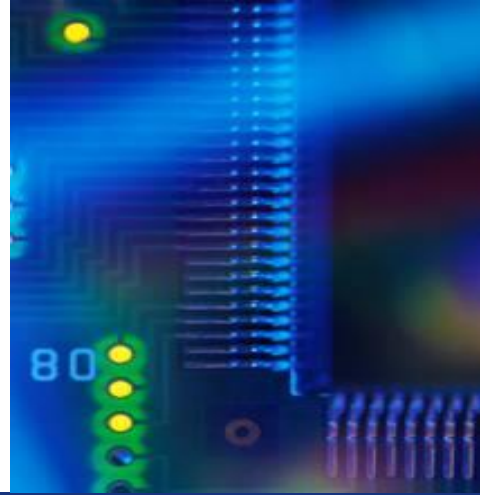
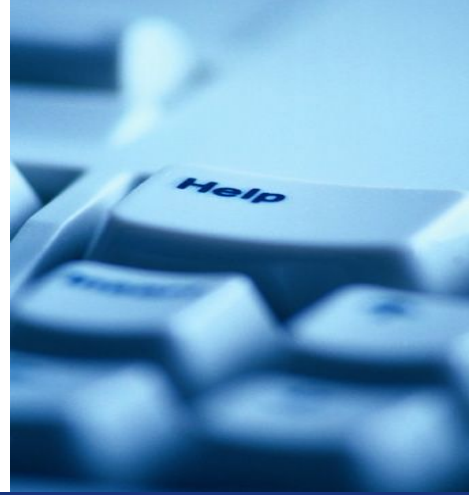




**UNIVERSITAS
BUDI LUHUR**



FAKULTAS TEKNOLOGI INFORMASI

Mobile Programming

[PG119/ 3 SKS]

Riskiana Wulan, MKom

Agenda

1. **Implicit Intent**
2. **Material Design**



IMPLICIT INTENT

Implicit Intents

Implicit Intent Vs Explicit Intent?

How Implicit Intents Work

- **Declare an action (e.g., ACTION_VIEW).**
- **Provide data (e.g., a URI or file path).**

Example code:

```
Intent intent = new Intent(Intent.ACTION_VIEW);  
intent.setData(Uri.parse("https://www.google.com"));  
startActivity(intent);
```

Common Actions:

- **ACTION_SEND:** Send a message
- **ACTION_DIAL:** Open dialer
- **ACTION_VIEW:** Display a URL or location

reference:

<https://developer.android.com/guide/components/intents-common>

Differences between Implicit Vs Explicit

Aspect	Explicit Intent	Implicit Intent
Component	Specifies the exact target component	Specifies only the action to perform
Use Case	Navigating between app activities	Interacting with external apps

Sample of Explicit intent

```
Intent intent = new Intent(this, TargetActivity.class);
startActivity(intent);
```

Sample Implicit Intent

```
Intent intent = new Intent(Intent.ACTION_VIEW);
intent.setData(Uri.parse("https://www.google.com"));

// Verify that there is an app to handle this intent
if (intent.resolveActivity(getPackageManager()) != null) {
    startActivity(intent);
    Log.d("success", "success");
} else{
    // Notify the user if no browser is available
    Toast.makeText(MainActivity.this, "No browser available", Toast.LENGTH_SHORT).show();
}
```



Material Design Components

What is Material Design Component?

Definition: A design system introduced by Google that combines principles of good design with technology.

Key Features:

- Consistency across devices and platforms
- Use of shadows, animations, and grid-based layouts
- Focus on user interaction and visual hierarchy

Why Use It?

- Enhances user experience
- Aligns with modern design standards

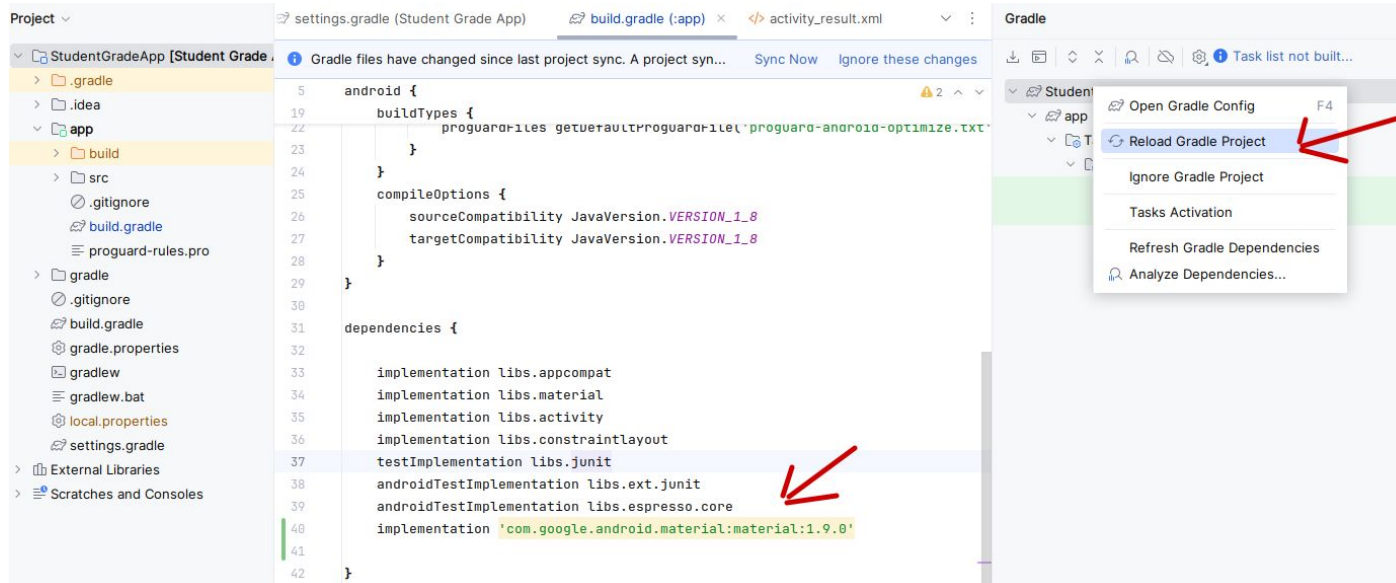
<https://developer.android.com/develop/ui/views/theming/look-and-feel>

Adding Material Design Library

1. Pada `app/build.gradle` file, tambahkan baris dibawah ini untuk menambahkan dependency material design

implementation 'com.google.android.material:material:1.9.0'

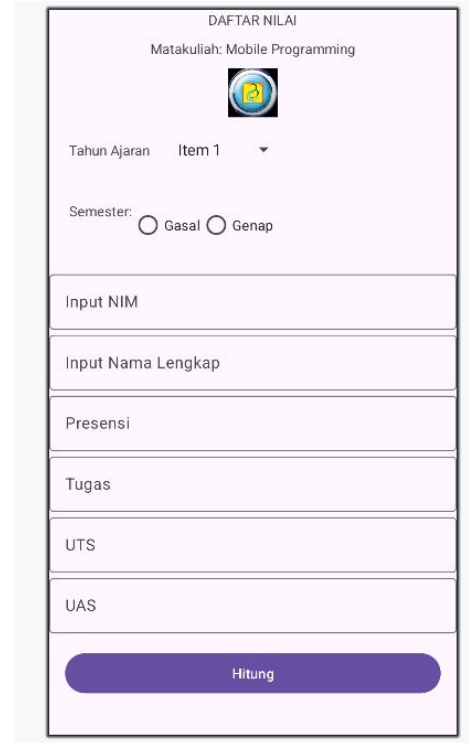
2. Lalu pada gradle menu, klik kanan, pilih Reload Gradle Project



The screenshot shows the Android Studio interface. On the left, the Project view shows the 'app' directory. The main editor displays the `build.gradle` file for the 'app' module. The `dependencies` section is visible, and the line `implementation 'com.google.android.material:material:1.9.0'` has been added and is highlighted with a red arrow. On the right, the Gradle tool window is open, and a right-click context menu is displayed over the 'app' directory. The menu options include 'Open Gradle Config', 'Reload Gradle Project' (highlighted with a red arrow), 'Ignore Gradle Project', 'Tasks Activation', 'Refresh Gradle Dependencies', and 'Analyze Dependencies...'. A status bar at the top of the Gradle window indicates 'Task list not built...'.

Contoh

Pada Screen Student Grade App disamping, input field component menggunakan Material design yaitu **TextInputEditText** dan button component menggunakan **MaterialButton**



Contoh menggunakan TextInputEditText

```
<com.google.android.material.textfield.TextInputLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">

    <com.google.android.material.textfield.TextInputEdit
        Text
        android:id="@+id/et_uas"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="UAS" />

</com.google.android.material.textfield.TextInputLayout>
```

Contoh Penggunaan Material Button

```
<com.google.android.material.button.MaterialButton
    android:id="@+id/btn_calculate"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="16dp"
    android:text="Hitung" />
```



HANDS ON LAB

Buat Project baru untuk registrasi new user dengan ketentuan sebagai berikut:

- 1. Create Registration Form yang berisi**
 - a. Dropdown (Spinner) yang berisi fakultas yaitu FTI, FE, FIKOM,FK**
 - b. input field-field berikut ini**
 - NIM**
 - Nama Lengkap**
 - Email (harus menggunakan format email valid)**
 - Phone (hanya boleh angka)**
 - Jurusan**
- 2. Semua fields wajib diisi**
- 3. Pada Registration form terdapat 2 button yaitu button Register dan Button Reset**
- 4. Jika button Register diklik maka screen akan berpindah ke Summary page yang berisi detail data user yang disimpan**
- 5. Jika Form Reset diklik maka, input field akan kosong atau mentrigger clear data.**

- **Summary Detail Page**
 - Pada summary detail page, email dan phone dapat diklik. yang jika email diklik akan meredirect ke compose email screen, jika phone diklik maka akan meredirect ke dial screen
- **Gunakan material design component saat mendesign layout**
- **Push Project ke github. Cantumkan github repo url project pada elearning**
- **Dikumpulkan maksimal hari Rabu tanggal 4 Desember 2024 pukul 24.00**
- **Gunakan best practices dari Clean code yang sudah dipelajari dari pertemuan pekan lalu**