

**LAPORAN PROJECT MOBILE PROGRAMMING  
STUDENT ATTENDANCE APPLICATION**



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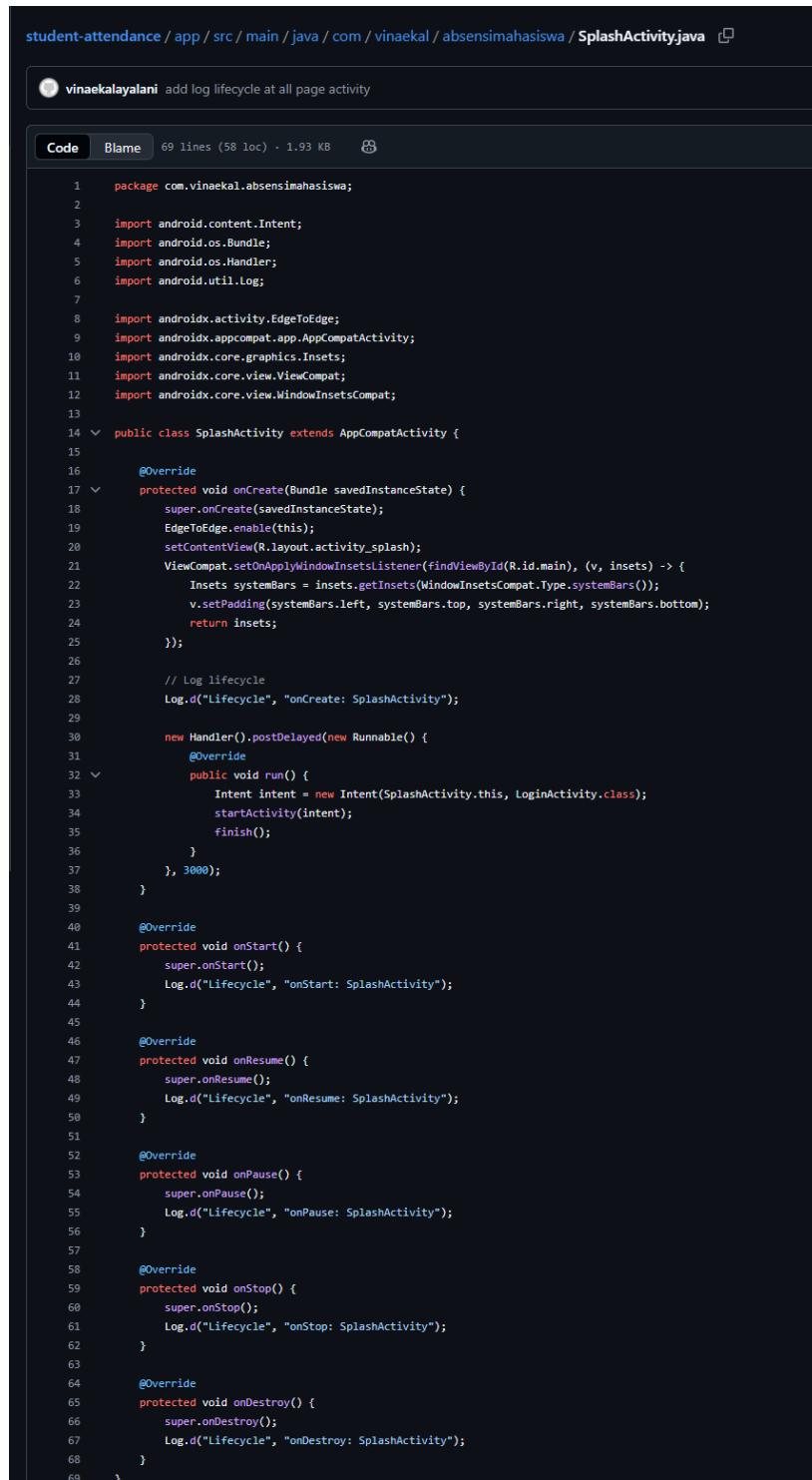
**FAKULTAS TEKNIK  
PROGRAM STUDI TEKNIK INFORMATIKA  
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## Contents

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## I. Source Code

### A. SplashActivity.java



The screenshot shows a GitHub repository page for 'student-attendance' with the file 'SplashActivity.java' open. The code is displayed in a dark-themed code editor. The file contains Java code for a SplashActivity class that extends AppCompatActivity. It includes logic for handling window insets, logging lifecycle events, and transitioning to LoginActivity after a delay.

```
student-attendance / app / src / main / java / com / vinaekal / absensimahasiswa / SplashActivity.java □

vinaekalayalani add log lifecycle at all page activity

Code Blame 69 lines (58 loc) · 1.93 KB ⚙

1 package com.vinaekal.absensimahasiswa;
2
3 import android.content.Intent;
4 import android.os.Bundle;
5 import android.os.Handler;
6 import android.util.Log;
7
8 import androidx.activity.EdgeToEdge;
9 import androidx.appcompat.app.AppCompatActivity;
10 import androidx.core.graphics.Insets;
11 import androidx.core.view.ViewCompat;
12 import androidx.core.view.WindowInsetsCompat;
13
14 public class SplashActivity extends AppCompatActivity {
15
16     @Override
17     protected void onCreate(Bundle savedInstanceState) {
18         super.onCreate(savedInstanceState);
19         EdgeToEdge.enable(this);
20         setContentView(R.layout.activity_splash);
21         ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
22             Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
23             v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
24             return insets;
25         });
26
27         // Log lifecycle
28         Log.d("Lifecycle", "onCreate: SplashActivity");
29
30         new Handler().postDelayed(new Runnable() {
31             @Override
32             public void run() {
33                 Intent intent = new Intent(SplashActivity.this, LoginActivity.class);
34                 startActivity(intent);
35                 finish();
36             }
37         }, 3000);
38     }
39
40     @Override
41     protected void onStart() {
42         super.onStart();
43         Log.d("Lifecycle", "onStart: SplashActivity");
44     }
45
46     @Override
47     protected void onResume() {
48         super.onResume();
49         Log.d("Lifecycle", "onResume: SplashActivity");
50     }
51
52     @Override
53     protected void onPause() {
54         super.onPause();
55         Log.d("Lifecycle", "onPause: SplashActivity");
56     }
57
58     @Override
59     protected void onStop() {
60         super.onStop();
61         Log.d("Lifecycle", "onStop: SplashActivity");
62     }
63
64     @Override
65     protected void onDestroy() {
66         super.onDestroy();
67         Log.d("Lifecycle", "onDestroy: SplashActivity");
68     }
69 }
```

## B. activity\_splash.xml

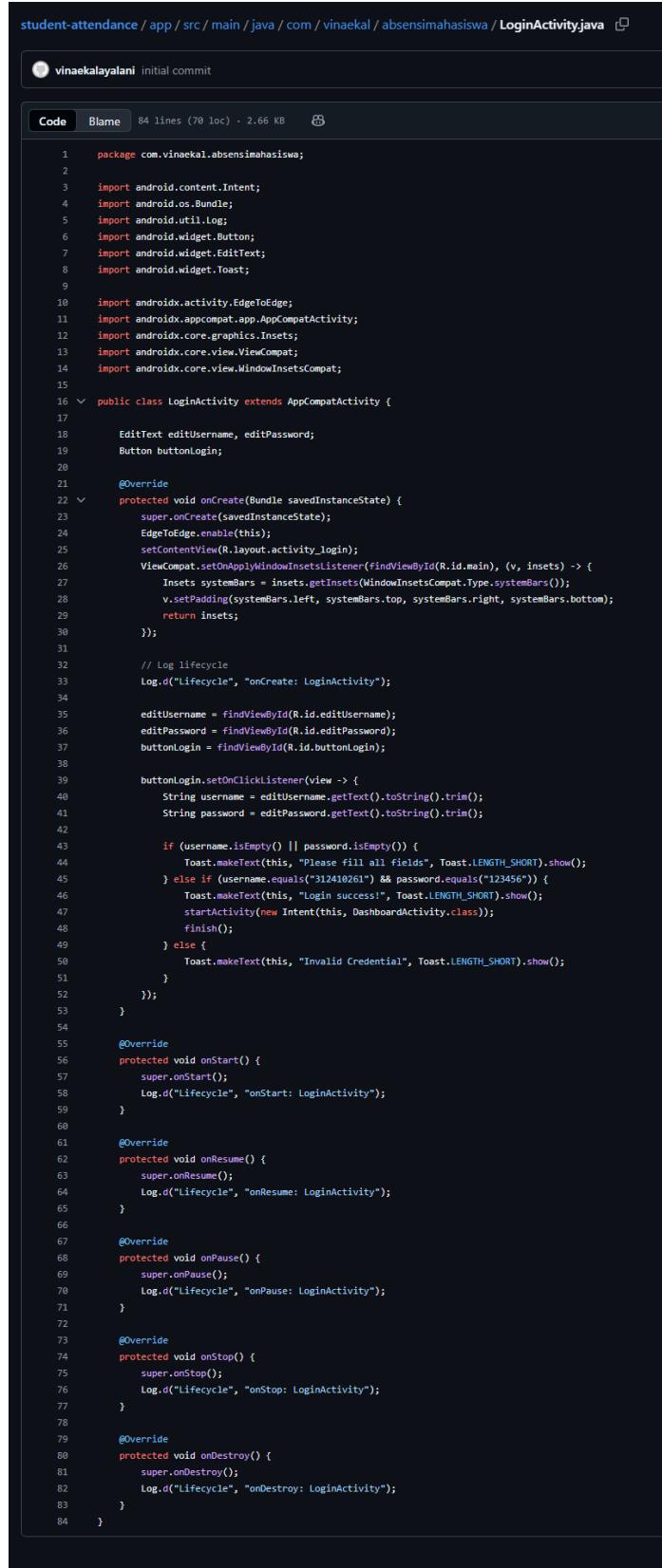
student-attendance / app / src / main / res / layout / **activity\_splash.xml** ↗

vinaekalayalani initial commit

**Code** Blame 30 lines (28 loc) · 1.29 KB ⚙

```
1   <?xml version="1.0" encoding="utf-8"?>
2   <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
3       xmlns:app="http://schemas.android.com/apk/res-auto"
4       android:id="@+id/main"
5       android:layout_width="match_parent"
6       android:layout_height="match_parent"
7       tools:context=".SplashActivity"
8       android:background="#FFFFFF">
9
10      <LinearLayout
11          android:id="@+id/splashLayout"
12          android:layout_width="0dp"
13          android:layout_height="wrap_content"
14          android:orientation="vertical"
15          app:layout_constraintTop_toTopOf="parent"
16          app:layout_constraintStart_toStartOf="parent"
17          app:layout_constraintEnd_toEndOf="parent"
18          app:layout_constraintBottom_toBottomOf="parent">
19
20          <ImageView
21              android:id="@+id/logoSplash"
22              android:layout_width="120dp"
23              android:layout_height="120dp"
24              android:layout_gravity="center"
25              android:src="@drawable/logoupb"
26              android:contentDescription="Logo"
27              android:layout_marginBottom="16dp" />
28
29      </LinearLayout>
30  </androidx.constraintlayout.widget.ConstraintLayout>
```

### C. LoginActivity.java

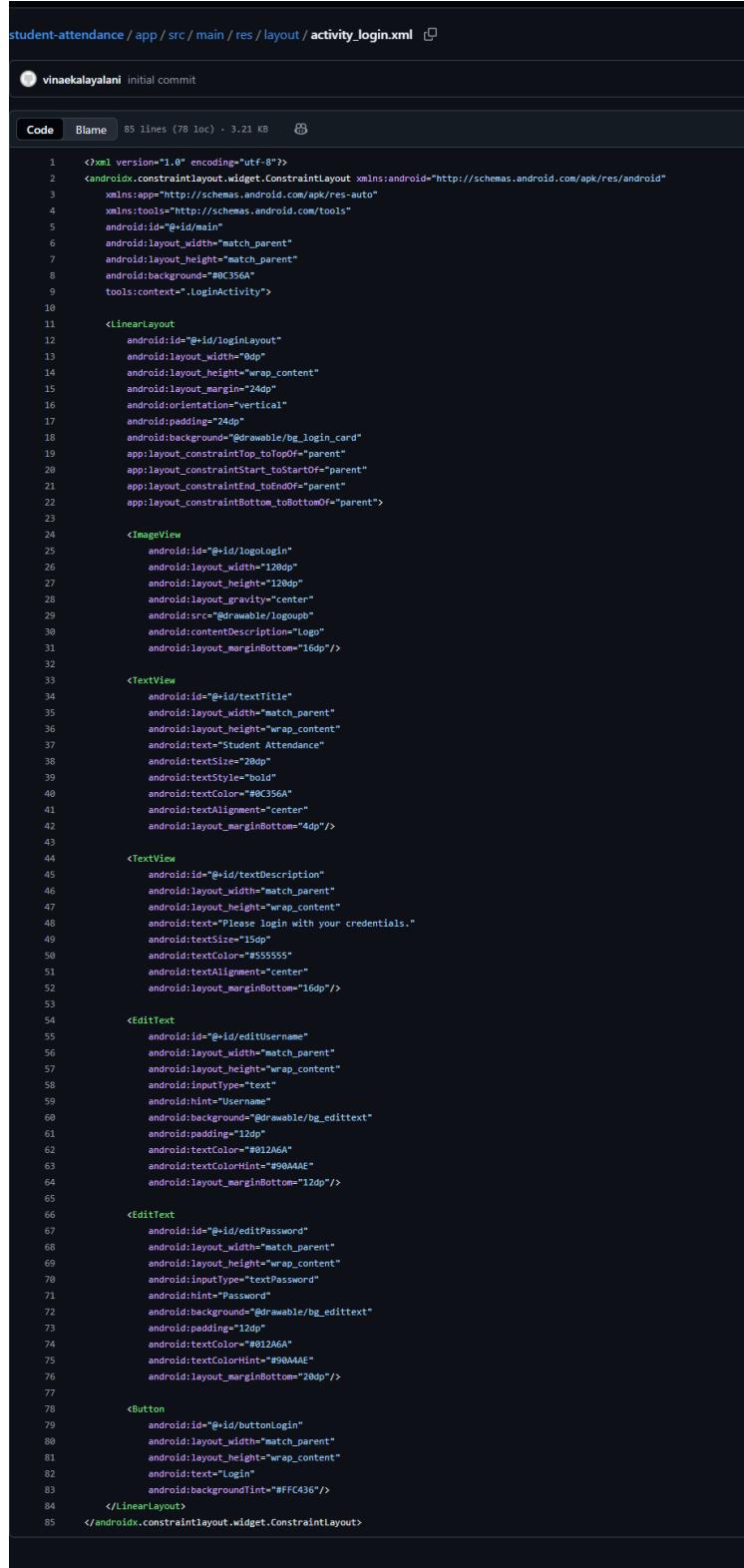


The screenshot shows a GitHub code review interface for the file `LoginActivity.java`. The file has 84 lines of code (70 loc) and a size of 2.66 KB. The code is in Java and defines a `loginActivity` class that extends `AppCompatActivity`. It includes imports for various Android packages and components like `EditText`, `Button`, and `Toast`. The class handles the lifecycle methods (`onCreate`, `onStart`, `onResume`, `onPause`, `onStop`, `onDestroy`) and performs login logic by checking user input and displaying Toast messages.

```
student-attendance / app / src / main / java / com / vinaekal / absensimahasiswa / LoginActivity.java
```

```
1 package com.vinaekal.absensimahasiswa;
2
3 import android.content.Intent;
4 import android.os.Bundle;
5 import android.util.Log;
6 import android.widget.Button;
7 import android.widget.EditText;
8 import android.widget.Toast;
9
10 import androidx.activity.OnEdge;
11 import androidx.appcompat.app.AppCompatActivity;
12 import android.core.graphics.Insets;
13 import android.core.view.ViewCompat;
14 import android.core.view.WindowInsetsCompat;
15
16 public class loginActivity extends AppCompatActivity {
17
18     EditText editUsername, editPassword;
19     Button buttonLogin;
20
21     @Override
22     protected void onCreate(Bundle savedInstanceState) {
23         super.onCreate(savedInstanceState);
24         EdgeToEdge.enable(this);
25         setContentView(R.layout.activity_login);
26         ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
27             Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
28             v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
29             return insets;
30         });
31
32         // Log lifecycle
33         Log.d("Lifecycle", "onCreate: LoginActivity");
34
35         editUsername = findViewById(R.id.editUsername);
36         editPassword = findViewById(R.id.editPassword);
37         buttonLogin = findViewById(R.id.buttonLogin);
38
39         buttonLogin.setOnClickListener(view -> {
40             String username = editUsername.getText().toString().trim();
41             String password = editPassword.getText().toString().trim();
42
43             if (username.isEmpty() || password.isEmpty()) {
44                 Toast.makeText(this, "Please fill all fields", Toast.LENGTH_SHORT).show();
45             } else if (username.equals("312410261") && password.equals("123456")) {
46                 Toast.makeText(this, "Login success!", Toast.LENGTH_SHORT).show();
47                 startActivity(new Intent(this, DashboardActivity.class));
48                 finish();
49             } else {
50                 Toast.makeText(this, "Invalid Credential", Toast.LENGTH_SHORT).show();
51             }
52         });
53     }
54
55     @Override
56     protected void onStart() {
57         super.onStart();
58         Log.d("Lifecycle", "onStart: LoginActivity");
59     }
60
61     @Override
62     protected void onResume() {
63         super.onResume();
64         Log.d("Lifecycle", "onResume: LoginActivity");
65     }
66
67     @Override
68     protected void onPause() {
69         super.onPause();
70         Log.d("Lifecycle", "onPause: LoginActivity");
71     }
72
73     @Override
74     protected void onStop() {
75         super.onStop();
76         Log.d("Lifecycle", "onStop: LoginActivity");
77     }
78
79     @Override
80     protected void onDestroy() {
81         super.onDestroy();
82         Log.d("Lifecycle", "onDestroy: LoginActivity");
83     }
84 }
```

## D. activity\_login.xml



The screenshot shows a GitHub commit for the file `activity_login.xml`. The commit is titled "initial commit" by user "vinaekalayalani". The code editor interface includes tabs for "Code" and "Blame", and displays 85 lines of XML code with a total size of 3.21 KB.

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#00C356AA"
    tools:context=".LoginActivity">

    <LinearLayout
        android:id="@+id/loginLayout"
        android:layout_width="0dp"
        android:layout_height="wrap_content"
        android:layout_margin="24dp"
        android:orientation="vertical"
        android:padding="24dp"
        android:background="@drawable/bg_login_card"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintBottom_toBottomOf="parent">

        <ImageView
            android:id="@+id/logoLogin"
            android:layout_width="120dp"
            android:layout_height="120dp"
            android:layout_gravity="center"
            android:src="@drawable/logoapp"
            android:contentDescription="Logo"
            android:layout_marginBottom="16dp"/>

        <TextView
            android:id="@+id/textTitle"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Student Attendance"
            android:textSize="20dp"
            android:textStyle="bold"
            android:textColor="#00C356AA"
            android:textAlignment="center"
            android:layout_marginBottom="4dp"/>

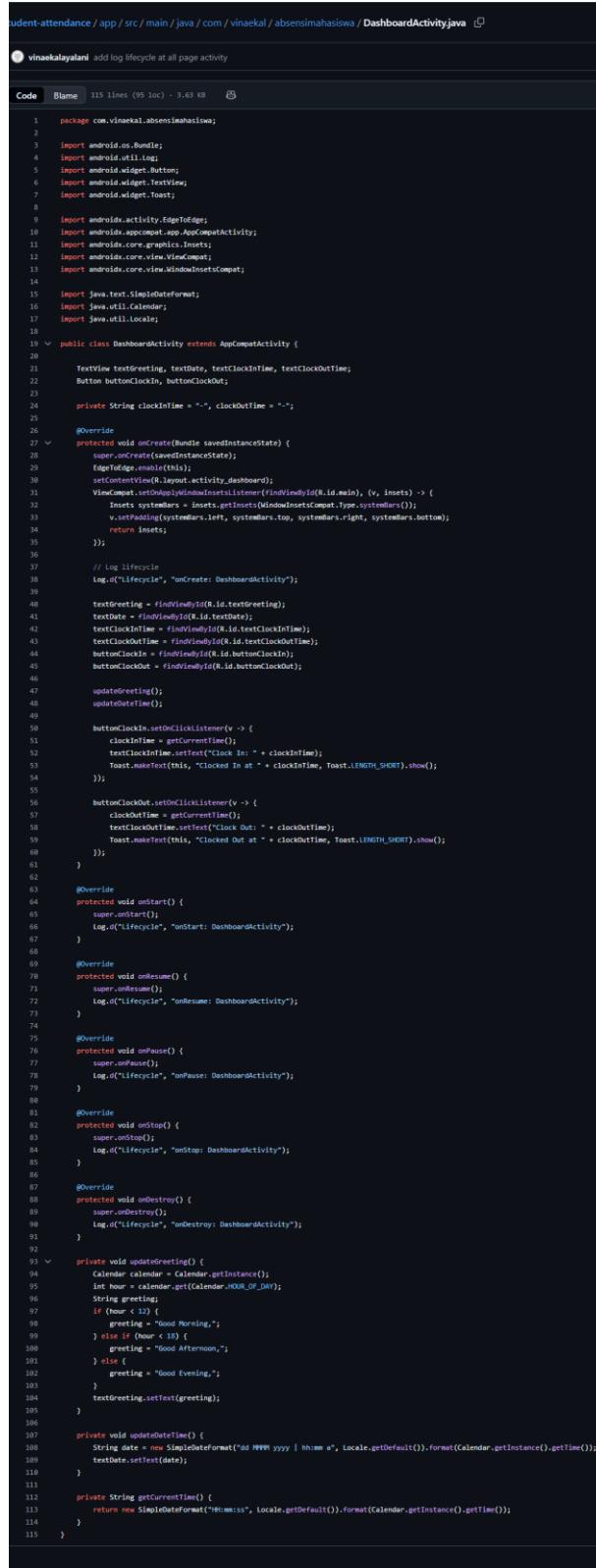
        <TextView
            android:id="@+id/textDescription"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Please login with your credentials."
            android:textSize="15dp"
            android:textColor="#555555"
            android:textAlignment="center"
            android:layout_marginBottom="16dp"/>

        <EditText
            android:id="@+id/editUsername"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:inputType="text"
            android:hint="Username"
            android:background="@drawable/bg_edittext"
            android:padding="12dp"
            android:textColor="#0012A6AA"
            android:textColorHint="#9004AAE"
            android:layout_marginBottom="12dp"/>

        <EditText
            android:id="@+id/editPassword"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:inputType="textPassword"
            android:hint="Password"
            android:background="@drawable/bg_edittext"
            android:padding="12dp"
            android:textColor="#0012A6AA"
            android:textColorHint="#9004AAE"
            android:layout_marginBottom="28dp"/>

        <Button
            android:id="@+id/buttonLogin"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Login"
            android:backgroundTint="#FFFC36"/>
    </LinearLayout>
</androidx.constraintlayout.widget.ConstraintLayout>
```

## E. DashboardActivity.java



```
student-attendance / app / src / main / java / com / vinaekal / absensimahasiswa / DashboardActivity.java

vinaekalayani add log lifecycle at all page activity

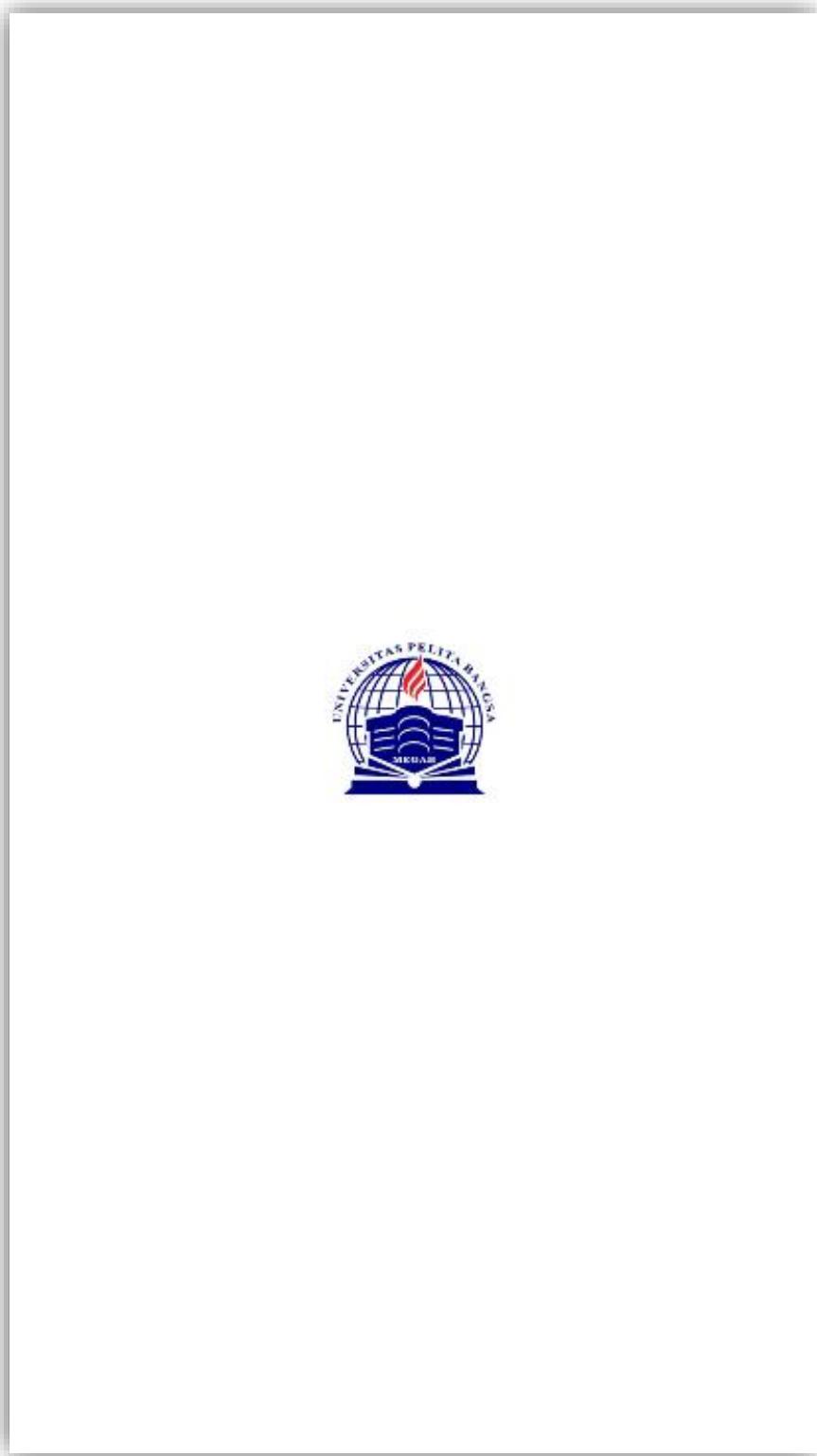
Code Blame 113 lines (95 loc) - 3.63 KB

1 package com.vinaekal.absensimahasiswa;
2
3 import android.os.Bundle;
4 import android.util.Log;
5 import android.widget.Button;
6 import android.widget.TextView;
7 import android.widget.Toast;
8
9 import androidx.activity.OnBackPressedCallback;
10 import androidx.appcompat.app.AppCompatActivity;
11 import android.core.graphics.Insets;
12 import android.core.view.ViewCompat;
13 import android.core.view.WindowInsetsCompat;
14
15 import java.text.SimpleDateFormat;
16 import java.util.Calendar;
17 import java.util.Locale;
18
19 public class DashboardActivity extends AppCompatActivity {
20
21     TextView textGreeting, textDate, textClockInTime, textClockOutTime;
22     Button buttonClockIn, buttonClockOut;
23
24     private String clockInTime = "", clockOutTime = "";
25
26     @Override
27     protected void onCreate(Bundle savedInstanceState) {
28         super.onCreate(savedInstanceState);
29         EdgeEffect.enable(this);
30         setContentView(R.layout.activity_dashboard);
31         ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
32             insets.systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
33             v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
34             return insets;
35         });
36
37         // Log lifecycle
38         Log.d("Lifecycle", "onCreate: DashboardActivity");
39
40         textGreeting = findViewById(R.id.textGreeting);
41         textDate = findViewById(R.id.textDate);
42         textClockInTime = findViewById(R.id.textClockInTime);
43         textClockOutTime = findViewById(R.id.textClockOutTime);
44         buttonClockIn = findViewById(R.id.buttonClockIn);
45         buttonClockOut = findViewById(R.id.buttonClockOut);
46
47         updateGreeting();
48         updateDateTime();
49
50         buttonClockIn.setOnClickListener(v -> {
51             clockInTime = getCurrentTime();
52             textClockInTime.setText("Clock In: " + clockInTime);
53             Toast.makeText(this, "Clocked In at " + clockInTime, Toast.LENGTH_SHORT).show();
54         });
55
56         buttonClockOut.setOnClickListener(v -> {
57             clockOutTime = getCurrentTime();
58             textClockOutTime.setText("Clock Out: " + clockOutTime);
59             Toast.makeText(this, "Clocked Out at " + clockOutTime, Toast.LENGTH_SHORT).show();
60         });
61
62     }
63
64     @Override
65     protected void onStart() {
66         super.onStart();
67         Log.d("Lifecycle", "onStart: DashboardActivity");
68     }
69
70     @Override
71     protected void onResume() {
72         super.onResume();
73         Log.d("Lifecycle", "onResume: DashboardActivity");
74     }
75
76     @Override
77     protected void onPause() {
78         super.onPause();
79         Log.d("Lifecycle", "onPause: DashboardActivity");
80     }
81
82     @Override
83     protected void onStop() {
84         super.onStop();
85         Log.d("Lifecycle", "onStop: DashboardActivity");
86     }
87
88     @Override
89     protected void onDestroy() {
90         super.onDestroy();
91         Log.d("Lifecycle", "onDestroy: DashboardActivity");
92     }
93
94     private void updateGreeting() {
95         Calendar calendar = Calendar.getInstance();
96         int hour = calendar.get(Calendar.HOUR_OF_DAY);
97         String greeting;
98         if (hour < 12) {
99             greeting = "Good Morning,";
100        } else if (hour < 18) {
101            greeting = "Good Afternoon,";
102        } else {
103            greeting = "Good Evening,";
104        }
105        textGreeting.setText(greeting);
106    }
107
108    private void updateDateTime() {
109        String date = new SimpleDateFormat("dd MMMM yyyy | hh:mm a", Locale.getDefault()).format(Calendar.getInstance().getTime());
110        textDate.setText(date);
111    }
112
113    private String getCurrentTime() {
114        return new SimpleDateFormat("HH:mm:ss", Locale.getDefault()).format(Calendar.getInstance().getTime());
115    }
116}
```

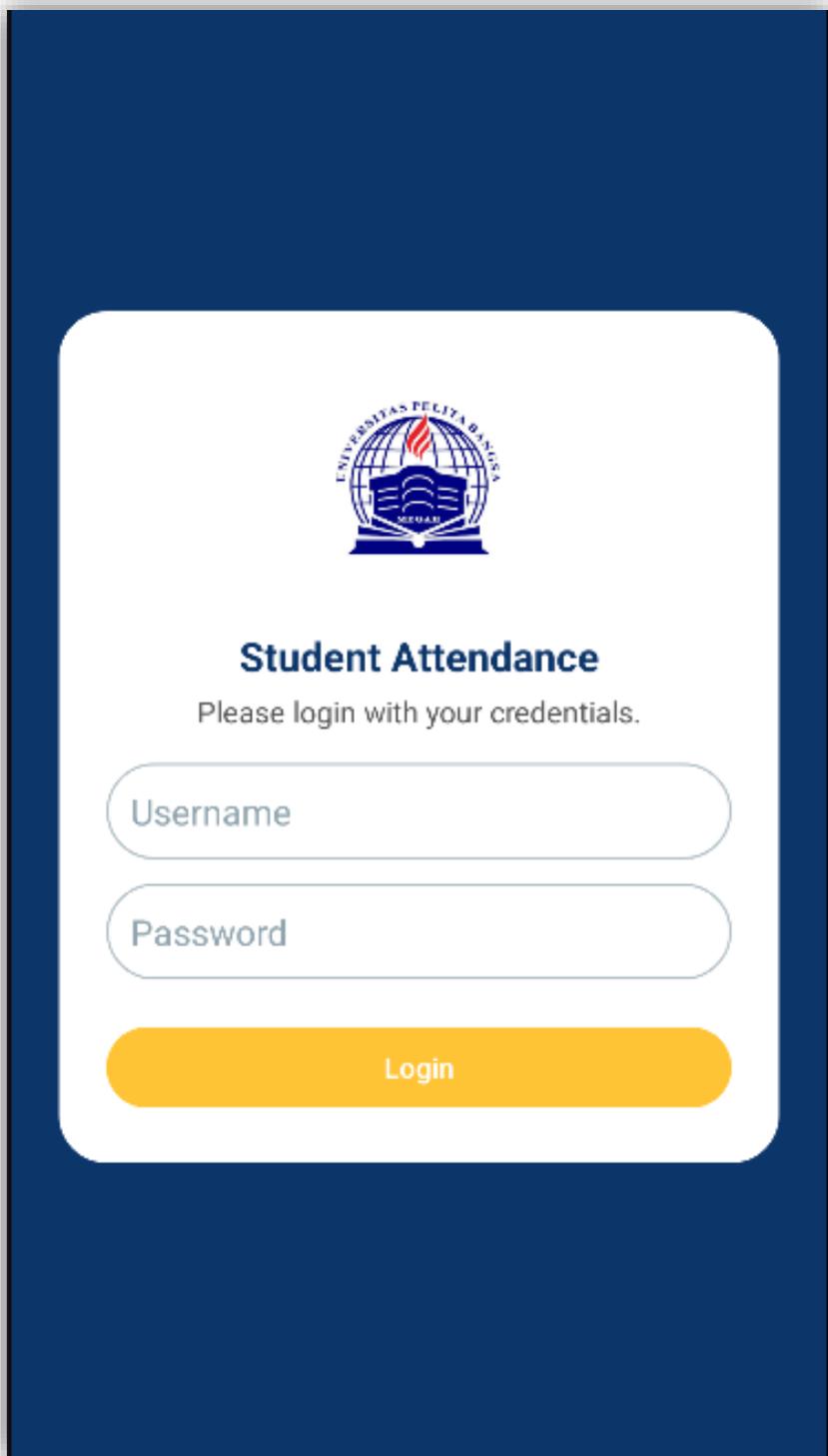
## F. activity\_dashboard.xml

## II. Screenshot Pages

### A. Splash Page



B. Login Page



### C. Dashboard Page

