

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 Pengerjaan

GAMBAR TIDAK HARUS SAMA

VIDEO ADA DI LINK BERIKUT INI

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

Nandang Hermanto

UNIVERSITAS AMIKOM PURWOKERTO

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 Pallette – 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. Masukkan 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 studio code

8. Buat file dart baru dengan nama **dosen.dart** kemudian lengkapi isinya seperti dibawah ini

Kode Program

```

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-
13     smiling-holding-digital-tablet-standing-white-background_1258-89376.jpg?w=740&t=st=
14     1710710673~exp=1710711273~hmac=41d392af726a600fd3751e56232d789eeaba0c0d
15     83a52e0dc742c34f25184c51";
16
17     @override
18     Widget build(BuildContext context) {
19         return Scaffold(
20             appBar: AppBar(
21                 title: const Text("Dosen"),
22             ),
23             body: Column(
24                 crossAxisAlignment: CrossAxisAlignment.start,
25                 children: [
26                     Container(
27                         width: MediaQuery.of(context).size.width,
28                         height: MediaQuery.of(context).size.width,
29                         decoration: BoxDecoration(
30                             color: Colors.red,
31                             image: DecorationImage(
32                                 image: NetworkImage(alamatGambar), fit: BoxFit.cover)),
33                     ),
34                     Expanded(
35                         child: GridView(
36                             gridDelegate: const SliverGridDelegateWithFixedCrossAxisCount(
37                                 crossAxisCount: 3),
38                             children: [
39                                 GestureDetector(
40                                     onTap: () {
41                                         setState(() {
42                                             alamatGambar =
43                                             "https://img.freepik.com/free-photo/image-young-asian-woman-
44                                             company-worker-glasses-smiling-holding-digital-tablet-standing-white-background_1258-
45                                             89376.jpg?w=740&t=st=1710710673~exp=1710711273~hmac=
46                                             41d392af726a600fd3751e56232d789eeaba0c0d83a52e0dc742c34f25184c51";
47                                         });
48                                     },
49                                     child: Container(
50                                         margin: const EdgeInsets.all(2),
51                                         height: 100,
52                                         width: 100,
53                                         decoration: const BoxDecoration(
54                                             image: DecorationImage(
55                                                 image: NetworkImage(
56                                                     "https://img.freepik.com/free-photo/image-young-asian-woman-
57                                                     company-worker-glasses-smiling-holding-digital-tablet-standing-white-background_1258-
58                                                     89376.jpg?w=740&t=st=1710710673~exp=1710711273~hmac=
59                                                     41d392af726a600fd3751e56232d789eeaba0c0d83a52e0dc742c34f25184c51"),

```

```

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-
man-party-suit-smiling-pleased-attend-formal-event-standing-white-background_1258-
64650.jpg?w=740&t=st=1710710678~exp=1710711278~hmac=
339b4deb61b657338ee71033508dc3ca645f2bed763f792eabf19cf78685cd93";
61             });
62         },
63         child: Container(
64             margin: const EdgeInsets.all(2),
65             height: 100,
66             width: 100,
67             decoration: const BoxDecoration(
68                 image: DecorationImage(
69                     image: NetworkImage(
70                         "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=
339b4deb61b657338ee71033508dc3ca645f2bed763f792eabf19cf78685cd93"),
71                     fit: BoxFit.cover),
72                     color: Colors.green,
73                 ),
74             ),
75         ),
76         GestureDetector(
77             onTap: () {
78                 setState(() {
79                     alamatGambar =
80                     "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=a3bca476a66893c00fd22392d4407313c4fb515c427fcc68fbff55eaf4be3ad";
81                 });
82             },
83             child: Container(
84                 margin: const EdgeInsets.all(2),
85                 height: 100,
86                 width: 100,
87                 decoration: const BoxDecoration(
88                     image: DecorationImage(
89                         image: NetworkImage(
90                             "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=a3bca476a66893c00fd22392d4407313c4fb515c
427fcc68fbff55eaf4be3ad"),
91                             fit: BoxFit.cover),
92                             color: Colors.green,
93                         ),
94                     ),
95                 ),
96             GestureDetector(
97                 onTap: () {
98                     setState(() {
99                         alamatGambar =

```

```

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=
ac0e8f7e857a026baf4ea407fb6c1c1a6a65097e9cce918b95a3d53b29e75a";
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=  
ac0e8f7e857a026baf4ea407fb6c1c1a6a65097e9cceb918b95a3d53b29e75a"),  
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=1710710673~exp=1710711273~hmac=41d392af726a600fd3751e56232d789eeaba0c0d
83a52e0dc742c34f25184c51"),
29                 fit: BoxFit.cover,
30               ),
31             ),
32             title: const Text("00001"),
33             subtitle: const Column(
34               crossAxisAlignment: CrossAxisAlignment.start,
35               children: [
36                 Text("Nama mahasiswa"),
37                 Text("Alamat mahasiswa"),
38                 Text("mahasiswa@gmail.com"),
39                 Text("08961"),
40               ],
41             ),
42           ),
43           ListTile(
44             leading: Container(
45               height: 60,
46               width: 60,
47               decoration: BoxDecoration(
48                 color: Colors.red,
49                 borderRadius: BorderRadius.circular(50),
50                 image: const DecorationImage(
51                   image: NetworkImage(
52                     "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("0002"),
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=a3bca476a66893c00fd22392d4407313c4fb515c427fcc68fbff55eaf4be3ad"),
79                 fit: BoxFit.cover,
80             ),
81         ),
82     ),
83 title: const Text("0003"),
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=c5378f4f44b103b041117904930bb3b24a05a5d6
6cc4f03523cea91e9e15725b"),
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=
ac0e8f7e857a026baf64ea407fb6c1c1a6a65097e9cceb918b95a3d53b29e75a"),
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=41d392af726a600fd3751e56232d789eeaba0c0d
83a52e0dc742c34f25184c51"),
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 }
23

```


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     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



