

# **LAPORAN JOBSHEET 5**

## **Aplikasi Pertama & Widget Dasar Flutter**

Mata Kuliah: Pemrograman Mobile

Dosen Pengampu: Ade Ismail, S.Kom., M.TI.



Disusun Oleh:

Nama: Syava Aprilia P

NIM: 2241760129

Absen: 24

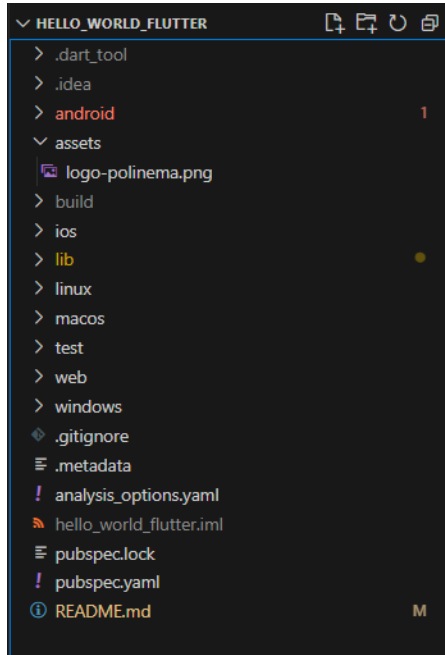
**PROGRAM STUDI SISTEM INFORMASI BISNIS**

**JURUSAN TEKNOLOGI INFORMASI**

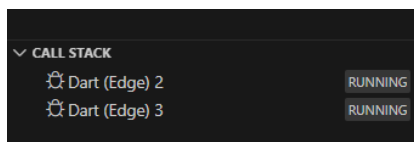
**POLITEKNIK NEGERI MALANG**

**2024**

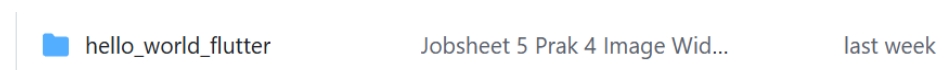
## Praktikum 1: Membuat Project Flutter Baru



## Praktikum 2: Menghubungkan Perangkat Android atau Emulator



## Praktikum 3: Membuat Repository GitHub dan Laporan Praktikum



## Praktikum 4: Menerapkan Widget Dasar

### Langkah 1: Text Widget

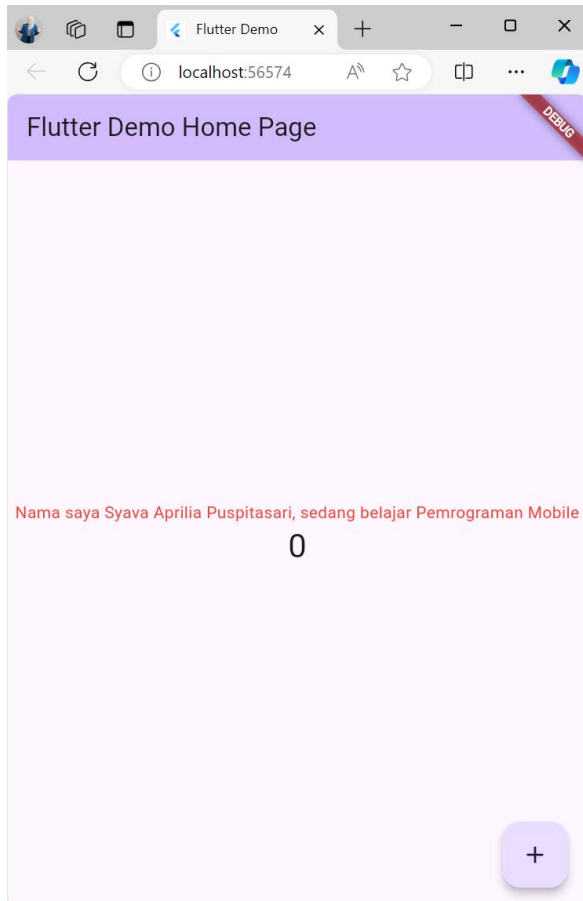
Buat folder baru `basic_widgets` di dalam folder `lib`. Kemudian buat file baru di dalam `basic_widgets` dengan nama `text_widget.dart`. Ketik atau salin kode program berikut ke project `hello_world` Anda pada file `text_widget.dart`.

```
main.dart M text_widget.dart U X
lib > basic_widgets > text_widget.dart > ...
1 import 'package:flutter/material.dart';
2
3 class MyTextWidget extends StatelessWidget {
4   const MyTextWidget({Key? key}) : super(key: key);
5
6   @override
7   Widget build(BuildContext context) {
8     return const Text(
9       "Nama saya Syava Aprilia Puspitasari, sedang belajar Pemrograman Mobile",
10      style: TextStyle(color: Colors.red, fontSize: 14),
11      textAlign: TextAlign.center); // Text
12   }
13 }
```

Lakukan import file text\_widget.dart ke main.dart, lalu ganti bagian text widget dengan kode di atas. Maka hasilnya seperti gambar berikut. Screenshot hasil milik Anda, lalu dibuat laporan

```
main.dart M X text_widget.dart U
lib > main.dart > _MyHomePageState > build
58 class _MyHomePageState extends State<MyHomePage> {
73   Widget build(BuildContext context) {
101     // axis because Columns are vertical (the cross axis would be
102     // horizontal).
103     //
104     // TRY THIS: Invoke "debug painting" (choose the "Toggle Debug Paint"
105     // action in the IDE, or press "p" in the console), to see the
106     // wireframe for each widget.
107     mainAxisAlignment: MainAxisAlignment.center,
108     children: <Widget>[
109       const MyTextWidget(),
110       Text(
111         '$_counter',
112         style: Theme.of(context).textTheme.headlineMedium,
113       ), // Text
114     ], // <Widget>[]
115   ), // Column
116 ), // Center
117 floatingActionButton: FloatingActionButton(
118   onPressed: _incrementCounter,
119   tooltip: 'Increment',
+ 120   child: const Icon(Icons.add),
121 ), // This trailing comma makes auto-formatting nicer for build methods. // FloatingActionButton
122 ); // Scaffold
123 }
124 }
```

Hasil Running



## Langkah 2: Image Widget

Buat sebuah file `image_widget.dart` di dalam folder `basic_widgets` dengan isi kode berikut.

```
lib > basic_widgets > image_widget.dart > MyImageWidget
1  import 'package:flutter/material.dart';
2
3  class MyImageWidget extends StatelessWidget {
4    const MyImageWidget({Key? key}) : super(key: key);
5
6    @override
7    Widget build(BuildContext context) {
8      return const Image(
9        image: AssetImage("logo-polinema.png")
10     ); // Image
11   }
12 }
```

Lakukan penyesuaian asset pada file `pubspec.yaml` dan tambahkan file logo Anda di folder `assets` project `hello_world`.

Jangan lupa sesuaikan kode dan import di file `main.dart` kemudian akan tampil gambar seperti berikut.

```

lib > main.dart > main
59 class _MyHomePageState extends State<MyHomePage> {
74   Widget build(BuildContext context) {
105     // TRY THIS: Invoke "debug painting" (choose the "Toggle Debug Paint"
106     // action in the IDE, or press "p" in the console), to see the
107     // wireframe for each widget.
108     mainAxisAlignment: MainAxisAlignment.center,
109     children: <Widget>[
110       //const MyTextWidget(),
111       const MyImageWidget(),
112       Text(
113         '$_counter',
114         style: Theme.of(context).textTheme.headlineMedium,
115       ), // Text
116     ], // <Widget>[]
117   ), // Column
118 ), // Center
119 floatingActionButton: FloatingActionButton(
120   onPressed: _incrementCounter,
121   tooltip: 'Increment',
122   child: const Icon(Icons.add),
123 ), // This trailing comma makes auto-formatting nicer for build methods. // FloatingActionButton
124 ); // Scaffold
125 }
126 }

```

Hasil Running



## Praktikum 5: Menerapkan Widget Material Design dan iOS Cupertino

Selesaikan langkah-langkah praktikum berikut ini dengan melanjutkan project `hello_world` Anda. Lakukan langkah yang sama seperti pada Praktikum 3, yaitu setiap widget dibuat file sendiri lalu import ke `main.dart` dan screenshot hasilnya.

### Langkah 1: Cupertino Button dan Loading Bar

Buat file di `basic_widgets > loading_cupertino.dart`. Import stateless widget dari material dan cupertino. Lalu isi kode di dalam method `Widget build` adalah sebagai berikut.

```
lib > basic_widgets > loading_cupertino.dart > LoadingCupertino
1  import "package:flutter/cupertino.dart";
2  import "package:flutter/material.dart";
3
4  class LoadingCupertino extends StatelessWidget {
5    const LoadingCupertino({Key? key}) : super(key: key);
6    @override
7    Widget build(BuildContext context) {
8      return MaterialApp(
9        home: Container(
10         margin: const EdgeInsets.only(top: 30),
11         color: Colors.white,
12         child: Column(
13           children: <Widget>[
14             CupertinoButton(
15               child: const Text("Contoh button"),
16               onPressed: () {},
17             ), // CupertinoButton
18             const CupertinoActivityIndicator(),
19           ], // <Widget>[]
20         ), // Column
21       ), // Container
22     ); // MaterialApp
23   }
24 }
```

### Langkah 2: Floating Action Button (FAB)

Button widget terdapat beberapa macam pada flutter yaitu `ButtonBar`, `DropDownButton`, `TextButton`, `FloatingActionButton`, `IconButton`, `OutlineButton`, `PopupMenuButton`, dan `ElevatedButton`.

Buat file di `basic_widgets > fab_widget.dart`. Import stateless widget dari material. Lalu isi kode di dalam method `Widget build` adalah sebagai berikut.

```

lib > basic_widgets > fab_widget.dart > FabWidget > build
1  import 'package:flutter/material.dart';
2
3  class FabWidget extends StatelessWidget {
4    @override
5    Widget build(BuildContext context) {
6      return MaterialApp(
7        home: Scaffold(
8          appBar: AppBar(
9            title: const Text('Floating Action Button Example'),
10           backgroundColor: Colors.pink,
11         ), // AppBar
12         body: Center(
13           child: const Text(
14             'Tekan tombol FAB di bawah!',
15             style: TextStyle(fontSize: 18),
16           ), // Text
17         ), // Center
18         floatingActionButton: FloatingActionButton(
19           onPressed: () {
20             // Tambahkan aksi ketika FAB ditekan di sini
21           },
22           child: const Icon(Icons.thumb_up),
23           backgroundColor: Colors.pink,
24         ), // FloatingActionButton
25       ), // Scaffold
26     ); // MaterialApp
27   }
28 }
29

```

### Langkah 3: Scaffold Widget

Scaffold widget digunakan untuk mengatur tata letak sesuai dengan material design.

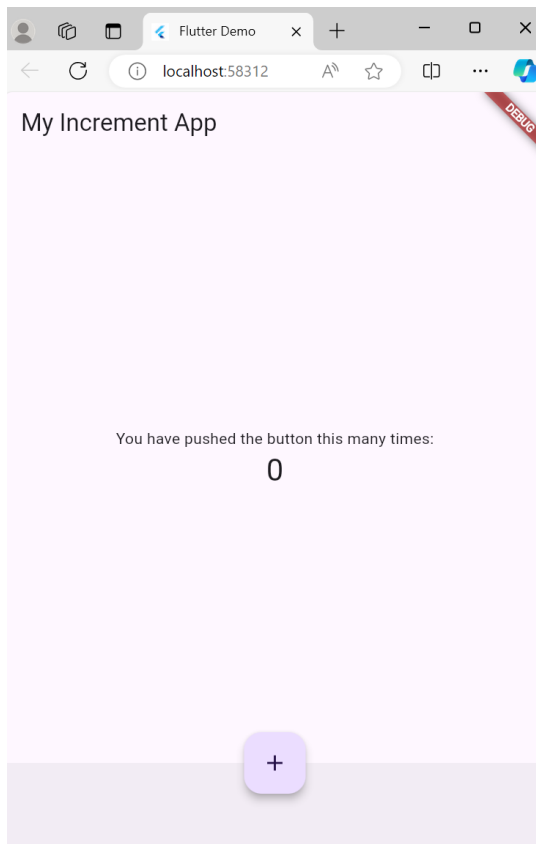
Ubah isi kode main.dart seperti berikut.

```

main.dart 2, M x ! pubspec.yaml text_widget.dart image_widget.dart loading_cupertino.d
lib > main.dart > _MyHomePageState
1  import 'package:flutter/material.dart';
2  import 'basic_widgets/text_widget.dart';
3  import 'basic_widgets/image_widget.dart';
4
5  void main() {
6    runApp(const MyApp());
7  }
8
9  class MyApp extends StatelessWidget {
10   const MyApp({super.key});
11
12   // This widget is the root of your application.
13   @override
14   Widget build(BuildContext context) {
15     return MaterialApp(
16       title: 'Flutter Demo',
17       theme: ThemeData(
18         colorScheme: ColorScheme.fromSeed(seedColor: Colors.deepPurple),
19         primarySwatch: Colors.red,
20       ), // ThemeData
21       home: const MyHomePage(title: 'My Increment App'),
22     ); // MaterialApp
23   }
24 }
25
26 class MyHomePage extends StatefulWidget {
27   const MyHomePage({Key? key, required this.title}) : super(key: key);
28
29   final String title;
30
31   @override
32   State<MyHomePage> createState() => _MyHomePageState();
33 }

```

## Hasil running



## Langkah 4: Dialog Widget

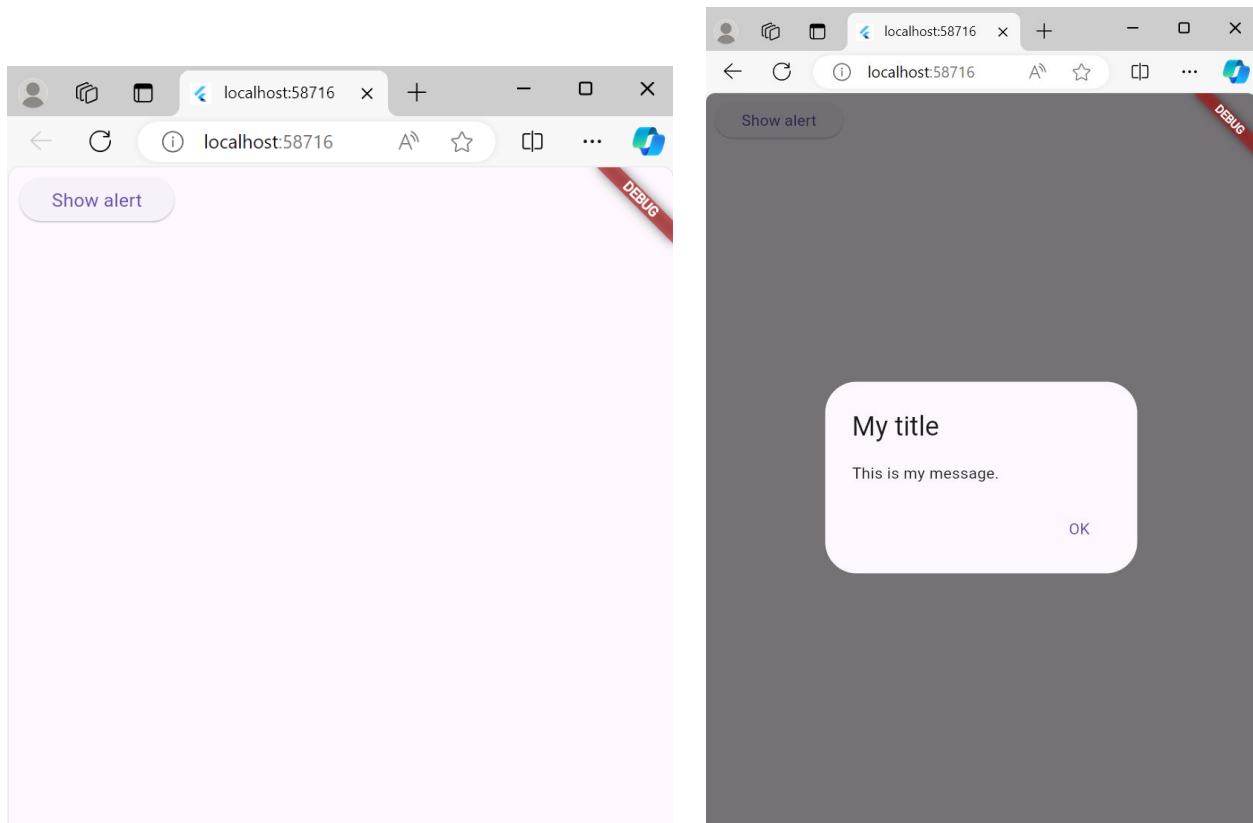
Dialog widget pada flutter memiliki dua jenis dialog yaitu AlertDialog dan SimpleDialog.

Ubah isi kode main.dart seperti berikut.

```
main.dart 2, M X ! pubspec.yaml text_widget.dart image_widget.dart loading_cupertino.d
lib > main.dart > ...
1 import 'package:flutter/material.dart';
2 import 'basic_widgets/text_widget.dart';
3 import 'basic_widgets/image_widget.dart';
4
5 Run | Debug | Profile
6 void main() {
7   runApp(const MyApp());
8 }
9 //DIALOG WIDGET
10 class MyApp extends StatelessWidget {
11   const MyApp({Key? key}) : super(key: key);
12
13   @override
14   Widget build(BuildContext context) {
15     return const MaterialApp(
16       home: Scaffold(
17         body: MyLayout(),
18       ), // Scaffold
19     ); // MaterialApp
20   }
21 }
22
23 class MyLayout extends StatelessWidget {
24   const MyLayout({Key? key}) : super(key: key);
25
26   @override
```



## Hasil Running



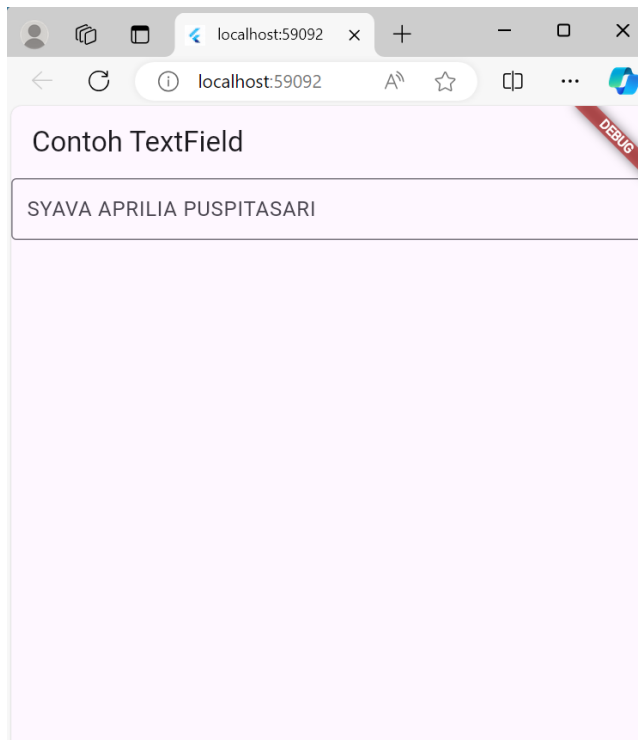
## Langkah 5: Input dan Selection Widget

Flutter menyediakan widget yang dapat menerima input dari pengguna aplikasi yaitu antara lain Checkbox, Date and Time Pickers, Radio Button, Slider, Switch, TextField.

Contoh penggunaan TextField widget adalah sebagai berikut:

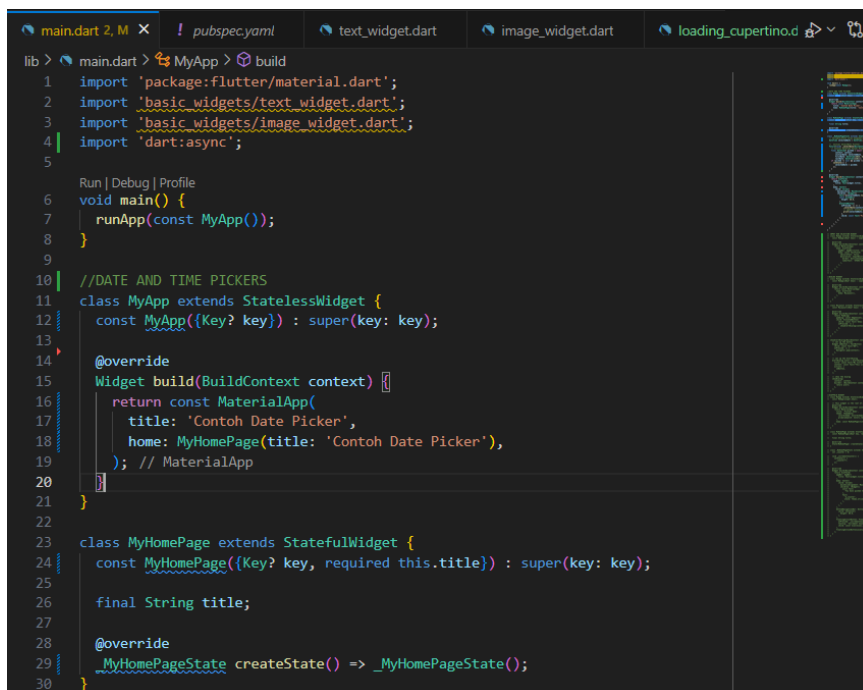
```
main.dart 2, M x ! pubspec.yaml text_widget.dart image_widget.dart loading_cupertino.d
lib > main.dart > MyApp > build
1 import 'package:flutter/material.dart';
2 import 'basic_widgets/text_widget.dart';
3 import 'basic_widgets/image_widget.dart';
4
5 Run | Debug | Profile
6 void main() {
7   runApp(const MyApp());
8 }
9 // INPUT DAN SELECTION WIDGET
10 class MyApp extends StatelessWidget {
11   const MyApp({Key? key}) : super(key: key);
12
13   @override
14   Widget build(BuildContext context) {
15     return MaterialApp(
16       home: Scaffold(
17         appBar: AppBar(title: const Text("Contoh TextField")),
18         body: const TextField(
19           obscureText: false,
20           decoration: InputDecoration(
21             border: OutlineInputBorder(),
22             labelText: 'SYAVA APRILIA PUSPITASARI',
23           ), // InputDecoration
24         ), // TextField
25       ), // Scaffold
26     ); // MaterialApp
27   }
28 }
```

## Hasil Running



## Langkah 6: Date and Time Pickers

Date and Time Pickers termasuk pada kategori input dan selection widget, berikut adalah contoh penggunaan Date and Time Pickers.



Hasil Running

