

4/23/2024

# Modul Praktikum

## Pemrograman Mobile

### **Pertemuan 6**

Pokok Bahasan :

Membuat Formulir

TextField Widget

RadioListTile Widget

Checkbox Widget

DropDownButton Widget

showDatePicker

showTimePicker

AlertDialog Widget

Mengatur Type Keyboard saat input data

Validasi inputan

Membuat Class Model

Menyimpan hasil inputan kedalam list

Menghapus data dari list

### **Kebutuhan**

Komputer / Laptop

Android Studio / Visual Studio Code

Nandang Hermanto

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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 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 file dart baru beri nama **model.dart**

**Kode Program**

lib\model.dart

```

1  import 'package:flutter/material.dart';
2
3  class Pendaftaran {
4    BuildContext context;
5    String nama = "";
6    String email = "";
7    String noTelp = "";
8    String jenisKelamin = "";
9    String bahasa = "";
10   String agama = "";
11   String tanggalDaftar = "";
12   String jamDaftar = "";
13
14   Pendaftaran(
15     this.context,
16     this.nama,
17     this.email,
18     this.noTelp,
19     this.jenisKelamin,
20     this.bahasa,
21     this.agama,
22     this.tanggalDaftar,
23     this.jamDaftar,
24   );
25
26   bool sudahValid() {
27     if (nama.isEmpty) {
28       tampilkanPesan("Nama Wajib Diisi");
29       return false;
30     }
31     if (email.isEmpty) {
32       tampilkanPesan("Email Wajib Diisi");
33       return false;
34     }
35     if (noTelp.isEmpty) {
36       tampilkanPesan("Nomor Telpon Wajib Diisi");
37       return false;
38     }
39     if (jenisKelamin == "null") {
40       tampilkanPesan("Silakan pilih salah satu jenis kelamin");
41       return false;
42     }
43     if (bahasa == "[ ]") {
44       tampilkanPesan("Wajib Memilih Minimal Satu Bahasa ");
45       return false;
46     }
47
48     if (agama == "null") {
49       tampilkanPesan("Wajib Memilih Satu Agama");
50       return false;
51     }
52     if (tanggalDaftar.isEmpty) {
53       tampilkanPesan("Tanggal Daftar Wajib Diisi");
54       return false;
55     }
56     if (jamDaftar.isEmpty) {
57       tampilkanPesan("Jam Daftar Wajib Diisi");

```

```

4/23/24, 7:43 AM model.dart
58     return false;
59   }
60
61   return true;
62 }
63
64 void tampilkanPesan(String s) {
65   ScaffoldMessenger.of(context).showSnackBar(SnackBar(content: Text(s)));
66 }
67 }
68
69 List<Pendaftaran> pendaftaranList = [];
70

```

5. Buat file dart baru bernama **agama.dart**

**Kode Program**

```

lib\agama.dart

1  import 'package:flutter/material.dart';
2
3  String? agamaDipilih;
4
5  class Agama extends StatefulWidget {
6    const Agama({super.key});
7
8    @override
9    State<Agama> createState() => _AgamaState();
10 }
11
12 class _AgamaState extends State<Agama> {
13   List<String> agamaList = [
14     "Islam",
15     "Katolik",
16     "Protestan",
17     "Hindu",
18     "Budha",
19     "Konghucu",
20     "Penganut Kepercayaan",
21   ];
22
23   @override
24   Widget build(BuildContext context) {
25     return DropdownButton(
26       hint: Text("Silakan Pilih Agama Yang Anda Anut"),
27       value: agamaDipilih,
28       items: agamaList
29         .map((e) => DropdownMenuItem(
30           child: Text(e),
31           value: e,
32         ))
33         .toList(),
34       onChanged: (value) {
35         setState(() {
36           agamaDipilih = value;
37         });
38       },
39     );
40   }
41 }
42

```

6. Buat file dart baru beri nama **kemampuanBerbahasa.dart**

**Kode Program**

lib\kemampuanBerbahasa.dart

```

1  import 'package:flutter/material.dart';
2
3  List<String> bahasaDipilihList = [];
4
5  class KemampuanBerbahasa extends StatefulWidget {
6    const KemampuanBerbahasa({super.key});
7
8    @override
9    State<KemampuanBerbahasa> createState() => _KemampuanBerbahasaState();
10 }
11
12 class _KemampuanBerbahasaState extends State<KemampuanBerbahasa> {
13   List<String> bahasaList = [
14     "Indonesia",
15     "Inggris",
16     "Arab",
17     "Sunda",
18     "Jawa",
19     "Madura",
20     "Jepang",
21     "Korea",
22     "Mandarin",
23   ];
24   @override
25   Widget build(BuildContext context) {
26     return Column(
27       crossAxisAlignment: CrossAxisAlignment.start,
28       children: [
29         Text("Kemampuan Berbahasa"),
30         Container(
31           height: 90,
32           child: GridView(
33             gridDelegate: SliverGridDelegateWithFixedCrossAxisCount(
34               crossAxisCount: 3, childAspectRatio: 4 / 1),
35             children: bahasaList.map((e) => OpsiBahasa(strBahasa: e)).toList(),
36           ),
37         ),
38       ],
39     );
40   }
41 }
42
43 class OpsiBahasa extends StatefulWidget {
44   final String strBahasa;
45   const OpsiBahasa({
46     super.key,
47     required this.strBahasa,
48   });
49
50   @override
51   State<OpsiBahasa> createState() => _OpsiBahasaState();
52 }
53
54 class _OpsiBahasaState extends State<OpsiBahasa> {
55   bool? opsiDipilih = false;
56
57   @override

```

```
4/23/24, 7:49 AM kemampuanBerbahasa.dart
58 Widget build(BuildContext context) {
59   return Row(
60     children: [
61       Checkbox(
62         value: opsiDipilih,
63         onChanged: (value) {
64           setState(() {
65             opsiDipilih = value;
66             if (value == true) {
67               bahasaDipilihList.add(widget.strBahasa);
68             } else {
69               bahasaDipilihList.remove(widget.strBahasa);
70             }
71           });
72         },
73       ),
74       Text(widget.strBahasa),
75     ],
76   );
77 }
78 }
79 }
```

7. Buat file dart baru beri nama **tanggalDaftar.dart**

**Kode Program**

```
lib\tanggalDaftar.dart

1  import 'package:flutter/material.dart';
2
3  TextEditingController tanggalDaftarController = TextEditingController();
4
5  class TanggalDaftar extends StatefulWidget {
6    const TanggalDaftar({super.key});
7
8    @override
9    State<TanggalDaftar> createState() => _TanggalDaftarState();
10 }
11
12 class _TanggalDaftarState extends State<TanggalDaftar> {
13   @override
14   Widget build(BuildContext context) {
15     return TextField(
16       controller: tanggalDaftarController,
17       decoration: InputDecoration(
18         label: Text("Tanggal Daftar"),
19         suffixIcon: IconButton(
20           onPressed: () {
21             pilihTanggal();
22           },
23           icon: Icon(Icons.date_range),
24         ),
25       ),
26     );
27   }
28
29   Future<void> pilihTanggal() async {
30     DateTime? tglDidapat;
31
32     tglDidapat = await showDatePicker(
33       context: context,
34       firstDate: DateTime(2024),
35       lastDate: DateTime(2025),
36     );
37
38     if (tglDidapat.toString() != "null") {
39       tanggalDaftarController.text = tglDidapat.toString().substring(0, 10);
40     }
41   }
42 }
43
```

8. Buat file dart baru beri nama **jamDaftar.dart**

**Kode Program**

lib\jamDaftar.dart

```

1  import 'package:flutter/material.dart';
2
3  TextEditingController jamDaftarController = TextEditingController();
4
5  class JamDaftar extends StatefulWidget {
6    const JamDaftar({super.key});
7
8    @override
9    State<JamDaftar> createState() => JamDaftarState();
10 }
11
12 class JamDaftarState extends State<JamDaftar> {
13   @override
14   Widget build(BuildContext context) {
15     return TextField(
16       controller: jamDaftarController,
17       decoration: InputDecoration(
18         label: Text("Jam Daftar"),
19         suffixIcon: IconButton(
20           onPressed: () {
21             pilihTanggal();
22           },
23           icon: Icon(Icons.timer),
24         ),
25       ),
26     );
27   }
28
29   Future<void> pilihTanggal() async {
30     TimeOfDay? tglDidapat;
31
32     tglDidapat =
33       await showTimePicker(context: context, initialTime: TimeOfDay.now());
34
35     if (tglDidapat.toString() != "null") {
36       jamDaftarController.text = tglDidapat
37         .toString()
38         .replaceAll('TimeOfDay(', '')
39         .replaceAll(')', '');
40     }
41   }
42 }
43

```

9. Buat file dart baru bernama **dataPendaftaran.dart**

**Kode Program**

lib\dataPendaftaran.dart

```

1  import 'package:flutter/material.dart';
2  import 'package:flutter_formulir/model.dart';
3
4  class DataPendaftaran extends StatefulWidget {
5    const DataPendaftaran({super.key});
6
7    @override
8    State<DataPendaftaran> createState() => _DataPendaftaranState();
9  }
10
11  class _DataPendaftaranState extends State<DataPendaftaran> {
12    @override
13    Widget build(BuildContext context) {
14      return Scaffold(
15        appBar: AppBar(
16          title: Text("Data Pendaftaran"),
17        ),
18        body: ListView.builder(
19          itemCount: pendaftaranList.length,
20          itemBuilder: (context, index) => Card(
21            child: ListTile(
22              title: Text(pendaftaranList[index].nama),
23              subtitle: Column(
24                crossAxisAlignment: CrossAxisAlignment.start,
25                children: [
26                  Text(pendaftaranList[index].email),
27                  Text(pendaftaranList[index].noTelp),
28                  Text(pendaftaranList[index].jenisKelamin),
29                  Text(pendaftaranList[index].bahasa),
30                  Text(pendaftaranList[index].agama),
31                  Text(pendaftaranList[index].tanggalDaftar),
32                  Text(pendaftaranList[index].jamDaftar),
33                ],
34              ),
35              trailing: IconButton(
36                onPressed: () {
37                  hapusData(index);
38                },
39                icon: Icon(
40                  Icons.delete,
41                ),
42              ),
43            ),
44          ),
45        ),
46      );
47    }
48
49    void hapusData(int index) {
50      showDialog(
51        context: context,
52        builder: (context) => AlertDialog(
53          title: Text("Hapus Data"),
54          content: Text(
55            "Apakah anda yakin akan hapus data ${pendaftaranList[index].nama} ?",
56          ),
57          actions: [
58            ElevatedButton(

```

```
4/23/24, 7:54 AM dataPendaftaran.dart
58         onPressed: () {
59             setState(() {
60                 pendaftaranList.removeAt(index);
61                 Navigator.pop(context);
62             });
63         },
64         child: Text("Ya"),
65     ),
66     ElevatedButton(
67         onPressed: () {
68             Navigator.pop(context);
69         },
70         child: Text("Tidak"),
71     ),
72 ],
73 ),
74 );
75 }
76 }
77 }
```

10. Buka File **main.dart** kemudian edit menjadi seperti dibawah ini

Kode Program	
	<pre> lib\main.dart  1 import 'package:flutter/material.dart'; 2 import 'package:flutter/widgets.dart'; 3 import 'package:flutter_formulir/agama.dart'; 4 import 'package:flutter_formulir/dataPendaftaran.dart'; 5 import 'package:flutter_formulir/jamDaftar.dart'; 6 import 'package:flutter_formulir/kemampuanBerbahasa.dart'; 7 import 'package:flutter_formulir/model.dart'; 8 import 'package:flutter_formulir/tanggalDaftar.dart'; 9 10 void main(List&lt;String&gt; args) { 11   runApp(MyApp()); 12 } 13 14 class MyApp extends StatelessWidget { 15   const MyApp({super.key}); 16 17   @override 18   Widget build(BuildContext context) { 19     return MaterialApp( 20       theme: ThemeData( 21         appBarTheme: AppBarTheme( 22           backgroundColor: Colors.teal, 23           foregroundColor: Colors.white, 24         ), 25         elevatedButtonTheme: ElevatedButtonThemeData( 26           style: ButtonStyle( 27             backgroundColor: MaterialStatePropertyAll(Colors.teal), 28             foregroundColor: MaterialStatePropertyAll(Colors.white), 29           ), 30         ), 31       ), 32       debugShowCheckedModeBanner: false, 33       home: MyHomePage(), 34     ); 35   } 36 } 37 38 class MyHomePage extends StatefulWidget { 39   const MyHomePage({super.key}); 40 41   @override 42   State&lt;MyHomePage&gt; createState() =&gt; _MyHomePageState(); 43 } 44 45 class _MyHomePageState extends State&lt;MyHomePage&gt; { 46   TextEditingController namaController = TextEditingController(); 47   TextEditingController emailController = TextEditingController(); 48   TextEditingController noTelpController = TextEditingController(); 49 50   String? jenisKelamin; 51 52   @override 53   Widget build(BuildContext context) { 54     return Scaffold( 55       appBar: AppBar( 56         title: Text("Latihan Formulir"), 57       ), </pre>

```

58      body: Padding(
59        padding: const EdgeInsets.all(8.0),
60        child: ListView(
61          children: [
62            TextField(
63              controller: namaController,
64              decoration: InputDecoration(
65                label: Text("Nama Lengkap"),
66              ),
67            ),
68            TextField(
69              controller: emailController,
70              keyboardType: TextInputType.emailAddress,
71              decoration: InputDecoration(
72                label: Text("Email"),
73              ),
74            ),
75            TextField(
76              controller: noTelpController,
77              keyboardType: TextInputType.phone,
78              decoration: InputDecoration(
79                label: Text("Nomor Telp"),
80              ),
81            ),
82          ],
83          Row(
84            mainAxisAlignment: MainAxisAlignment.spaceEvenly,
85            children: [
86              Expanded(
87                child: RadioListTile(
88                  title: Text("Pria"),
89                  value: "Pria",
90                  groupValue: jenisKelamin,
91                  onChanged: (value) {
92                    setState(() {
93                      jenisKelamin = value;
94                    });
95                  },
96                ),
97              Expanded(
98                child: RadioListTile(
99                  title: Text("Wanita"),
100                  value: "Wanita",
101                  groupValue: jenisKelamin,
102                  onChanged: (value) {
103                    setState(() {
104                      jenisKelamin = value;
105                    });
106                  },
107                ),
108              ),
109            ],
110          ),
111          KemampuanBerbahasa(),
112          Agama(),
113          TanggalDaftar(),
114          JamDaftar(),
115          Padding(
116            padding: const EdgeInsets.all(8.0),
117            child: Row(

```

```

4/23/24, 7:56 AM                                     main.dart
118     mainAxisAlignment: MainAxisAlignment.spaceEvenly,
119     children: [
120       ElevatedButton(
121         onPressed: () {
122           setState(() {
123             Pendaftaran pendaftaran = Pendaftaran(
124               context,
125               namaController.text,
126               emailController.text,
127               noTelpController.text,
128               jenisKelamin.toString(),
129               bahasaDipilihList.toString(),
130               agamaDipilih.toString(),
131               tanggalDaftarController.text,
132               jamDaftarController.text,
133             );
134
135             if (pendaftaran.sudahValid()) {
136               pendaftaranList.add(pendaftaran);
137
138               Navigator.push(
139                 context,
140                 MaterialPageRoute(
141                   builder: (context) => DataPendaftaran(),
142                 ),
143               );
144             }
145           });
146         },
147         child: Text("Simpan"),
148       ),
149       ElevatedButton(
150         onPressed: () {
151           Navigator.push(
152             context,
153             MaterialPageRoute(
154               builder: (context) => DataPendaftaran(),
155             ),
156           );
157         },
158         child: Text("Lihat Data"),
159       ),
160     ],
161   ),
162 ),
163 ],
164 ),
165 ),
166 );
167 }
168 }
169

```

1. Jalankan program

Hasil Program

4G 4G 05:53 0.40 KB/s 9

Bluetooth Alarm Clock Wi-Fi 32% 🔋

## Latihan Formulir

Nama Lengkap

Email

Nomor Telpn

☐ Pria ☐ Wanita


Kemampuan Berbahasa


☐ Indonesia ☐ Inggris ☐ Arab

☐ Sunda ☐ Jawa ☐ Madura

☐ Jepang ☐ Korea ☐ Mandarin

Silakan Pilih Agama Yang Anda Anut ▼

Tanggal Daftar 

Jam Daftar 

Simpan Lihat Data

☰ 🏠 ↶

