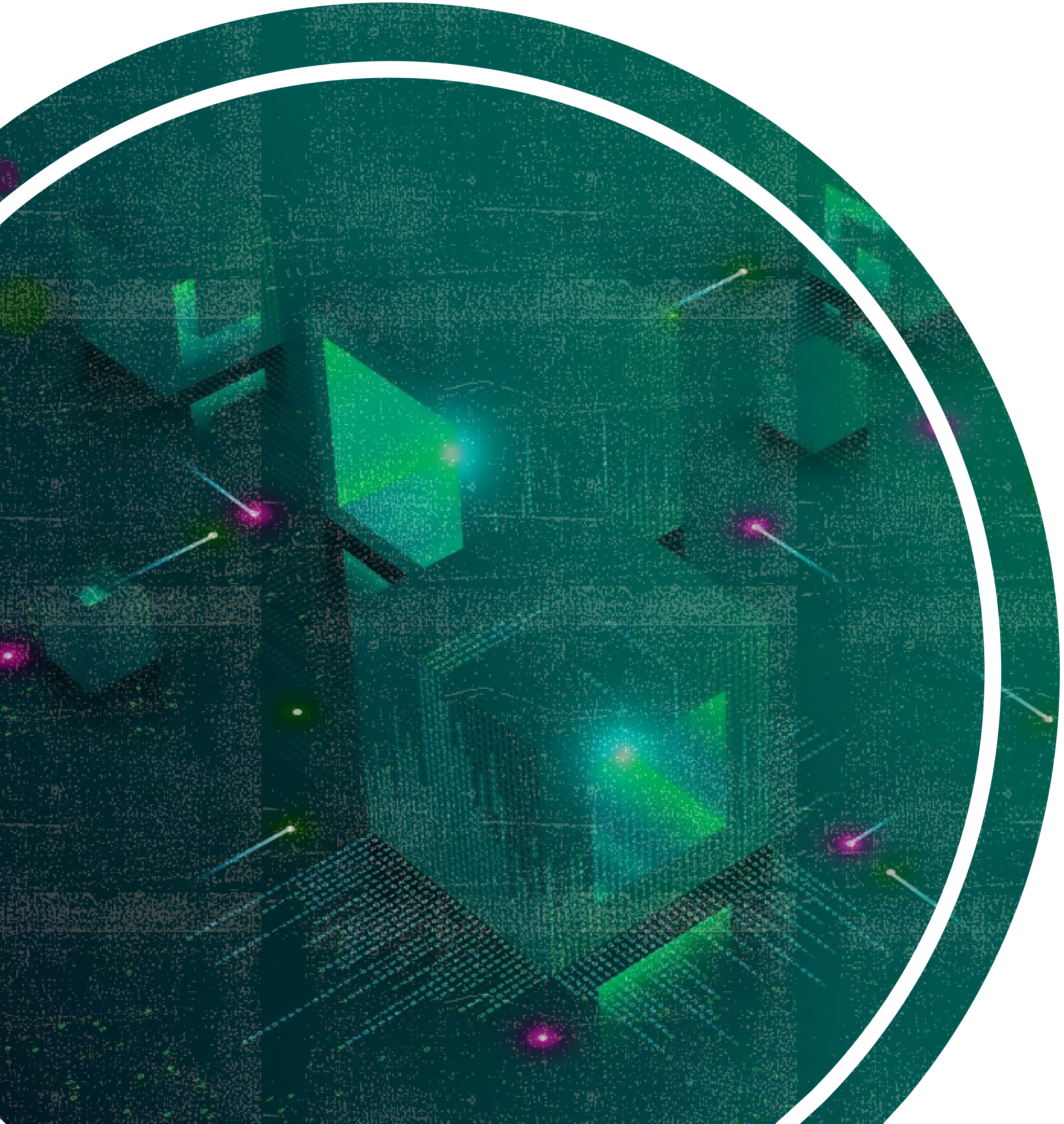
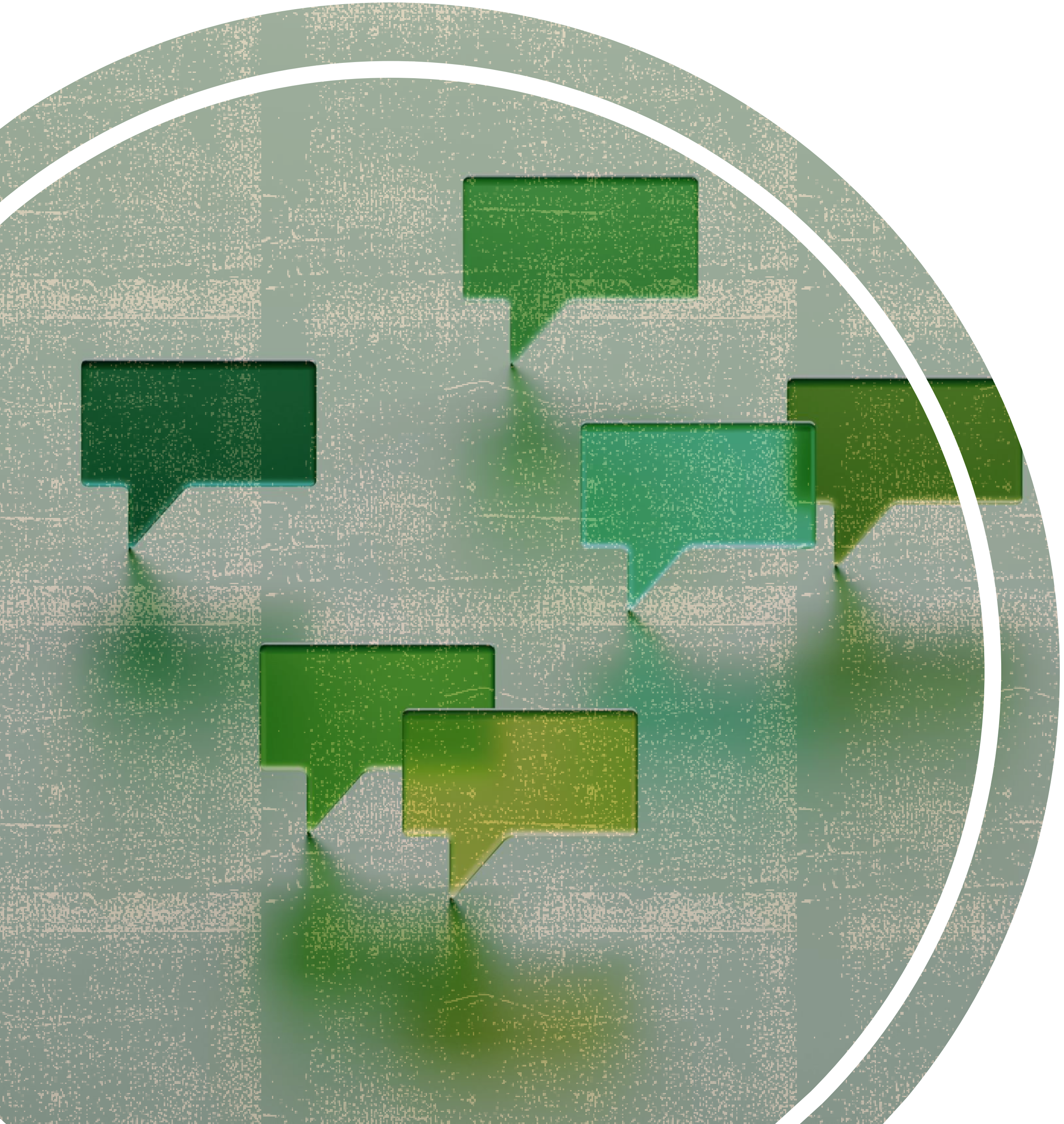
LECTURE # 07

BASIC INTENTS IN ANDROID STUDIO



INTRODUCTION:

- Intents are a fundamental concept in Android development that allow you to navigate between different components of an application or even between different applications on the device. In this lecture, we will cover the basics of intents in Android Studio.



WHAT IS INTENT:

- An Intent is a messaging object that you can use to request an action from another app component. It can be used to start activities, services, and broadcast receivers. Intents can also carry data between components using extras.

TYPES OF INTENT:

Explicit Intents: Used to start a specific component within your application.

Implicit Intents: Used to activate components from other applications on the device.

BASIC COMPONENT OF INTENT:

1. **Action:** Specifies the action to be performed (e.g., ACTION_VIEW, ACTION_SEND).
2. **Data:** The URI or data on which the action should be performed.
3. **Extras:** Additional information passed along with the intent.

CREATE AND USING INTENT IN ANDROID STUDIO:

Creating an Intent:

To create an intent, you can use Intent intent = new Intent(context, TargetActivity.class);.

Passing Data:

You can pass data between activities using extras: intent.putExtra("key", value);.

Starting an Activity:

To start a new activity, use startActivity(intent);.

CREATING SLIDER IN ANDROID STUDIO

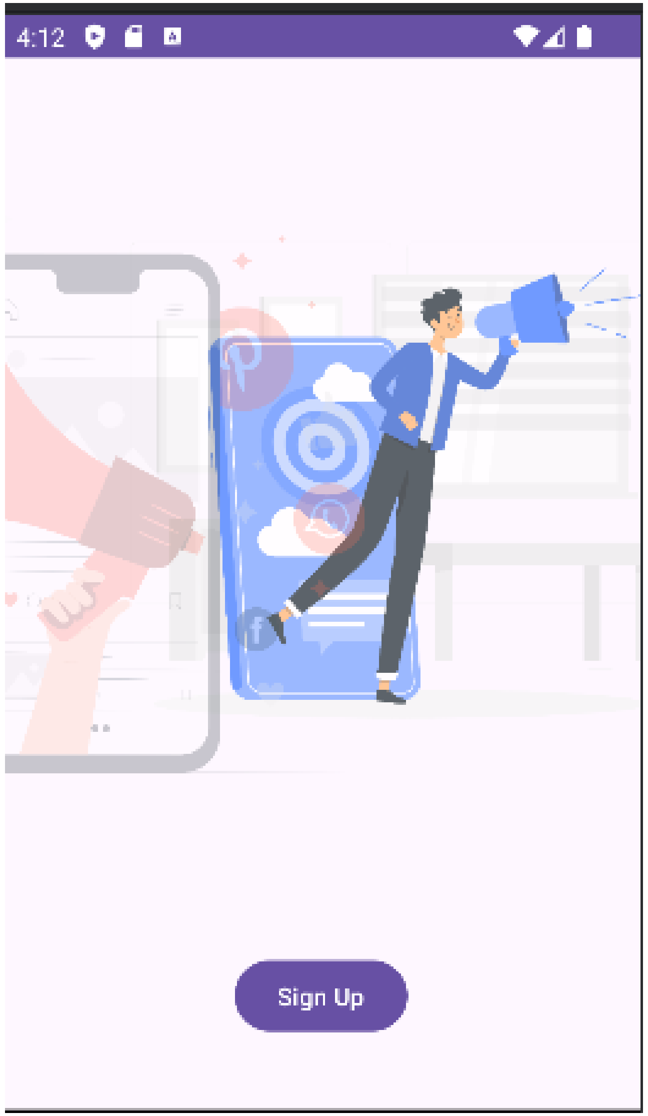
- A View Flipper is a type of layout manager in Android that is used to display multiple views one at a time, with the ability to flip or transition between them. It's often used to create slideshow-like interfaces where different views or images are displayed sequentially, with each view transitioning into the next one.

APPLICATION OF VIEW FLIPPER

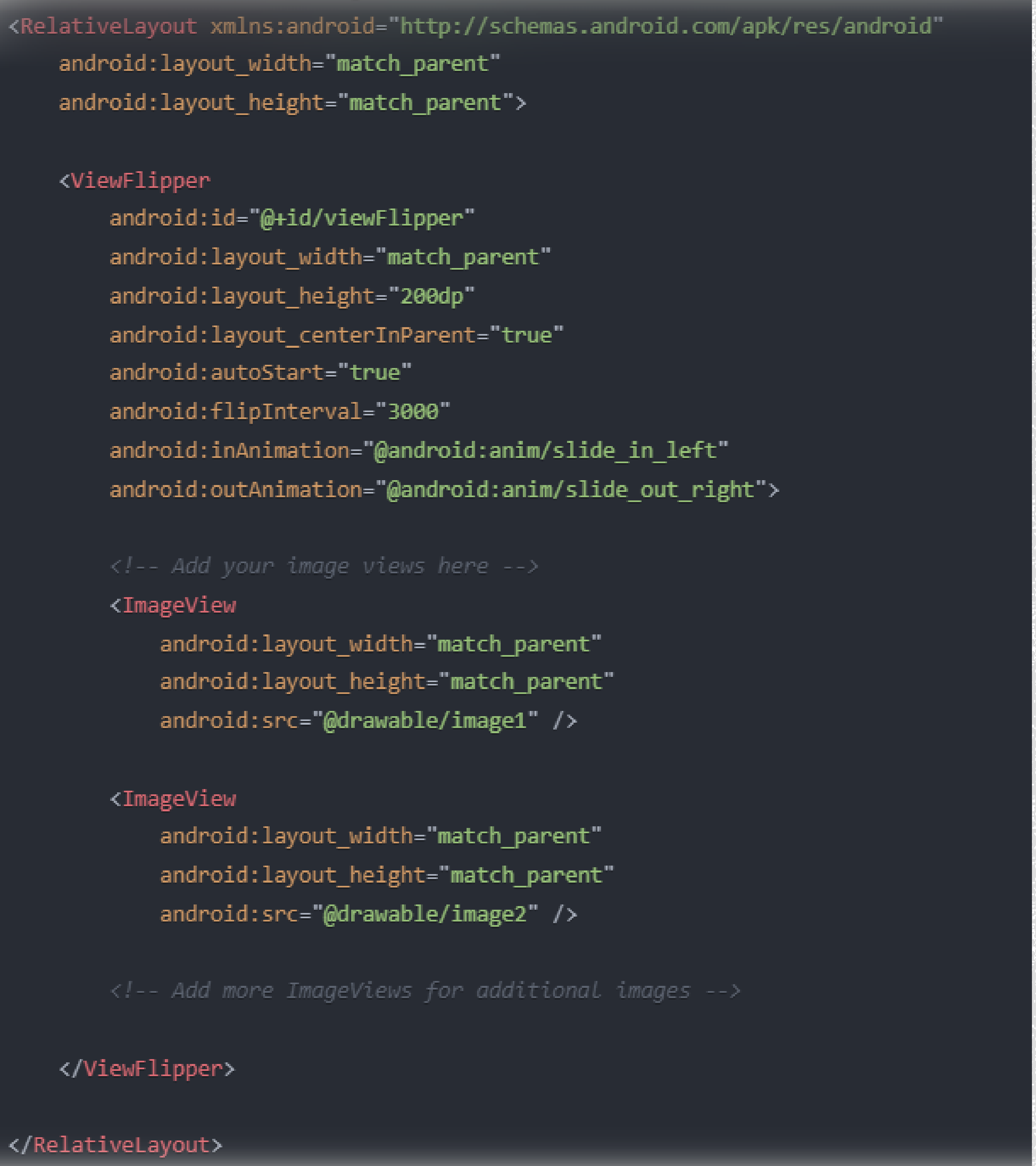
- **Sequential Display:** ViewFlipper displays its child views one at a time in a sequential manner.

- **Transition Effects:** It supports various transition effects between views, such as sliding, fading, and flipping, which can be specified through animation resources.

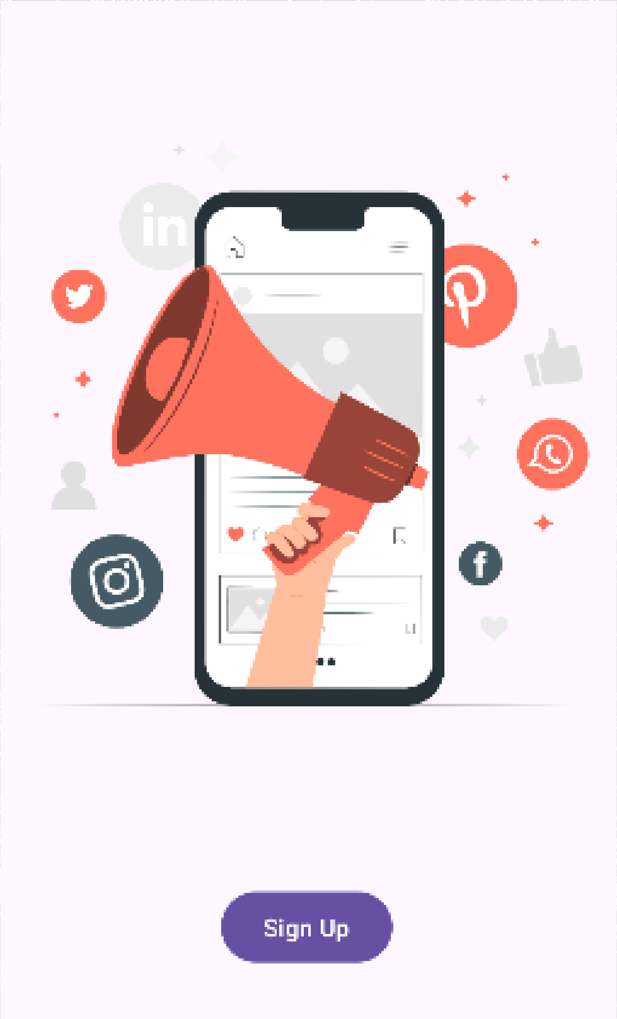
- **Automatic Animation:** ViewFlipper can automatically transition between views at regular intervals by setting the android:autoStart attribute to true and specifying the flip interval using the android:flipInterval attribute.



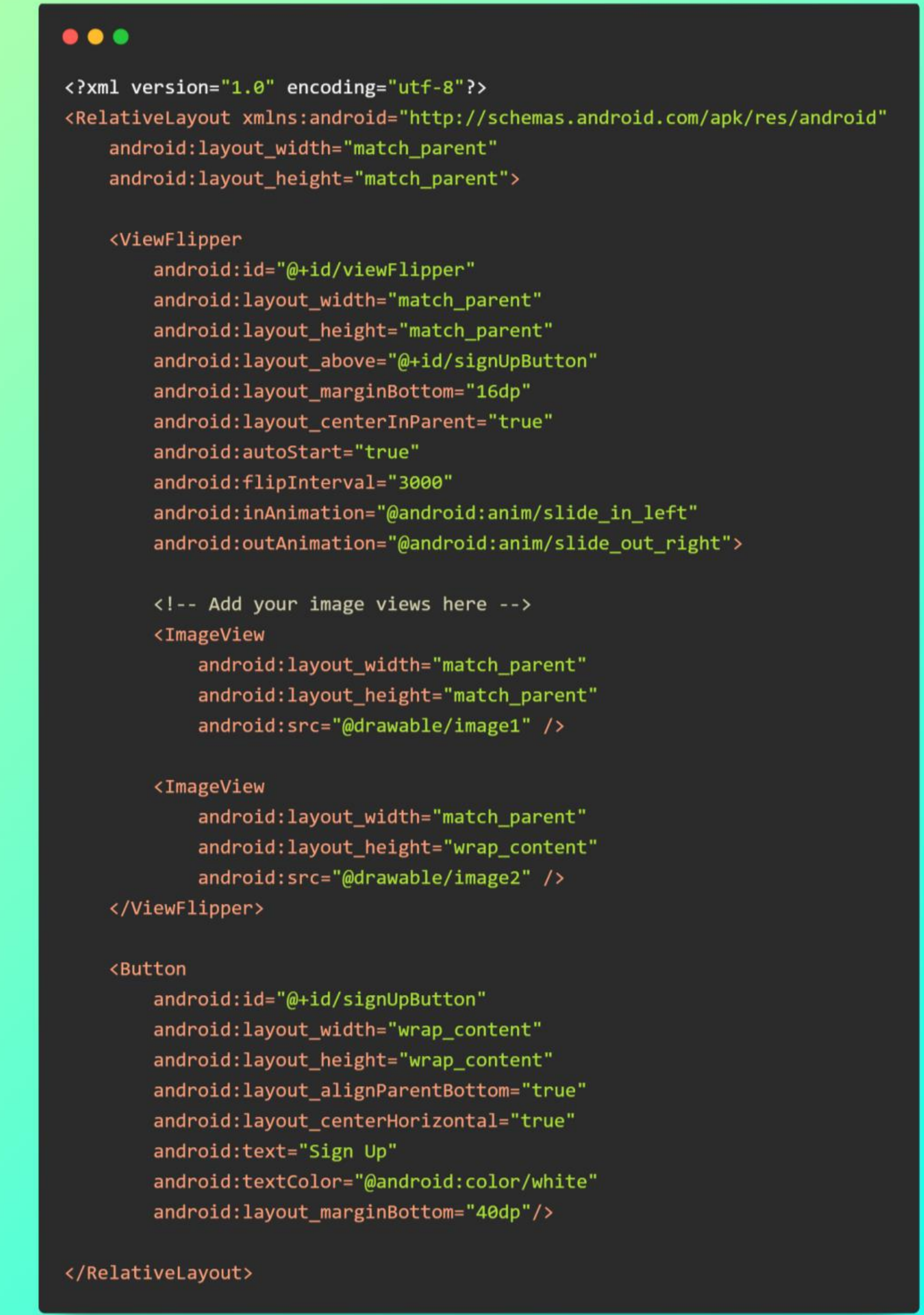
VIEW FLIPPER



```xml
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <ViewFlipper
        android:id="@+id/viewFlipper"
        android:layout_width="match_parent"
        android:layout_height="200dp"
        android:layout_centerInParent="true"
        android:autoStart="true"
        android:flipInterval="3000"
        android:inAnimation="@android:anim/slide_in_left"
        android:outAnimation="@android:anim/slide_out_right">

        <!-- Add your image views here -->
        <ImageView
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:src="@drawable/image1" />

        <ImageView
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:src="@drawable/image2" />

        <!-- Add more ImageViews for additional images -->

    </ViewFlipper>

</RelativeLayout>
```

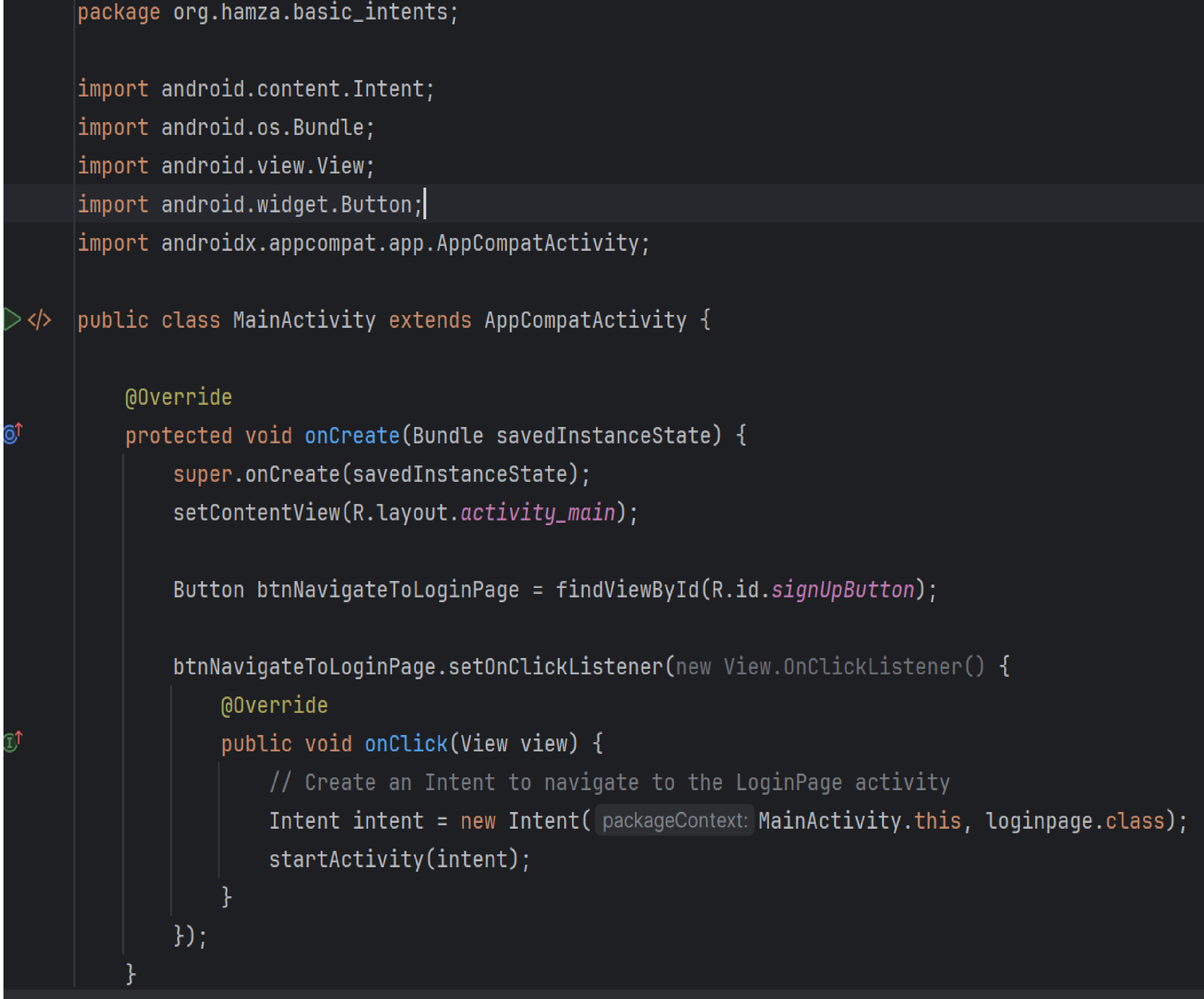


ACTIVITY.XML OF SLIDER



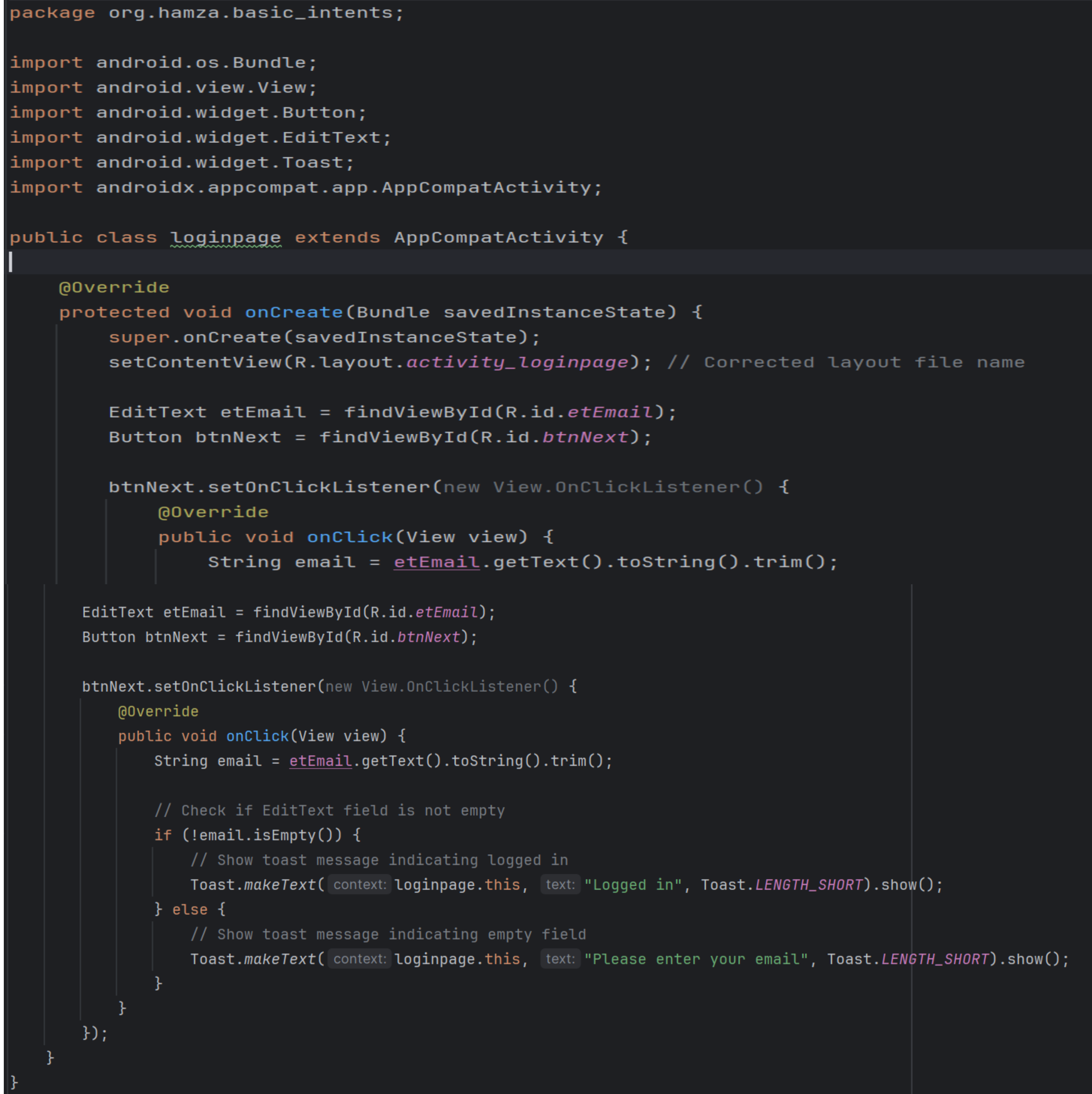
```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <ViewFlipper
        android:id="@+id/viewFlipper"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_above="@+id/signUpButton"
        android:layout_marginBottom="16dp"
        android:layout_centerInParent="true"
        android:autoStart="true"
        android:flipInterval="3000"
        android:inAnimation="@android:anim/slide_in_left"
        android:outAnimation="@android:anim/slide_out_right">

        <!-- Add your image views here -->
        <ImageView
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:src="@drawable/image1" />

        <ImageView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:src="@drawable/image2" />
    </ViewFlipper>

    <Button
        android:id="@+id/signUpButton"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_centerHorizontal="true"
        android:text="Sign Up"
        android:textColor="@android:color/white"
        android:layout_marginBottom="40dp"/>

</RelativeLayout>
```

MAIN ACTIVITY 1ST SCREEN JAVA FILE (SLIDER & INTENTS)



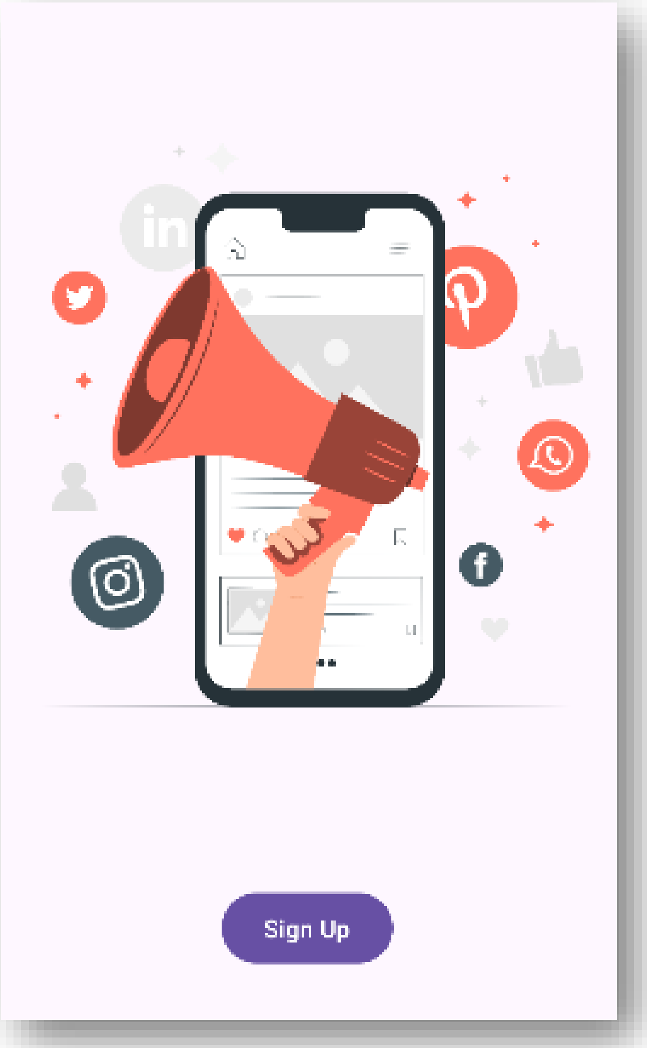
```java
package org.hamza.basic_intents;

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

public class MainActivity extends AppCompatActivity {

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

        Button btnNavigateToLoginPage = findViewById(R.id.signUpButton);

        btnNavigateToLoginPage.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                // Create an Intent to navigate to the LoginPage activity
                Intent intent = new Intent( packageContext: MainActivity.this, loginpage.class);
                startActivity(intent);
            }
        });
    }
```

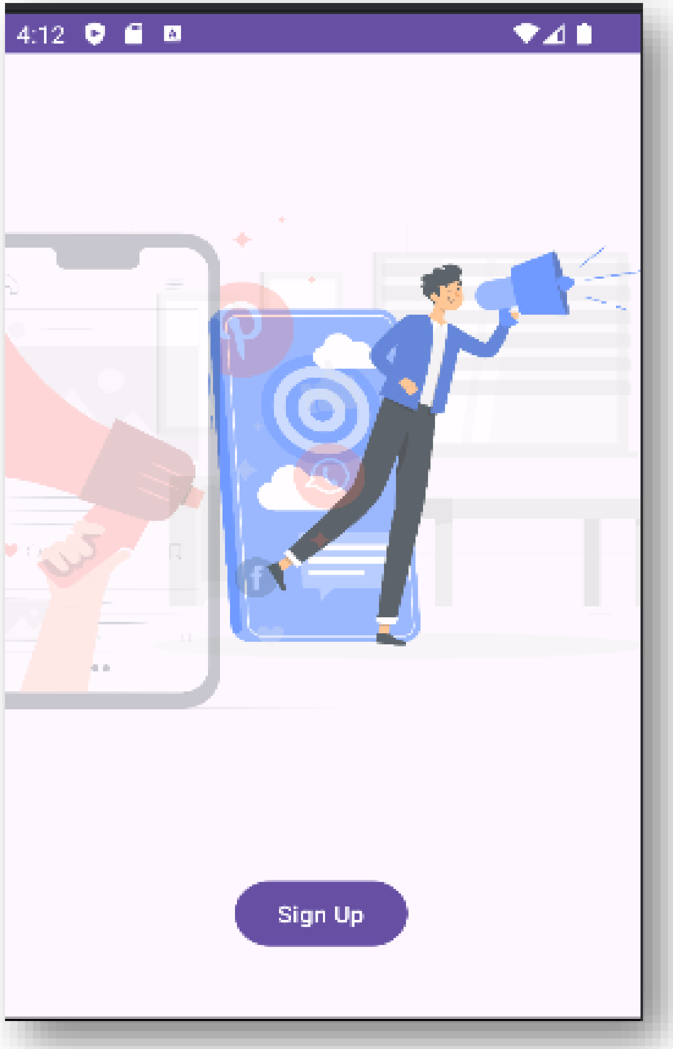
MAIN ACTIVITY 2ND SCREEN JAVA FILE (LOGIN SCREEN)

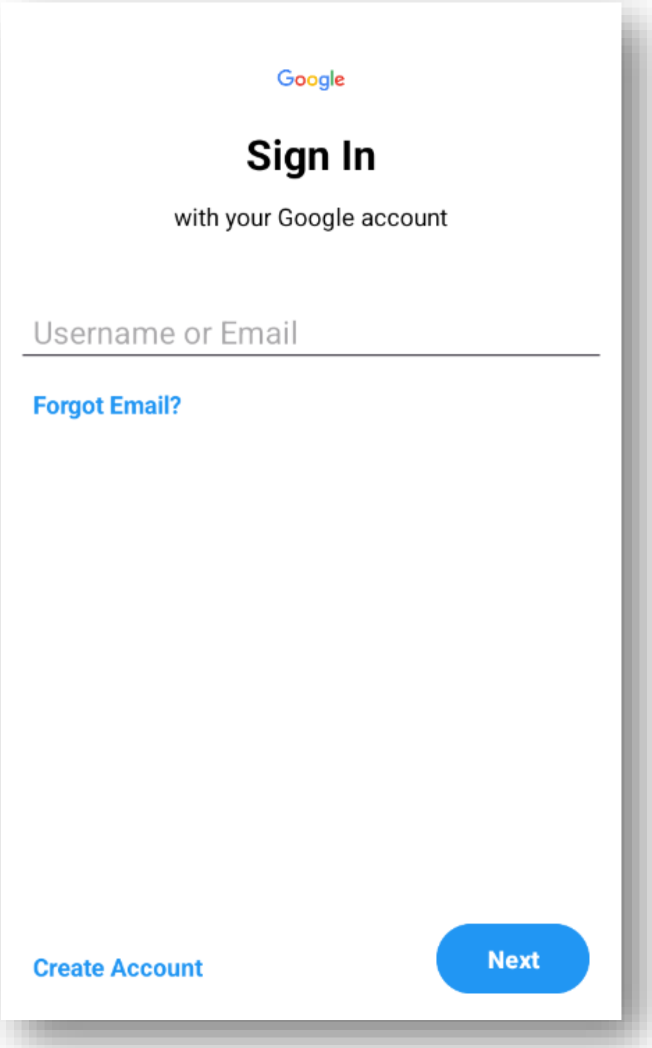


```java
package org.hamza.basic_intents;

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

public class loginpage extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_loginpage); // Corrected layout file name

        EditText etEmail = findViewById(R.id.etEmail);
        Button btnNext = findViewById(R.id.btnNext);

        btnNext.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String email = etEmail.getText().toString().trim();

        EditText etEmail = findViewById(R.id.etEmail);
        Button btnNext = findViewById(R.id.btnNext);

        btnNext.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String email = etEmail.getText().toString().trim();

                // Check if EditText field is not empty
                if (!email.isEmpty()) {
                    // Show toast message indicating logged in
                    Toast.makeText( context: loginpage.this,  text: "Logged in", Toast.LENGTH_SHORT).show();
                } else {
                    // Show toast message indicating empty field
                    Toast.makeText( context: loginpage.this,  text: "Please enter your email", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}
```

OUTPUTS:







Google

Sign In

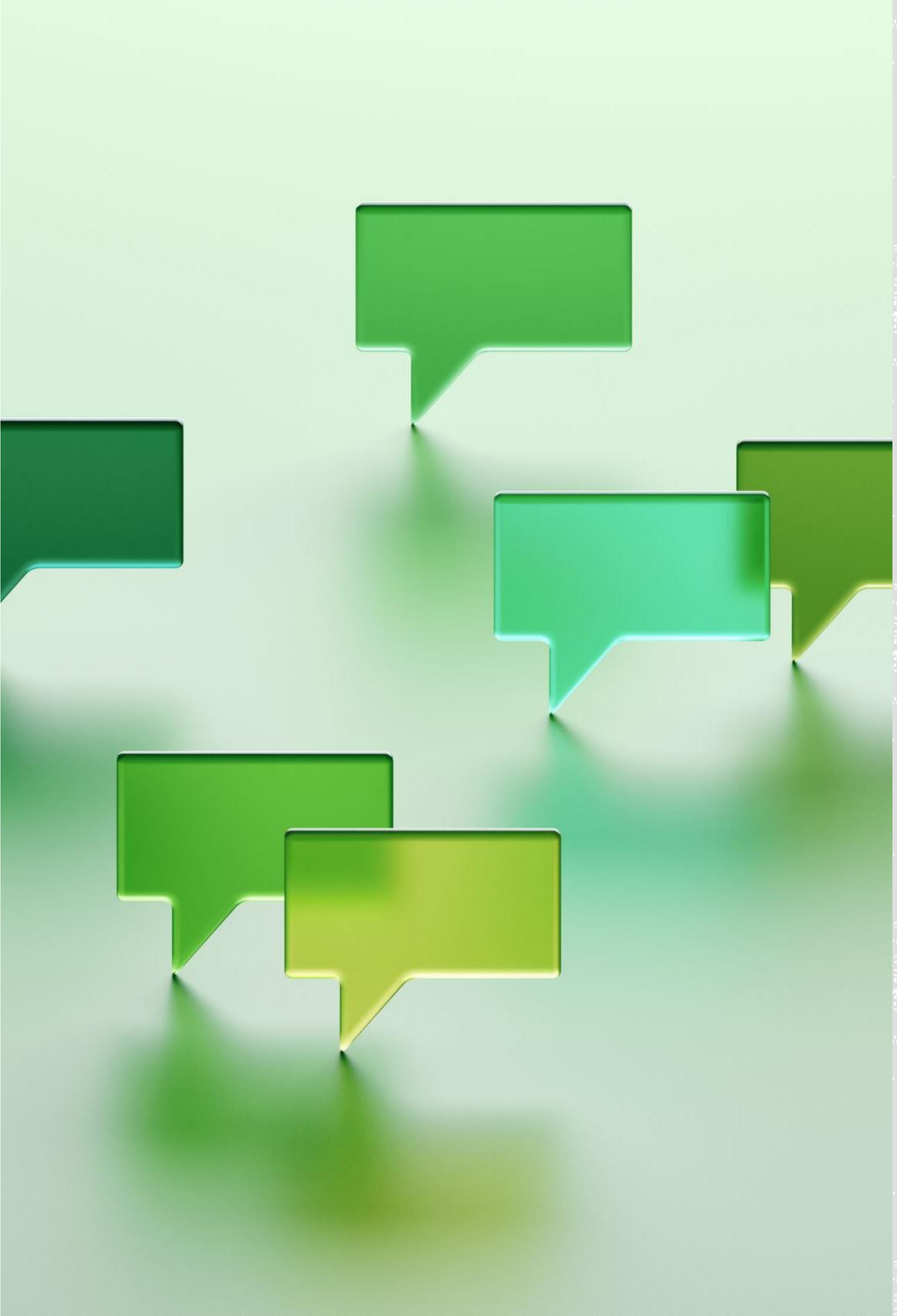
with your Google account

Username or Email

Forgot Email?

Create Account

Next



TASK : OPENING WEBSITE

- **Task 1: Implicit Intent for Opening a Website**

1. **Objective:** To use an implicit intent to open a website in a browser.
2. **Description:** Create a new activity with a Button labeled "Open Website".
3. Implement an implicit intent that opens a specific website (e.g., "https://www.example.com") when the button is clicked.
4. Ensure the device has a browser installed to handle the intent.

TASK 2: SHARING APP:

Objective: To share content from one activity to another using an explicit intent.

Description: Create an activity with a TextView displaying a piece of content (e.g., a quote or a fact).

Implement a Button labeled "Share" that, when clicked, shares the content to another app (e.g., messaging or social media).

Use an explicit intent to send the content to the sharing app.