

LAPORAN PRAKTIKUM



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Mata Kuliah : **Pemrograman Perangkat Bergerak
(TIU3403)**

Praktikum ke / Judul : 7 / FRAMEWORK FLUTTER LANJUT

Tanggal Praktikum : 30 Mei 2022

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**PROGRAM STUDI D3 TEKNIK INFORMATIKA
JURUSAN TEKNIK INFORMATIKA
POLITEKNIK NEGERI INDRAMAYU
2022**



A. Tujuan Praktikum

Tujuan Umum

Mahasiswa dapat

Tujuan Khusus

Mahasiswa mampu:

1. ...
2. ...

B. Rangkuman Teori Singkat

1. Kode Program Main

```
1  import 'package:flutter/material.dart';
2  import 'package:flutter_application_1/pages/login_page.dart';
3  import 'package:flutter_application_1/pages/register_page.dart';
4
5  Run | Debug | Profile
6  void main() {
7    runApp(MaterialApp(
8      debugShowCheckedModeBanner: false,
9      title: 'Login Register Page',
10     initialRoute: "/",
11     routes: {
12       "/": (context) => LoginPage(),
13       RegisterPage.routeName: (context) => RegisterPage(),
14     },
15   )); // MaterialApp
16 }
```

2. Kode Program Login



```
1  import 'package:flutter/material.dart';
2  import 'package:flutter_application_1/constants/color.dart';
3  import 'package:flutter_application_1/pages/home_page.dart';
4  import 'package:flutter_application_1/pages/register_page.dart';
5
6  class LoginPage extends StatelessWidget {
7    const LoginPage({Key? key}) : super(key: key);
8
9    @override
10   Widget build(BuildContext context) {
11     return Scaffold(
12       body: Container(
13         color: ColorPallette.primaryColor,
14         padding: const EdgeInsets.all(20.0),
15         child: ListView(
16           children: <Widget>[
17
18             _iconLogin(),
19             _titleDescription(),
20             _textField(),
21             _buildButton(context),
22           ], // <Widget>[]
23         ), // Column
24       ), // Center
25     ], // <Widget>[]
26   ), // ListView
27 ), // Container
28 ); // Scaffold
29 }
30
31 }
32
33
34 Widget _iconLogin() {
35   return Image.asset(
36     'assets/images/icon_login.png',
37     width: 150.0,
38     height: 150.0,
39   );
40 }
```



```
42 Widget _titleDescription() {
43   return Column(
44     children: const <Widget>[
45       Padding(
46         padding: EdgeInsets.only(top: 16),
47       ), // Padding
48       Text(
49         "Login into app",
50         style: TextStyle(
51           color: Colors.white,
52           fontSize: 16.0,
53         ), // TextStyle
54       ), // Text
55       Padding(
56         padding: EdgeInsets.only(top: 12),
57       ), // Padding
58       Text(
59         "Lorem ipsum, dolor sit amet consectetur adipisicing elit. Libero nam facilis dolor debitis nesciunt corrupti ipsam,
60         aliquam delectus possimus hic.",
61         style: TextStyle(fontSize: 12, color: Colors.white),
62         textAlign: TextAlign.center,
63       ) // Text
64     ], // <Widget>[]
65   ); // Column
66 }

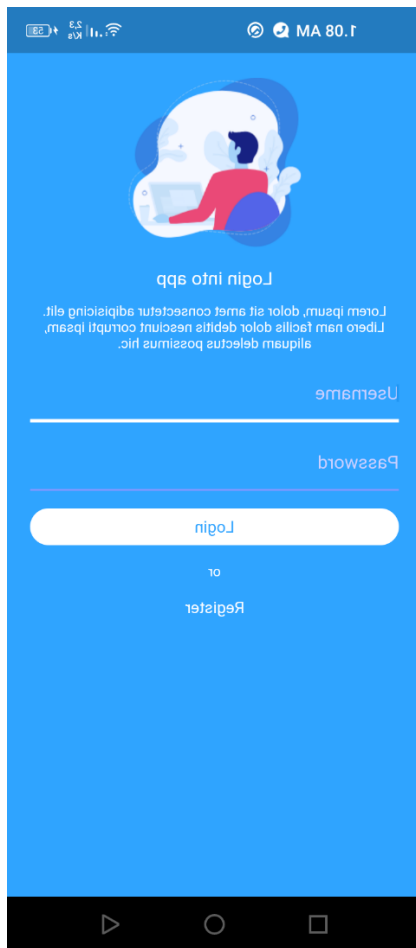
67 Widget _textField() {
68   return Column(
69     children: <Widget>[
70       const Padding(padding: EdgeInsets.only(top: 12)),
71       TextFormField(
72         decoration: const InputDecoration(
73           border: UnderlineInputBorder(),
74           enabledBorder: UnderlineInputBorder(
75             borderSide: BorderSide(
76               color: ColorPallette.underlineTextField, width: 1.5)), // BorderSide // UnderlineInputBorder
77           focusedBorder: UnderlineInputBorder(
78             borderSide: BorderSide(color: Colors.white, width: 3)), // UnderlineInputBorder
79           hintText: "Username",
80           hintStyle: TextStyle(color: ColorPallette.hintColor)), // InputDecoration
81         style: const TextStyle(color: Colors.white),
82         autofocus: true,
83       ), // TextFormField

84       const Padding(padding: EdgeInsets.only(top: 12)),
85       TextFormField(
86         decoration: const InputDecoration(
87           border: UnderlineInputBorder(),
88           enabledBorder: UnderlineInputBorder(
89             borderSide: BorderSide(
90               color: ColorPallette.underlineTextField, width: 1.5)), // BorderSide // UnderlineInputBorder
91           focusedBorder: UnderlineInputBorder(
92             borderSide: BorderSide(color: Colors.white, width: 3)), // UnderlineInputBorder
93           hintText: "Password",
94           hintStyle: TextStyle(color: ColorPallette.hintColor)), // InputDecoration
95         style: const TextStyle(color: Colors.white),
96         autofocus: false,
97         obscureText: true,
98       ) // TextFormField
99     ], // <Widget>[]
100   ); // Column
101 }
```



```
103 Widget _buildButton(BuildContext context) {
104   return Column(
105     children: <Widget>[
106       const Padding(padding: EdgeInsets.only(top: 16)),
107       InkWell(
108         onTap: () {
109           Navigator.push(context, MaterialPageRoute(builder: (context) {
110             return const HomePage();
111           })); // MaterialPageRoute
112           ScaffoldMessenger.of(context).showSnackBar(
113             const SnackBar(content: Text("Login Successfully!!!")));
114         },
115         child: Container(
116           padding: const EdgeInsets.symmetric(vertical: 8.0),
117           width: double.infinity,
118           decoration: BoxDecoration(
119             color: Colors.white, borderRadius: BorderRadius.circular(30)), // BoxDecoration
120           child: const Text(
121             "Login",
122             style: TextStyle(color: ColorPallete.primaryColor),
123             textAlign: TextAlign.center,
124           ), // Text
125         ), // Container
126       ), // InkWell
127       const Padding(padding: EdgeInsets.only(top: 16)),
128       const Text(
129         'or',
130         style: TextStyle(color: Colors.white, fontSize: 12),
131       ), // Text
132       const Padding(padding: EdgeInsets.only(top: 16)),
133       GestureDetector(
134         onTap: () {
135           Navigator.push(context, MaterialPageRoute(builder: (context) {
136             return const RegisterPage();
137           })); // MaterialPageRoute
138         },
139         child: const Text(
140           "Register",
141           style: TextStyle(color: Colors.white),
142         ), // Text
143       ), // GestureDetector
144     ], // <Widget>[]
145   ); // Column
146 }
```

Hasil Kode Program Login



3. Kode Program Register



```
1  import 'package:flutter/material.dart';
2  import 'package:flutter_application_1/constants/color.dart';
3  import 'package:flutter_application_1/pages/login_page.dart';
4
5  class RegisterPage extends StatelessWidget {
6    static const routeName = "/registerPage";
7
8    const RegisterPage({Key? key}) : super(key: key);
9
10   @override
11   Widget build(BuildContext context) {
12     return Scaffold(
13       body: Container(
14         color: ColorPallette.primaryColor,
15         padding: const EdgeInsets.all(20.0),
16         child: ListView(
17           children: <Widget>[
18             Center(
19               child: Column(
20                 children: <Widget>[
21                   _iconRegister(),
22                   _titleDescription(),
23                   _textField(),
24                   _buildButton(context),
25                 ], // <Widget>[]
26               ), // Column
27             ) // Center
28           ], // <Widget>[]
29         )), // ListView // Container
30   ); // Scaffold
```

```
34  Widget _iconRegister() {
35    return Image.asset(
36      'assets/images/icon_register.png',
37      width: 150.0,
38      height: 150.0,
39    );
40  }
```



```
42 ~ Widget _titleDescription() {  
43 ~   return Column(  
44 ~     children: const <Widget>[  
45 ~       Padding(  
46 ~         padding: EdgeInsets.only(top: 16),  
47 ~       ), // Padding  
48 ~       Text(  
49 ~         "Registration",  
50 ~         style: TextStyle(  
51 ~           color: Colors.white,  
52 ~           fontSize: 16.0,  
53 ~         ), // TextStyle  
54 ~       ), // Text  
55 ~       Padding(  
56 ~         padding: EdgeInsets.only(top: 12),  
57 ~       ), // Padding  
58 ~       Text(  
59 ~         "Lorem ipsum, dolor sit amet consectetur adipisicing elit. Libero nam facilis dolor debitis nesciunt corrupti ipsam,  
60 ~         aliquam delectus possimus hic.",  
61 ~         style: TextStyle(fontSize: 12, color: Colors.white),  
62 ~         textAlign: TextAlign.center,  
63 ~       ) // Text  
64 ~     ], // <Widget>[]  
65 ~   ); // Column  
66 ~ }
```

```
Widget _textField() {  
  return Column(  
    children: <Widget>[  
      const Padding(padding: EdgeInsets.only(top: 12)),  
      TextFormField(  
        decoration: const InputDecoration(  
          border: UnderlineInputBorder(),  
          enabledBorder: UnderlineInputBorder(  
            borderSide: BorderSide(  
              color: ColorPallette.underlineTextField, width: 1.5)), // BorderSide // UnderlineInputBorder  
          focusedBorder: UnderlineInputBorder(  
            borderSide: BorderSide(color: Colors.white, width: 3)), // UnderlineInputBorder  
          hintText: "Username",  
          hintStyle: TextStyle(color: ColorPallette.hintColor), // InputDecoration  
          style: const TextStyle(color: Colors.white),  
          autofocus: false,  
        ), // TextFormField  
      ),  
      const Padding(padding: EdgeInsets.only(top: 12)),
```

```
85 ~      TextFormField(  
86 ~        decoration: const InputDecoration(  
87 ~          border: UnderlineInputBorder(),  
88 ~          enabledBorder: UnderlineInputBorder(  
89 ~            borderSide: BorderSide(  
90 ~              color: ColorPallette.underlineTextField, width: 1.5)), // BorderSide // UnderlineInputBorder  
91 ~          focusedBorder: UnderlineInputBorder(  
92 ~            borderSide: BorderSide(color: Colors.white, width: 3)), // UnderlineInputBorder  
93 ~          hintText: "Password",  
94 ~          hintStyle: TextStyle(color: ColorPallette.hintColor), // InputDecoration  
95 ~          style: const TextStyle(color: Colors.white),  
96 ~          autofocus: false,  
97 ~          obscureText: true,  
98 ~        ), // TextFormField
```



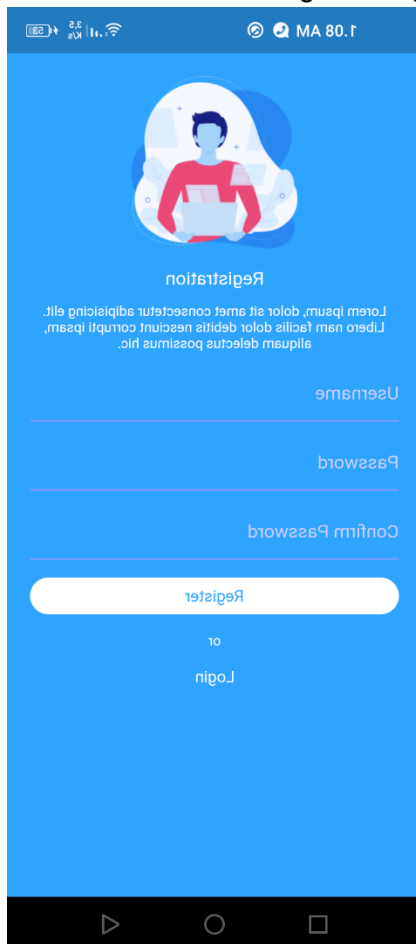

```
99     const Padding(padding: EdgeInsets.only(top: 12)),
100     TextFormField(
101       decoration: const InputDecoration(
102         border: UnderlineInputBorder(),
103         enabledBorder: UnderlineInputBorder(
104           borderSide: BorderSide(
105             color: ColorPallette underlineTextField, width: 1.5)), // BorderSide // UnderlineInputBorder
106         focusedBorder: UnderlineInputBorder(
107           borderSide: BorderSide(color: Colors.white, width: 3)), // UnderlineInputBorder
108         hintText: "Confirm Password",
109         hintStyle: TextStyle(color: ColorPallette hintColor)), // InputDecoration
110       style: const TextStyle(color: Colors.white),
111       autofocus: false,
112       obscureText: true,
113     ) // TextFormField
114   ], // <Widget>[]
115 ); // Column
116 }

118 Widget _buildButton(BuildContext context) {
119   return Column(
120     children: <Widget>[
121       const Padding(padding: EdgeInsets.only(top: 16)),
122       InkWell(
123         onTap: () {
124           ScaffoldMessenger.of(context).showSnackBar(
125             const SnackBar(content: Text("Register Successfully!!!"));
126           Navigator.pop(context);
127         },
128         child: Container(
129           padding: const EdgeInsets.symmetric(vertical: 8.0),
130           width: double.infinity,
131           decoration: BoxDecoration(
132             color: Colors.white, borderRadius: BorderRadius.circular(30)), // BoxDecoration
133           child: const Text(
134             "Register",
135             style: TextStyle(color: ColorPallette.primaryColor),
136             textAlign: TextAlign.center,
137           ), // Text
138         ), // Container
139       ), // InkWell
140     ],
141   );
142 }
```



```
140     const Padding(padding: EdgeInsets.only(top: 16)),
141     const Text(
142       'or',
143       style: TextStyle(color: Colors.white, fontSize: 12),
144     ), // Text
145     const Padding(padding: EdgeInsets.only(top: 16)),
146     GestureDetector(
147       onTap: () {
148         Navigator.push(context, MaterialPageRoute(builder: (context) {
149           return const LoginPage();
150         })); // MaterialPageRoute
151       },
152       child: const Text(
153         "Login",
154         style: TextStyle(color: Colors.white),
155       ), // Text
156     ), // GestureDetector
157   ], // <Widget>[]
158 ); // Column
159 }
```

Hasil Kode Program Register



4. Kode Program Home



```
1 import 'package:flutter/material.dart';
2
3 class HomePage extends StatefulWidget {
4   const HomePage({Key? key}) : super(key: key);
5
6   @override
7   State<HomePage> createState() => _HomePageState();
8 }
9
10 class _HomePageState extends State<HomePage> {
11   @override
12   Widget build(BuildContext context) {
13     var size = MediaQuery.of(context).size;
14
15     var cardTextStyle = const TextStyle(
16       fontFamily: "Montserrat Regular",
17       fontSize: 14,
18       color: Color.fromRGB(63, 63, 63, 1)); // TextStyle
19
20     return Scaffold(
21       body: Stack(
22         children: <Widget>[
23           Container(
24             height: size.height * 0.36,
25             decoration: const BoxDecoration(
26               image: DecorationImage(
27                 alignment: Alignment.center,
28                 image: AssetImage('assets/images/top_header.png')), // DecorationImage // BoxDecoration
29             ), // Container
30
31           SafeArea(
32             child: Padding(
33               padding: const EdgeInsets.all(16),
34               child: Column(
35                 children: <Widget>[
36                   Row(
37                     mainAxisAlignment: MainAxisAlignment.spaceBetween,
38                     children: [
39                       Container(
40                         height: 64,
41                         margin: const EdgeInsets.only(bottom: 20),
42                         child: Row(
43                           crossAxisAlignment: CrossAxisAlignment.start,
44                           children: <Widget>[
45                             const CircleAvatar(
46                               radius: 32,
47                               backgroundImage: NetworkImage(
48                                 'https://avatars.githubusercontent.com/u/77718626?v=4'), // NetworkImage
49                             ), // CircleAvatar
50                             const SizedBox(
51                               width: 16,
52                             ), // SizedBox
```



```
52      Column(  
53        mainAxisAlignment: MainAxisAlignment.center,  
54        crossAxisAlignment: CrossAxisAlignment.start,  
55        children: const <Widget>[  
56          Text(  
57            'Hakim Asrori',  
58            style: TextStyle(  
59              fontFamily: 'Montserrat Medium',  
60              color: Colors.white,  
61              fontSize: 20), // TextStyle  
62          ), // Text  
63          Text(  
64            '2003071',  
65            style: TextStyle(  
66              fontSize: 14,  
67              color: Colors.white,  
68              fontFamily: "Montserrat Regular",  
69            ), // TextStyle  
70          ), // Text  
71        ], // <Widget>[]  
72      ), // Column  
73    ], // <Widget>[]  
74  ), // Row  
75 ), // Container
```

```
76      Container(  
77        margin: const EdgeInsets.only(bottom: 20),  
78        child: InkWell(  
79          onTap: () {  
80            Navigator.pop(context);  
81          },  
82          child: const Icon(  
83            Icons.logout,  
84            color: Colors.white,  
85          ), // Icon  
86        ), // InkWell  
87      ), // Container  
88    ],  
89  ), // Row
```

```
90      Expanded(  
91        child: GridView.count(  
92          crossAxisSpacing: 10,  
93          mainAxisSpacing: 10,  
94          primary: false,  
95          crossAxisCount: 2,  
96          children: <Widget>[
```



```
97      InkWell(
98        onTap: () => print("Data Diri"),
99        child: Card(
100          shape: RoundedRectangleBorder(
101            borderRadius: BorderRadius.circular(8),
102          ), // RoundedRectangleBorder
103          elevation: 4,
104          child: Column(
105            mainAxisAlignment: MainAxisAlignment.center,
106            children: <Widget>[
107              Image.asset(
108                'assets/images/widget/student.png',
109                height: 100,
110              ), // Image.asset
111              Text(
112                'Data Diri',
113                style: cardTextStyle,
114              ) // Text
115            ], // <Widget>[]
116          ), // Column
117        ), // Card
118      ), // InkWell
```

```
119      InkWell(
120        onTap: () => print("Jadwal Kursus"),
121        child: Card(
122          shape: RoundedRectangleBorder(
123            borderRadius: BorderRadius.circular(8),
124          ), // RoundedRectangleBorder
125          elevation: 4,
126          child: Column(
127            mainAxisAlignment: MainAxisAlignment.center,
128            children: <Widget>[
129              Image.asset(
130                'assets/images/widget/calendar.png',
131                height: 100,
132              ), // Image.asset
133              Text(
134                'Jadwal Kursus',
135                style: cardTextStyle,
136              ) // Text
137            ], // <Widget>[]
138          ), // Column
139        ), // Card
140      ), // InkWell
```



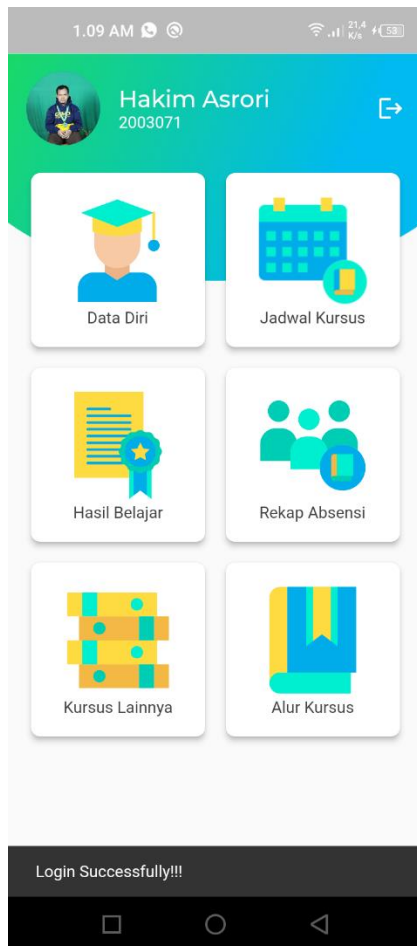
```
141 ✓ InkWell(  
142   onTap: () => print("Hasil Belajar"),  
143   child: Card(  
144     shape: RoundedRectangleBorder(  
145       borderRadius: BorderRadius.circular(8),  
146     ), // RoundedRectangleBorder  
147     elevation: 4,  
148     child: Column(  
149       mainAxisAlignment: MainAxisAlignment.center,  
150       children: <Widget>[  
151         Image.asset(  
152           'assets/images/widget/prize.png',  
153           height: 100,  
154         ), // Image.asset  
155         Text(  
156           'Hasil Belajar',  
157           style: cardTextStyle,  
158         ) // Text  
159       ], // <Widget>[]  
160     ), // Column  
161   ), // Card  
162 ), // InkWell
```

```
163 InkWell(  
164   onTap: () => print("Rekap Absensi"),  
165   child: Card(  
166     shape: RoundedRectangleBorder(  
167       borderRadius: BorderRadius.circular(8),  
168     ), // RoundedRectangleBorder  
169     elevation: 4,  
170     child: Column(  
171       mainAxisAlignment: MainAxisAlignment.center,  
172       children: <Widget>[  
173         Image.asset(  
174           'assets/images/widget/recap.png',  
175           height: 100,  
176         ), // Image.asset  
177         Text(  
178           'Rekap Absensi',  
179           style: cardTextStyle,  
180         ) // Text  
181       ], // <Widget>[]  
182     ), // Column  
183   ), // Card  
184 ), // InkWell
```



```
185     InkWell(  
186       onTap: () => print("Kursus Lainnya"),  
187       child: Card(  
188         shape: RoundedRectangleBorder(  
189           borderRadius: BorderRadius.circular(8),  
190         ), // RoundedRectangleBorder  
191         elevation: 4,  
192         child: Column(  
193           mainAxisAlignment: MainAxisAlignment.center,  
194           children: <Widget>[  
195             Image.asset(  
196               'assets/images/widget/books.png',  
197               height: 100,  
198             ), // Image.asset  
199             Text(  
200               'Kursus Lainnya',  
201               style: cardTextStyle,  
202             ) // Text  
203           ], // <Widget>[]  
204         ), // Column  
205       ), // Card  
206     ), // InkWell  
207  
208     InkWell(  
209       onTap: () => print("Alur Kursus"),  
210       child: Card(  
211         shape: RoundedRectangleBorder(  
212           borderRadius: BorderRadius.circular(8),  
213         ), // RoundedRectangleBorder  
214         elevation: 4,  
215         child: Column(  
216           mainAxisAlignment: MainAxisAlignment.center,  
217           children: <Widget>[  
218             Image.asset(  
219               'assets/images/widget/library.png',  
220               height: 100,  
221             ), // Image.asset  
222             Text(  
223               'Alur Kursus',  
224               style: cardTextStyle,  
225             ) // Text  
226           ], // <Widget>[]  
227         ), // Column  
228       ), // Card  
229     ), // InkWell
```

Hasil Kode Program Home



5. Kode Program Menu Logout

```
76 Container(  
77   margin: const EdgeInsets.only(bottom: 20),  
78   child: InkWell(  
79     onTap: () {  
80       Navigator.pop(context);  
81     },  
82     child: const Icon(  
83       Icons.logout,  
84       color: Colors.white,  
85     ), // Icon  
86   ), // InkWell  
87 ) // Container  
88 ],  
89 ), // Row
```




C. Langkah dan Hasil Pelaksanaan Praktikum



D. Langkah dan Hasil Latihan



Program Studi D3 Teknik Informatika
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E. Hasil dan Penjelasan Tugas



F. Kesimpulan

G. Referensi

- Alberto Miola. "Flutter Complete Reference Create Beautiful, Fast and Native Apps for Any Device". Independently Published. 2020.
- Simone Alessandria, Brian Kayfirz. "Flutter Cookbook: Over 100 proven techniques and solutions for app development with Flutter 2.2 and Dart". Packt Publishing. Birmingham - Mumbai. 2021.
- Dieter Meiller. "Modern App Development with Dart and Flutter 2: A Comprehensive Introduction to Flutter". Walter de Gruyter GmbH. Berlin - Boston. 2021.
- Priyanka Tyagi. "Pragmatic Flutter: Building Cross-Platform Mobile Apps for Android, iOS, Web & Desktop". CRC Press Taylor & Francis Group, LLC. London - New York. 2022.