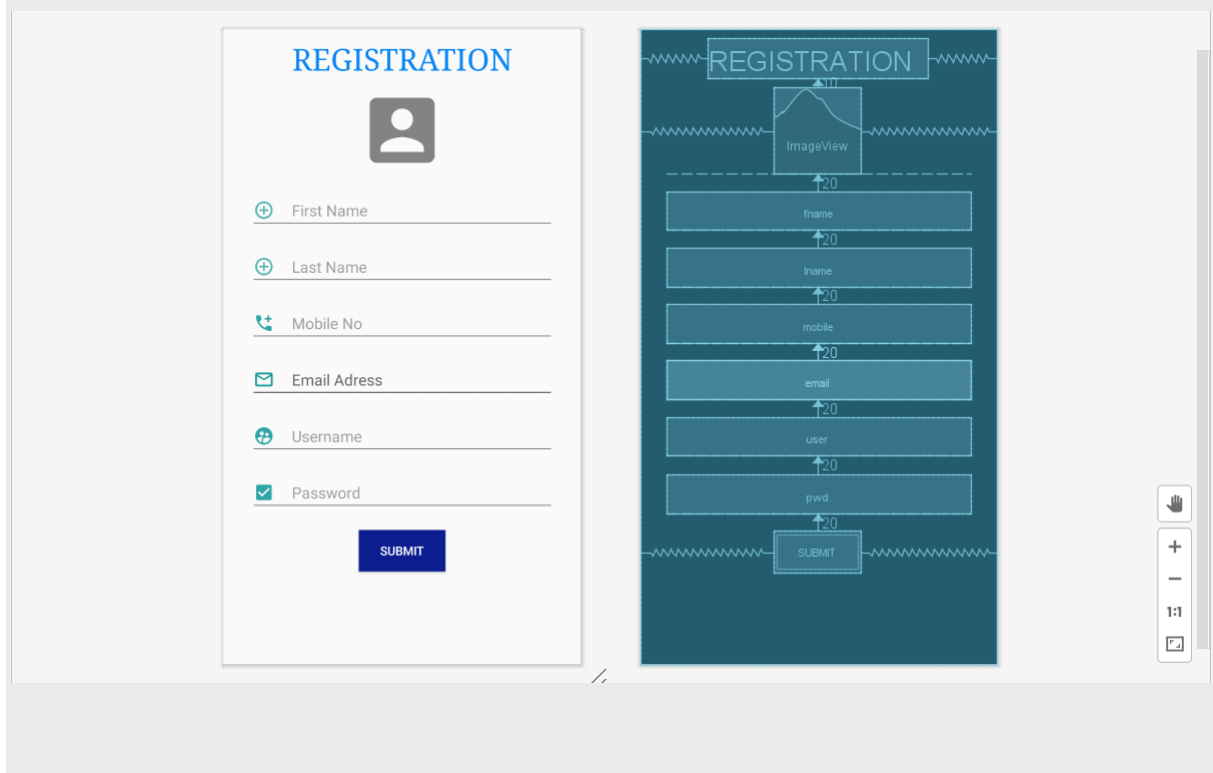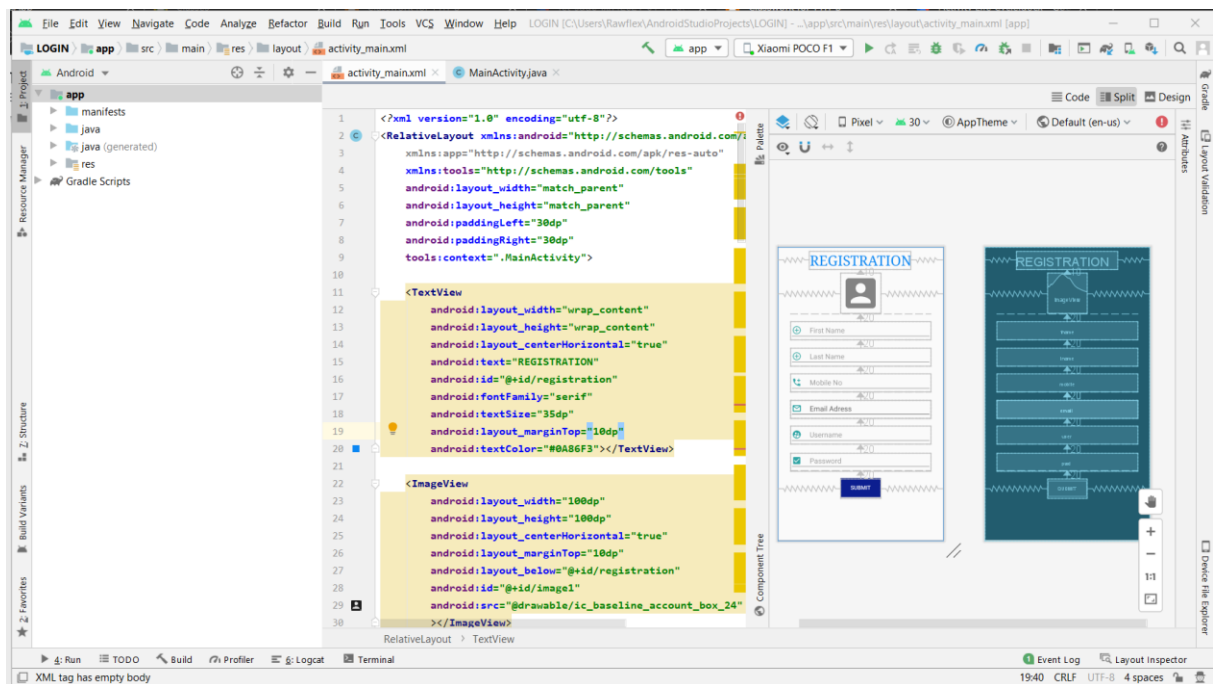
SCREENSHOTS

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/
    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"
    android:paddingLeft="30dp"
    android:paddingRight="30dp"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:text="REGISTRATION"
        android:id="@+id/registration"
        android:fontFamily="serif"
        android:textSize="35dp"
        android:layout_marginTop="10dp"
        android:textColor="#0A86F3"></TextView>

    <ImageView
        android:layout_width="100dp"
        android:layout_height="100dp"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="10dp"
        android:layout_below="@+id/registration"
        android:id="@+id/image1"
        android:src="@drawable/ic_baseline_account_box_24"
        ></ImageView>
```

RelativeLayout > TextView

4: Run   TODO   Build   Profiler   6: Logcat   Terminal

XML tag has empty body

19:40 CRLF UTF-8 4 spaces

REGISTRATION

First Name

Last Name

Mobile No

Email Adress

Username

Password

SUBMIT

LOGIN

REGISTRATION

⊕ SANKET

⊕ DESHMANE

📞⁺ sanket.21810492@viit.ac.in

✉ sanket.21810492@viit.ac.in

👥 sanket

☑ 123456

SUBMIT

LOGIN

REGISTRATION

⊕   First Name

⊕   Last Name

📞⁺   Mobile No

✉   Email Adress

👥   Username

☑   Password

Registered Successfully

SUBMIT