

**EXPERIMENT NO: 05**

**AIM:** Create a Facebook page using RelativeLayout; set properties using .xml file.

**Procedure:*****MainActivity.java***

```
package com.example.s3mca55;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    @Override

    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        // Find the ImageView elements by their IDs
        ImageView facebookView = findViewById(R.id.fbView);
        ImageView likeImgView = findViewById(R.id.likeView);
        ImageView commentImgView = findViewById(R.id.cmmntView);
        ImageView shareImgView = findViewById(R.id.shareView);

        // Set click listeners for the ImageViews
        likeImgView.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                showToast("You clicked the Like button");
            }
        });
    }
}
```

```

    }
});
commentImgView.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        showToast("You clicked the Comment button");
    }
});
shareImgView.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        showToast("You clicked the Share button");
    }
});
}
// Helper method to display a toast message
private void showToast(String message){
    Toast.makeText(this, message, Toast.LENGTH_LONG).show();
}
}

```

### ***activity\_main.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="fill_parent"
    android:layout_height="fill_parent"
    android:paddingLeft="16dp"
    android:paddingRight="16dp" >

```

<ScrollView

```
    android:layout_width="match_parent"  
    android:layout_height="match_parent">
```

<LinearLayout

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:orientation="vertical">
```

<ImageView

```
    android:id="@+id/fbView"  
    android:layout_width="200dp"  
    android:layout_height="80dp"  
    android:layout_gravity="center"  
    android:src="@drawable/f"/>
```

<ImageView

```
    android:id="@+id/imageView6"  
    android:layout_width="match_parent"  
    android:layout_height="281dp"  
    android:src="@drawable/f"/>
```

<androidx.gridlayout.widget.GridLayout

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:layout_marginTop="40dp"  
    app:columnCount="4"  
    app:rowCount="4">
```

<ImageView

```
android:id="@+id/likeView"
android:layout_width="110dp"
android:layout_height="83dp"
app:layout_row="0"
app:layout_column="1"
android:clickable="true"
android:onClick="onLikeClick"
app:layout_gravity="center"
android:src="@drawable/f"/>
```

<ImageView

```
android:id="@+id/cmmntView"
android:layout_width="111dp"
android:layout_height="66dp"
app:layout_row="0"
app:layout_column="2"
app:layout_gravity="center"
android:clickable="true"
android:onClick="onComntClick"

android:src="@drawable/f"/>
```

<ImageView

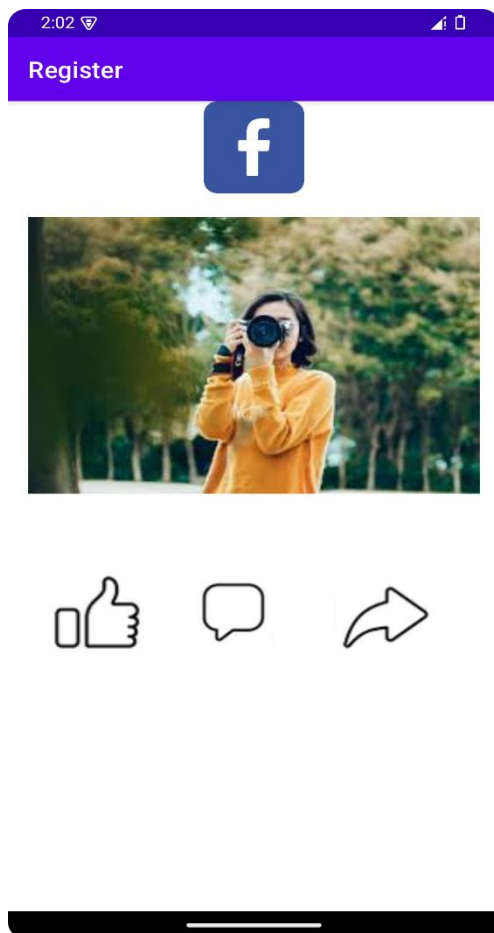
```
android:id="@+id/shareView"
android:layout_width="93dp"
android:layout_height="86dp"
app:layout_row="0"
app:layout_column="3"
app:layout_gravity="center"
android:clickable="true"
android:onClick="onShareClick"
```

```
        android:src="@drawable/f"/>
    </androidx.gridlayout.widget.GridLayout>
```

```
</LinearLayout>
</ScrollView>
```

```
</RelativeLayout>
```

## **OUTPUT:**



## **RESULT:**

The program was executed successfully and the output was verified.

**EXPERIMENT NO: 06**

**AIM:** Develop an application that toggles image using FrameLayout.

**Procedure:*****MainActivity.java***

```
package com.example.s3mca55;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.ImageView;

public class MainActivity extends AppCompatActivity implements View.OnClickListener{
    ImageView i1,i2;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        // Find the ImageView elements by their IDs
        i1= findViewById(R.id.img1);
        i2= findViewById(R.id.img2);
        // Set click listeners for the ImageViews
        i1.setOnClickListener(this);
        i2.setOnClickListener(this);
    }
    public void onClick(View view){
        if(view.getId()==R.id.img1){
            i1.setVisibility(view.GONE);
            i2.setVisibility(view.VISIBLE);
        }
    }
}
```

```

    }
    else{
        i2.setVisibility(view.GONE);
        i1.setVisibility(view.VISIBLE);
    }
}
}
}

```

### ***activity\_main.xml***

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

```

<FrameLayout 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:background="#BDBABA"
    tools:context=".MainActivity">

```

```

<ImageView
    android:id="@+id/img1"
    android:layout_width="427dp"
    android:layout_height="wrap_content"
    android:layout_gravity="left|top"
    android:background="#CACAC8"
    app:srcCompat="@drawable/f" />

```

```

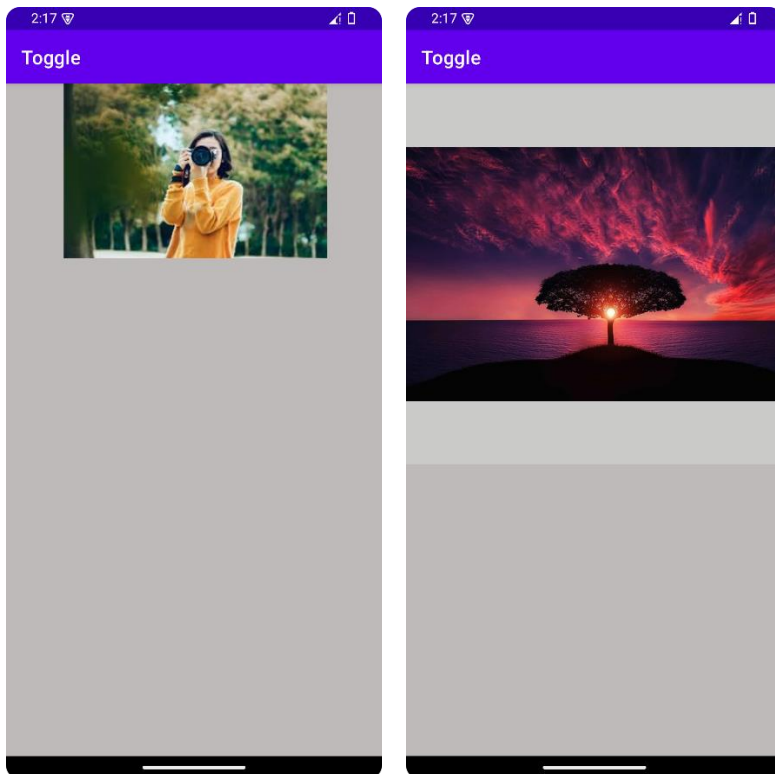
<ImageView
    android:id="@+id/img2"
    android:layout_width="396dp"

```

```
android:layout_height="wrap_content"  
android:layout_gravity="left|top"  
android:visibility="gone"  
app:srcCompat="@drawable/ic_launcher_foreground" />
```

```
</FrameLayout>
```

## **OUTPUT:**



## **RESULT:**

The program was executed successfully and the output was verified.



**EXPERIMENT NO: 07**

**AIM:** Design a registration activity and store registration details in local memory of phone using Intents and SharedPreferences.

**Procedure:*****MainActivity.java***

```
package com.example.s3mca55;

import androidx.appcompat.app.AppCompatActivity;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    private EditText username, email, passwd;
    private Button regbtn;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        username = findViewById(R.id.usernameText);
        email = findViewById(R.id.emailText);
        passwd = findViewById(R.id.passwordText);
        regbtn = findViewById(R.id.registerButton);
```

```

regbtn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        String uname = username.getText().toString();
        String em = email.getText().toString();
        String pwd = passwd.getText().toString();

        //storing using shared preferences...
        SharedPreferences preferences = getSharedPreferences("MyPref", MODE_PRIVATE);
        SharedPreferences.Editor editor = preferences.edit();
        editor.putString("username", uname);
        editor.putString("email", em);
        editor.putString("password", pwd);
        editor.apply();

        Toast.makeText(MainActivity.this, "Registration successful",
        Toast.LENGTH_SHORT).show();

        //start activity using Intent..
        Intent intent = new Intent(MainActivity.this, MainActivity.class);
        startActivity(intent);
    }
});
}
}
}

```

### ***activity\_main.xml***

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

```
<LinearLayout
```

```
    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:orientation="vertical"
android:padding="16dp"
android:gravity="center">
```

```
<EditText
    android:id="@+id/usernameText"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="text"
    android:hint="Username" />
```

```
<EditText
    android:id="@+id/emailText"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textEmailAddress"
    android:hint="Email" />
```

```
<EditText
    android:id="@+id/passwordText"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:ems="10"
    android:inputType="textPassword"
    android:hint="Password" />
```

```
<Button
    android:id="@+id/registerButton"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:text="Register" />
```

```
</LinearLayout>
```

## **OUTPUT:**




Username \_\_\_\_\_

Email \_\_\_\_\_

Password \_\_\_\_\_

REGISTER

 Registration successful



## **RESULT:**

The program was executed successfully and the output was verified.