

3/20/2024

# Modul Praktikum

## Pemrograman Mobile

### Pertemuan 3

Pokok Bahasan :

Perpindahan antar halaman tanpa mengirim dan meminta data

Penggunaan bottom navigation bar

Widget lanjutan(container, image lokal dan network , icon, iconbutton,gridview)

GestureDetector

### Kebutuhan

Komputer / Laptop

Android Studio / Visual Studio Code

### PERHATIKAN

**PERHATIKAN SECARA SEKSAMA SEBELUM MENGERJAKAN PRAKTIKUM INI ADA BANYAK BAGIAN KODE PROGRAM YANG BISA DI COPY PASTE UNTUK MEMPERCEPAT PENGERJAAAN**

**GAMBAR TIDAK HARUS SAMA**

**VIDEO ADA DI LINK BERIKUT INI**

<https://www.youtube.com/watch?v=bR27KPTqWcl&pp=ygUQbmFuZGFuZyBoZXJtYW50bw%3D%3D>

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1. Pastikan visual studio code dan Dart sudah siap di komputer anda
2. Jalankan Visual Studio Code
3. Buat project flutter baru dengan cara **View – Command Pallete – Flutter:New Project – Application – arahkan ke folder tempat aplikasi akan disimpan – select a folder to create the project in – beri nama file – tekan enter**
4. Buat Folder **assets** di root directory project ada
5. Buat Folder **gambar** di dalam folder **assets**
6. Masukan logo amikompurwokerto.png ke dalam folder **gambar**
7. Buka file **pubspec.yaml** kemudian uncomment pada bagian asset seperti terlihat dibawah ini  

```
assets:  
  - assets/gambar/
```

Simpan file pubspec.yaml  
Kemudian jalankan perintah flutter pub get dari terminal visual studiocode
8. Buat file dart baru dengan nama **dosen.dart** kemudian lengkapi isinya seperti dibawah ini

<b>Kode Program</b>
---------------------

```
1 import 'package:flutter/material.dart';
2
3 class Dosen extends StatefulWidget {
4   const Dosen({super.key});
5
6   @override
7   State<Dosen> createState() => _DosenState();
8 }
9
10 class _DosenState extends State<Dosen> {
11   String alamatGambar =
12     "https://img.freepik.com/free-photo/image-young-asian-woman-company-worker-glasses-
smiling-holding-digital-tablet-standing-white-background_1258-89376.jpg?w=740&t=st-
1710710673~exp=1710711273~hmac=41d392af726a600fd3751e56232d789eeaba0c0d
83a52e0dc742c34f25184c51";
13
14   @override
15   Widget build(BuildContext context) {
16     return Scaffold(
17       appBar: AppBar(
18         title: const Text("Dosen"),
19       ),
20       body: Column(
21         mainAxisAlignment: MainAxisAlignment.start,
22         children: [
23           Container(
24             width: MediaQuery.of(context).size.width,
25             height: MediaQuery.of(context).size.width,
26             decoration: BoxDecoration(
27               color: Colors.red,
28               image: DecorationImage(
29                 image: NetworkImage(alamatGambar), fit: BoxFit.cover),
30             ),
31           Expanded(
32             child: GridView(
33               gridDelegate: const SliverGridDelegateWithFixedCrossAxisCount(
34                 crossAxisCount: 3),
35               children: [
36                 GestureDetector(
37                   onTap: () {
38                     setState(() {
39                       alamatGambar =
40                         "https://img.freepik.com/free-photo/image-young-asian-woman-
company-worker-glasses-smiling-holding-digital-tablet-standing-white-background_1258-
89376.jpg?w=740&t=st=1710710673~exp=1710711273~hmac=
41d392af726a600fd3751e56232d789eeaba0c0d83a52e0dc742c34f25184c51";
41                     });
42                   },
43                 child: Container(
44                   margin: const EdgeInsets.all(2),
45                   height: 100,
46                   width: 100,
47                   decoration: const BoxDecoration(
48                     image: DecorationImage(
49                       image: NetworkImage(
50                         "https://img.freepik.com/free-photo/image-young-asian-woman-
company-worker-glasses-smiling-holding-digital-tablet-standing-white-background_1258-
89376.jpg?w=740&t=st=1710710673~exp=1710711273~hmac=
41d392af726a600fd3751e56232d789eeaba0c0d83a52e0dc742c34f25184c51"),
51                 
```

```

51             fit: BoxFit.cover),
52             color: Colors.green,
53         ),
54     ),
55     ),
56     GestureDetector(
57         onTap: () {
58             setState(() {
59                 alamatGambar =
60                     "https://img.freepik.com/free-photo/image-handsome-caucasian-
61                     man-party-suit-smiling-pleased-attend-formal-event-standing-white-background_1258-
62                     64650.jpg?w=740&t=st=1710710678~exp=1710711278~hmac=
63                     339b4deb61b657338ee71033508dc3ca645f2bed763f792eabf19cf78685cd93";
64             });
65         },
66     ),
67     child: Container(
68         margin: const EdgeInsets.all(2),
69         height: 100,
70         width: 100,
71         decoration: const BoxDecoration(
72             image: DecorationImage(
73                 image: NetworkImage(
74                     "https://img.freepik.com/free-photo/image-handsome-
75                     caucasian-man-party-suit-smiling-pleased-attend-formal-event-standing-white-
76                     background_1258-64650.jpg?w=740&t=st=1710710678~exp=1710711278~hmac=
77                     339b4deb61b657338ee71033508dc3ca645f2bed763f792eabf19cf78685cd93"),
78             fit: BoxFit.cover),
79             color: Colors.green,
80         ),
81     ),
82     ),
83     GestureDetector(
84         onTap: () {
85             setState(() {
86                 alamatGambar =
87                     "https://img.freepik.com/free-photo/shopping-concept-portrait-
88                     attractive-korean-girl-yellow-sweater-showing-promotion-offer-copy-space-pointing-looking-
89                     left-with-pleased-smile-blue-background_1258-76029.jpg?w=740&t=st=1710710698~exp=
90                     1710711298~hmac=a3bc476a66893c00fd22392d4407313c4fb515c427fccc68fbff55eaf4be3ad";
91             });
92         },
93     ),
94     child: Container(
95         margin: const EdgeInsets.all(2),
96         height: 100,
97         width: 100,
98         decoration: const BoxDecoration(
99             image: DecorationImage(

```

```

100    "https://img.freepik.com/free-photo/waist-up-portrait-handsome-
serious-unshaven-male-keeps-hands-together-dressed-dark-blue-shirt-has-talk-with-
interlocutor-stands-against-white-wall-self-confident-man-freelancer_273609-16320.jpg?w=
740&t=st=1710710691~exp=1710711291~hmac=52502b78c0ad72b7f50d8bd81088f89b87e85d29
240f642bee6b5d8aaa9df35a";
101    });
102  },
103  child: Container(
104    margin: const EdgeInsets.all(2),
105    height: 100,
106    width: 100,
107    decoration: const BoxDecoration(
108      image: DecorationImage(
109        image: NetworkImage(
110          "https://img.freepik.com/free-photo/waist-up-portrait-
handsome-serious-unshaven-male-keeps-hands-together-dressed-dark-blue-shirt-has-talk-with-
interlocutor-stands-against-white-wall-self-confident-man-freelancer_273609-16320.jpg?w=
740&t=st=1710710691~exp=1710711291~hmac=52502b78c0ad72b7f50d8bd81088f89b87e85d29
240f642bee6b5d8aaa9df35a"),
111        fit: BoxFit.cover),
112        color: Colors.green,
113      ),
114    ),
115  ),
116  GestureDetector(
117    onTap: () {
118      setState(() {
119        alamatGambar =
120          "https://img.freepik.com/free-photo/lifestyle-business-people-
beautiful-cute-girl-woman-holding-smart-phone-tablet-computer-pink_1150-15546.jpg?w=740&t=
st=1710710737~exp=1710711337~hmac=c5378f4f44b103b041117904930bb3b24a05a5d6
6cc4f03523cea91e9e15725b";
121      });
122    },
123    child: Container(
124      margin: const EdgeInsets.all(2),
125      height: 100,
126      width: 100,
127      decoration: const BoxDecoration(
128        image: DecorationImage(
129          image: NetworkImage(
130            "https://img.freepik.com/free-photo/lifestyle-business-
people-beautiful-cute-girl-woman-holding-smart-phone-tablet-computer-pink_1150-15546.jpg?
w=740&t=st=1710710737~exp=1710711337~hmac=c5378f4f44b103b041117904930bb3b24a05a5d6
6cc4f03523cea91e9e15725b"),
131        fit: BoxFit.cover),
132        color: Colors.green,
133      ),
134    ),
135  ),
136  GestureDetector(
137    onTap: () {
138      setState(() {
139        alamatGambar =
140          "https://img.freepik.com/free-photo/young-man-blue-striped-
jersey-looking-copy-space_140725-105151.jpg?w=740&t=st=1710710753~exp=1710711353~hmac=
ac0e8f7e857a026bafe4ea407fb6c1c1a6a65097e9cce918b95a3d53b29e75a";
141      });
142    },
143    child: Container(
144      margin: const EdgeInsets.all(2),
145      height: 100,
146      width: 100,
147      decoration: const BoxDecoration(

```

```
148         image: DecorationImage(
149             image: NetworkImage(
150                 "https://img.freepik.com/free-photo/young-man-blue-striped-
jersey-looking-copy-space_140725-105151.jpg?w=740&t=st=1710710753~exp=1710711353~hmac=
ac0e8f7e857a026bafe4ea407fb6c1c1a6a65097e9cce918b95a3d53b29e75a"),
151                 fit: BoxFit.cover),
152             color: Colors.green,
153         ),
154     ),
155     ],
156     ],
157     ],
158     ],
159     ],
160     );
161   );
162 }
163 }
164 }
```

9. Buat file dart baru dengan nama **mahasiswa.dart** kemudian lengkapi isinya seperti dibawah ini

**Kode Program**

```

1 import 'package:flutter/material.dart';
2
3 class Mahasiswa extends StatefulWidget {
4   const Mahasiswa({super.key});
5
6   @override
7   State<Mahasiswa> createState() => _DosenState();
8 }
9
10 class _DosenState extends State<Mahasiswa> {
11   @override
12   Widget build(BuildContext context) {
13     return Scaffold(
14       appBar: AppBar(
15         title: const Text("Mahasiswa"),
16       ),
17       body: ListView(
18         children: [
19           ListTile(
20             leading: Container(
21               height: 60,
22               width: 60,
23               decoration: BoxDecoration(
24                 color: Colors.red,
25                 borderRadius: BorderRadius.circular(50),
26                 image: const DecorationImage(
27                   image: NetworkImage(
28                     "https://img.freepik.com/free-photo/image-young-asian-woman-company-worker-glasses-smiling-holding-digital-tablet-standing-white-background_1258-89376.jpg?w=740&t=st=1710718673~exp=1710711273~hmac=41d392af726a600fd3751e56232d789eeaba0c0d83a52e0dc742c34f25184c51"),
29                     fit: BoxFit.cover,
30                   ),
31                 ),
32             ),
33             title: const Text("00001"),
34             subtitle: const Column(
35               crossAxisAlignment: CrossAxisAlignment.start,
36               children: [
37                 Text("Nama mahasiswa"),
38                 Text("Alamat mahasiswa"),
39                 Text("mahasiswa@gmail.com"),
40                 Text("08961"),
41               ],
42             ),
43           ),
44           ListTile(
45             leading: Container(
46               height: 60,
47               width: 60,
48               decoration: BoxDecoration(
49                 color: Colors.red,
50                 borderRadius: BorderRadius.circular(50),
51                 image: const DecorationImage(
52                   image: NetworkImage(
53                     "https://img.freepik.com/free-photo/image-handsome-caucasian-man-party-suit-smiling-pleased-attend-formal-event-standing-white-background_1258-64650.jpg?w="
```

```
740&t=st=1710710678~exp=1710711278~hmac=339b4deb61b657338ee71033508dc3ca645f2bed
763f792eabf19cf78685cd93"),
54         fit: BoxFit.cover,
55     ),
56     ),
57     ),
58     title: const Text("00002"),
59     subtitle: const Column(
60         crossAxisAlignment: CrossAxisAlignment.start,
61         children: [
62             Text("Nama mahasiswa2"),
63             Text("Alamat mahasiswa2"),
64             Text("mahasiswa2@gmail.com"),
65             Text("08962"),
66             ],
67         ),
68     ),
69     ListTile(
70         leading: Container(
71             height: 60,
72             width: 60,
73             decoration: BoxDecoration(
74                 color: Colors.red,
75                 borderRadius: BorderRadius.circular(50),
76                 image: const DecorationImage(
77                     image: NetworkImage(
78                         "https://img.freepik.com/free-photo/shopping-concept-portrait-
attractive-korean-girl-yellow-sweater-showing-promotion-offer-copy-space-pointing-looking-
left-with-pleased-smile-blue-background_1258-76029.jpg?w=740&t=st=1710710698~exp=
1710711298~hmac=a3bca476a66893c00fd22392d4407313c4fb515c427fccc68fbff55eaf4be3ad"),
79                         fit: BoxFit.cover,
80                     ),
81                 ),
82             ),
83             title: const Text("00003"),
84             subtitle: const Column(
85                 crossAxisAlignment: CrossAxisAlignment.start,
86                 children: [
87                     Text("Nama mahasiswa 3"),
88                     Text("Alamat mahasiswa 3"),
89                     Text("mahasiswa3@gmail.com"),
90                     Text("08963"),
91                     ],
92                 ),
93             ),
94             ListTile(
95                 leading: Container(
96                     height: 60,
97                     width: 60,
98                     decoration: BoxDecoration(
99                         color: Colors.red,
100                         borderRadius: BorderRadius.circular(50),
101                         image: const DecorationImage(
102                             image: NetworkImage(
103                                 "https://img.freepik.com/free-photo/waist-up-portrait-handsome-
serious-unshaven-male-keeps-hands-together-dressed-dark-blue-shirt-has-talk-with-
interlocutor-stands-against-white-wall-self-confident-man-freelancer_273609-16320.jpg?w=
740&t=st=1710710691~exp=1710711291~hmac=52502b78c0ad72b7f50d8bd81088f89b87e85d29
240f642bee6b5d8aaa9df35a"),
104                         fit: BoxFit.cover,
105                     ),
106                 ),

```

```

107      ),
108      title: const Text("00004"),
109      subtitle: const Column(
110        crossAxisAlignment: CrossAxisAlignment.start,
111        children: [
112          Text("Nama mahasiswa 4"),
113          Text("Alamat mahasiswa 4"),
114          Text("mahasiswa4@gmail.com"),
115          Text("08964"),
116        ],
117      ),
118    ),
119    ListTile(
120      leading: Container(
121        height: 60,
122        width: 60,
123        decoration: BoxDecoration(
124          color: Colors.red,
125          borderRadius: BorderRadius.circular(50),
126          image: const DecorationImage(
127            image: NetworkImage(
128              "https://img.freepik.com/free-photo/lifestyle-business-people-beautiful-cute-girl-woman-holding-smart-phone-tablet-computer-pink_1150-15546.jpg?w=740&t=st=1710710737~exp=1710711337~hmac=c5378f4f44b103b04117904930bb3b24a05a5d66cc4f03523cea91e9e15725b"),
129              fit: BoxFit.cover,
130            ),
131          ),
132        ),
133        title: const Text("00005"),
134        subtitle: const Column(
135          crossAxisAlignment: CrossAxisAlignment.start,
136          children: [
137            Text("Nama mahasiswa 5"),
138            Text("Alamat mahasiswa 5"),
139            Text("mahasiswa5@gmail.com"),
140            Text("08965"),
141          ],
142        ),
143      ),
144      ListTile(
145        leading: Container(
146          height: 60,
147          width: 60,
148          decoration: BoxDecoration(
149            color: Colors.red,
150            borderRadius: BorderRadius.circular(50),
151            image: const DecorationImage(
152              image: NetworkImage(
153                "https://img.freepik.com/free-photo/young-man-blue-striped-jersey-looking-copy-space_140725-105151.jpg?w=740&t=st=1710710753~exp=1710711353~hmac=ac0e8f7e857a026bafe4ea407fb6c1c1a6a65097e9cce918b95a3d53b29e75a"),
154                fit: BoxFit.cover,
155              ),
156            ),
157          ),
158        title: const Text("00006"),
159        subtitle: const Column(
160          crossAxisAlignment: CrossAxisAlignment.start,
161          children: [
162            Text("Nama mahasiswa 6"),

```

```
163 |             Text("Alamat mahasiswa 6"),
164 |             Text("mahasiswa6@gmail.com"),
165 |             Text("08966"),
166 |             ],
167 |         ),
168 |     ),
169 |     ListTile(
170 |         leading: Container(
171 |             height: 60,
172 |             width: 60,
173 |             decoration: BoxDecoration(
174 |                 color: Colors.red,
175 |                 borderRadius: BorderRadius.circular(50),
176 |                 image: const DecorationImage(
177 |                     image: NetworkImage(
178 |                         "https://img.freepik.com/free-photo/image-young-asian-woman-company-worker-glasses-smiling-holding-digital-tablet-standing-white-background_1258-89376.jpg?w=740&t=st=1710710673~exp=1710711273~hmac=41d392af726a600fd3751e56232d789eeaba0c0d83a52e0dc742c34f25184c51"),
179 |                         fit: BoxFit.cover,
180 |                     ),
181 |                 ),
182 |             ),
183 |             title: const Text("00001"),
184 |             subtitle: const Column(
185 |                 crossAxisAlignment: CrossAxisAlignment.start,
186 |                 children: [
187 |                     Text("Nama mahasiswa 1"),
188 |                     Text("Alamat mahasiswa 1"),
189 |                     Text("mahasiswa1@gmail.com"),
190 |                     Text("08961"),
191 |                     ],
192 |                 ),
193 |             ],
194 |         ),
195 |     ),
196 | );
197 |
198 }
199 }
```

10. Buat file dart baru dengan nama **matakuliah.dart** kemudian lengkapi isinya seperti dibawah ini

**Kode Program**

```
1 import 'package:flutter/material.dart';
2
3 class Matakuliah extends StatefulWidget {
4   const Matakuliah({super.key});
5
6   @override
7   State<Matakuliah> createState() => _DosenState();
8 }
9
10 class _DosenState extends State<Matakuliah> {
11   @override
12   Widget build(BuildContext context) {
13     return Scaffold(
14       appBar: AppBar(
15         title: Text("Matakuliah"),
16       ),
17       body: Column(
18         children: [
19           Center(
20             child: Text("Ini adalah halaman Matakuliah"),
21           ),
22           IconButton(
23             onPressed: () {
24               Navigator.pop(context);
25             },
26             icon: Icon(
27               Icons.exit_to_app,
28               size: 50,
29             ),
30           ),
31         ],
32       ),
33     );
34   }
35 }
36 }
```

11. Buat file dart baru dengan nama **nilai.dart** kemudian lengkapi isinya seperti dibawah ini

**Kode Program**

```
1 import 'package:flutter/material.dart';
2
3 class Nilai extends StatefulWidget {
4   const Nilai({super.key});
5
6   @override
7   State<Nilai> createState() => _DosenState();
8 }
9
10 class _DosenState extends State<Nilai> {
11   @override
12   Widget build(BuildContext context) {
13     return Scaffold(
14       appBar: AppBar(
15         title: Text("Nilai"),
16       ),
17       body: Center(
18         child: Text("Ini adalah halaman Nilai"),
19       ),
20     );
21   }
22 }
```



12. Buka File **main.dart** kemudian edit menjadi seperti dibawah ini**Kode Program**

```

1 import 'package:flutter/material.dart';
2 import 'package:flutter_bottomnavigationbar_navigasi/dosen.dart';
3 import 'package:flutter_bottomnavigationbar_navigasi/mahasiswa.dart';
4 import 'package:flutter_bottomnavigationbar_navigasi/matakuliah.dart';
5 import 'package:flutter_bottomnavigationbar_navigasi/nilai.dart';
6
7 void main(List<String> args) {
8     runApp(const MyApp());
9 }
10
11 class MyApp extends StatelessWidget {
12     const MyApp({super.key});
13
14     @override
15     Widget build(BuildContext context) {
16         return const MaterialApp(
17             debugShowCheckedModeBanner: false,
18             home: MyHomePage(),
19         );
20     }
21 }
22
23 class MyHomePage extends StatefulWidget {
24     const MyHomePage({super.key});
25
26     @override
27     State<MyHomePage> createState() => _MyHomePageState();
28 }
29
30 class _MyHomePageState extends State<MyHomePage> {
31     int _currentIndex = 0;
32
33     @override
34     Widget build(BuildContext context) {
35         return Scaffold(
36             appBar: AppBar(
37                 title: const Text(
38                     "BottomNavigationBar dan Navigation",
39                     style: TextStyle(fontSize: 18),
40                 ),
41             ),
42             body: Center(
43                 child: Column(
44                     mainAxisAlignment: MainAxisAlignment.spaceEvenly,
45                     children: [
46                         const Text("Oleh : Nandang Hermanto"),
47                         Image.asset("assets/gambar/logoamikompurwokerto.png"),
48                     ],
49                 ),
50             ),
51             bottomNavigationBar: BottomNavigationBar(
52                 onTap: (value) {
53                     setState(() {
54                         _currentIndex = value;
55                     });
56
57                     panggilHalaman(value);
58                 },
59             ),
60         );
61     }
62 }
63
64 void panggilHalaman(int value) {
65     switch (value) {
66         case 0:
67             Navigator.pushNamed(context, '/dosen');
68             break;
69         case 1:
70             Navigator.pushNamed(context, '/mahasiswa');
71             break;
72         case 2:
73             Navigator.pushNamed(context, '/matakuliah');
74             break;
75         case 3:
76             Navigator.pushNamed(context, '/nilai');
77             break;
78     }
79 }
80
81 void main() {
82     runApp(MyApp());
83 }
84
85 
```

```
58     },
59     currentIndex: _currentIndex,
60     selectedItemColor: Colors.red,
61     backgroundColor: Colors.green[100],
62     type: BottomNavigationBarType.fixed,
63     items: const [
64       BottomNavigationBarItem(icon: Icon(Icons.home), label: "Home"),
65       BottomNavigationBarItem(icon: Icon(Icons.person), label: "Dosen"),
66       BottomNavigationBarItem(icon: Icon(Icons.people), label: "Mahasiswa"),
67       BottomNavigationBarItem(
68         icon: Icon(Icons.subject), label: "Matakuliah"),
69       BottomNavigationBarItem(icon: Icon(Icons.score), label: "Nilai"),
70     ],
71   ),
72 );
73 }
74
75 void panggilHalaman(int index) {
76   if (index == 1) {
77     Navigator.push(
78       context,
79       MaterialPageRoute(
80         builder: (context) => const Dosen(),
81       ),
82     );
83   } else if (index == 2) {
84     Navigator.push(
85       context,
86       MaterialPageRoute(
87         builder: (context) => const Mahasiswa(),
88       ),
89     );
90   } else if (index == 3) {
91     Navigator.push(
92       context,
93       MaterialPageRoute(
94         builder: (context) => const Matakuliah(),
95       ),
96     );
97   } else if (index == 4) {
98     Navigator.push(
99       context,
100      MaterialPageRoute(
101        builder: (context) => const Nilai(),
102      ),
103    );
104  }
105}
106}
107}
```

13. Jalankan program , berikut ini tampilan aplikasi saat dijalankan



