

**TUGAS PENDAHULUAN
PEMROGRAMAN PERANGKAT BERGERAK**

**MODUL 7
NAVIGASI & NOTIFIKASI**



Disusun Oleh :
Dzikri Naufal Wisnu
Pravida
2211104063
SE06-02

Asisten Praktikum :
Muhammad Faza Zulian Gesit Al Barru
Aisyah Hasna Aulia

Dosen Pengampu :
Yudha Islami Sulistya, S.Kom., M.Cs.

PROGRAM STUDI S1 SOFTWARE ENGINEERING
FAKULTAS INFORMATIKA
TELKOM UNIVERSITY PURWOKERTO
2024

A. SOAL NOMOR 1

Buatlah satu project baru, yang mana di dalamnya terdapat navigasi untuk pindah dari satu halaman ke halaman lainnya.

Source Code :

Main.dart

A screenshot of a code editor with a dark background and light-colored text. At the top left, there are three colored circles (red, yellow, green) representing window control buttons. The code is written in Dart and includes imports for Flutter material widgets and three custom screen widgets. It defines a main function that runs the MyApp widget. The MyApp class extends StatelessWidget and overrides the build method to return a MaterialApp widget. The MaterialApp widget is configured with a title, theme, initial route, and a list of routes for navigation.

```
1  import 'package:flutter/material.dart';
2  import 'screens/home_screen.dart';
3  import 'screens/second_screen.dart';
4  import 'screens/third_screen.dart';
5
6  void main() {
7    runApp(const MyApp());
8  }
9
10 class MyApp extends StatelessWidget {
11   const MyApp({super.key});
12
13   @override
14   Widget build(BuildContext context) {
15     return MaterialApp(
16       title: 'Flutter Navigation Demo',
17       theme: ThemeData(
18         primarySwatch: Colors.blue,
19         useMaterial3: true,
20       ),
21       initialRoute: '/',
22       routes: {
23         '/': (context) => const HomeScreen(),
24         '/second': (context) => const SecondScreen(),
25         '/third': (context) => const ThirdScreen(),
26       },
27     );
28   }
29 }
30
```

Home

```
1 import 'package:flutter/material.dart';
2
3 class HomeScreen extends StatelessWidget {
4   const HomeScreen({super.key});
5
6   @override
7   Widget build(BuildContext context) {
8     return Scaffold(
9       appBar: AppBar(
10        title: const Text('Home Screen'),
11        backgroundColor: Colors.blue,
12      ),
13      body: Center(
14        child: Column(
15          mainAxisAlignment: MainAxisAlignment.center,
16          children: [
17            const Text(
18              'Halaman Utama',
19              style: TextStyle(fontSize: 24),
20            ),
21            const SizedBox(height: 20),
22            ElevatedButton(
23              onPressed: () {
24                Navigator.pushNamed(context, '/second');
25              },
26              style: ElevatedButton.styleFrom(
27                backgroundColor: Colors.blue,
28                foregroundColor: Colors.white,
29                padding:
30                  const EdgeInsets.symmetric(horizontal: 32, vertical: 16),
31                shape: RoundedRectangleBorder(
32                  borderRadius: BorderRadius.circular(30),
33                ),
34                elevation: 5,
35                shadowColor: Colors.blue.withOpacity(0.5),
36              ),
37              child: Row(
38                mainAxisAlignment: MainAxisAlignment.min,
39                children: const [
40                  Icon(Icons.arrow_forward),
41                  SizedBox(
42                    width: 8,
43                  ),
44                  Text(
45                    'ke Halaman Kedua',
46                    style: TextStyle(fontSize: 16),
47                  ),
48                ],
49              ),
50            const SizedBox(height: 10),
51            ElevatedButton(
52              onPressed: () {
53                Navigator.pushNamed(context, '/third');
54              },
55              style: ElevatedButton.styleFrom(
56                backgroundColor: Colors.green,
57                foregroundColor: Colors.white,
58                padding:
59                  const EdgeInsets.symmetric(horizontal: 32, vertical: 16),
60                shape: RoundedRectangleBorder(
61                  borderRadius: BorderRadius.circular(30),
62                ),
63                elevation: 5,
64                shadowColor: Colors.green.withOpacity(0.5),
65              ),
66              child: Row(
67                mainAxisAlignment: MainAxisAlignment.min,
68                children: const [
69                  Icon(Icons.arrow_forward),
70                  SizedBox(width: 8),
71                  Text(
72                    'Ke Halaman Ketiga',
73                    style: TextStyle(fontSize: 16),
74                  ),
75                ],
76              ),
77            ),
78          ],
79        ),
80      ),
81    );
82  }
83 }
84
```

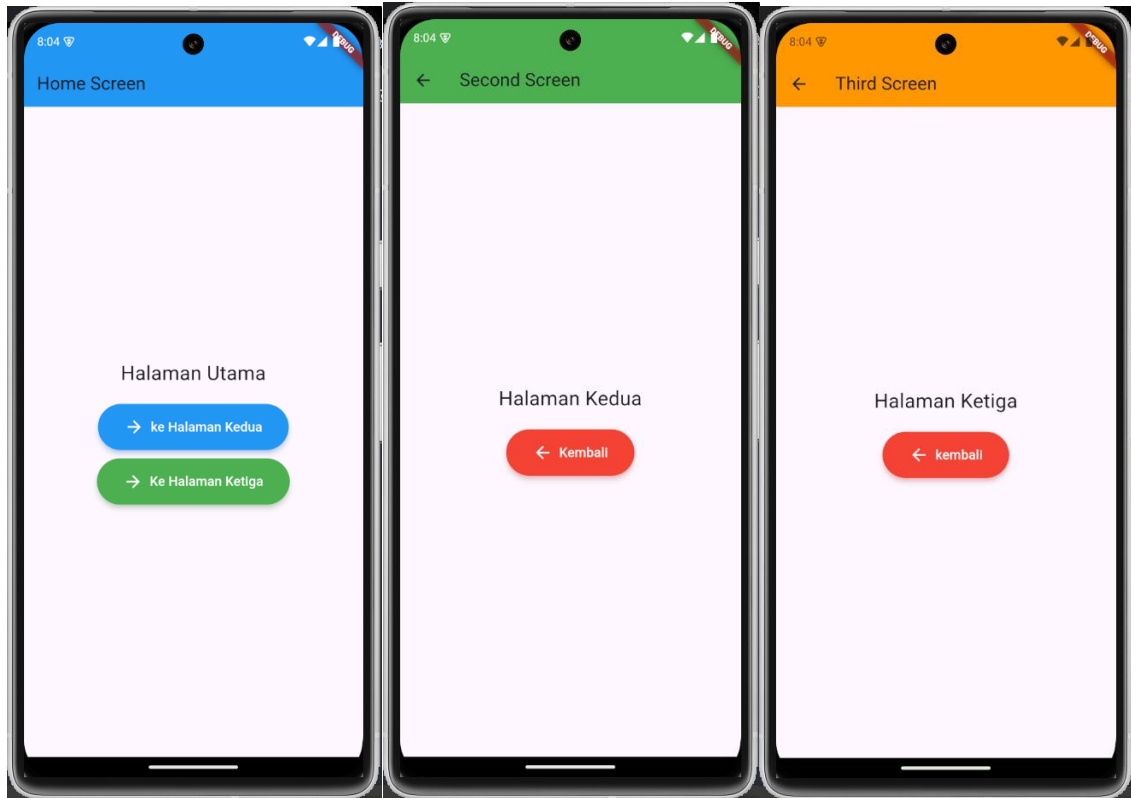
Second

```
1  import 'package:flutter/material.dart';
2
3  class SecondScreen extends StatelessWidget {
4    const SecondScreen({super.key});
5
6    @override
7    Widget build(BuildContext context) {
8      return Scaffold(
9        appBar: AppBar(
10         title: const Text('Second Screen'),
11         backgroundColor: Colors.green,
12       ),
13       body: Center(
14         child: Column(
15           mainAxisAlignment: MainAxisAlignment.center,
16           children: [
17             const Text(
18               'Halaman Kedua',
19               style: TextStyle(fontSize: 24),
20             ),
21             const SizedBox(height: 20),
22             ElevatedButton(
23               onPressed: () {
24                 Navigator.pop(context);
25               },
26               style: ElevatedButton.styleFrom(
27                 backgroundColor: Colors.red,
28                 foregroundColor: Colors.white,
29                 padding:
30                   const EdgeInsets.symmetric(horizontal: 32, vertical: 16),
31                 shape: RoundedRectangleBorder(
32                   borderRadius: BorderRadius.circular(30),
33                 ),
34                 elevation: 5,
35                 shadowColor: Colors.red.withOpacity(0.5),
36               ),
37             child: Row(
38               mainAxisAlignment: MainAxisAlignment.min,
39               children: const [
40                 Icon(Icons.arrow_back),
41                 SizedBox(width: 8),
42                 Text(
43                   'Kembali',
44                   style: TextStyle(fontSize: 16),
45                 ),
46               ],
47             ),
48           ],
49         ),
50       ),
51     );
52   }
53 }
54 }
55
```

Third

```
1 import 'package:flutter/material.dart';
2
3 class ThirdScreen extends StatelessWidget {
4   const ThirdScreen({super.key});
5
6   @override
7   Widget build(BuildContext context) {
8     return Scaffold(
9       appBar: AppBar(
10        title: const Text('Third Screen'),
11        backgroundColor: Colors.orange,
12      ),
13      body: Center(
14        child: Column(
15          mainAxisAlignment: MainAxisAlignment.center,
16          children: [
17            const Text(
18              'Halaman Ketiga',
19              style: TextStyle(fontSize: 24),
20            ),
21            const SizedBox(height: 20),
22            ElevatedButton(
23              onPressed: () {
24                Navigator.pop(context);
25              },
26              style: ElevatedButton.styleFrom(
27                backgroundColor: Colors.red,
28                foregroundColor: Colors.white,
29                padding:
30                  const EdgeInsets.symmetric(horizontal: 32, vertical: 16),
31                shape: RoundedRectangleBorder(
32                  borderRadius: BorderRadius.circular(30),
33                ),
34                elevation: 5,
35                shadowColor: Colors.red.withOpacity(0.5),
36              ),
37              child: Row(
38                mainAxisAlignment: MainAxisAlignment.min,
39                children: const [
40                  Icon(Icons.arrow_back),
41                  SizedBox(width: 8),
42                  Text(
43                    'kembali',
44                    style: TextStyle(fontSize: 16),
45                  ),
46                ],
47              ),
48            ),
49          ],
50        ),
51      ),
52    );
53  }
54 }
55
```

Screenshoot Output



Deskripsi Program :

Mulai dari struktur project terlebih dahulu kita akan membuat folder untuk menampung file home, second, dan third screen yang nanti akan kita import ke main.dart. Program ini menggunakan navigasi named routes yang nanti dengan menggunakan button untuk berpindah pindah screen. Halaman utama diberikan tombol untuk menuju ke halaman halaman yang lain. Di halaman second dan third screen diberikan button 'kembali' untuk kembali ke halaman utama. Cara kerja dari navigasinya dengan contoh 'Navigator.pushNamed(context, '/second')' akan membuat kita berpindah ke halaman second screen, kemudian menggunakan 'Navigator.pop(context)' untuk kembali ke halaman sebelumnya. Navigasi yang kita lakukan itu sebelumnya harus kita buat rute nya di main.dart kita guna untuk menentukan rute awal serta mendefinisikan semua rute yang tersedia. Output yang dihasilkan akan menampilkan halaman utama yang memiliki button ke halaman second dan third, lalu di masing masing halaman dapat kembali ke halaman utama menggunakan button 'kembali' atau icon arrow back yang dipojok kiri atas.