

Flutter Mentoring Udacoding

Week 3



Silabus Materi Week 3

Listview & Gridview

- Membuat List
- Membuat List Vertical
- Membuat List Horizontal
- Membuat Custom Gridview
- Membuat detail
- Custom List View
- Search pada listview

Menu

- Membuat Navigation Menu
- Membuat Bottom Menu
- Membuat Dropdown Menu

Date Picker & Time Picker

- Membuat aplikasi time picker
- Membuat aplikasi date picker

Konsep Client Server dengan Flutter , Webservice dengan Php dan Database Mysql

Json

- Pengenalan Konsep Json
- Jenis-jenis Json

Membuat Aplikasi Berita Client Server

- Membuat database
- Membuat Webservice dengan PHP
- Test api menggunakan Postman
- Membuat Aplikasi Berita Flutter

Login Register dengan Api dan Shared Preferences

- Membuat database
- Membuat Api
- Membuat Splash Screen
- Menggunakan Sharedpreferences
- Membuat Aplikasi login register flutter

Task

- Membuat Aplikasi Galeri Photo sederhana
- Membuat aplikasi Kamus Sederhana
- Membuat Aplikasi Form Register Mahasiswa Sederhana

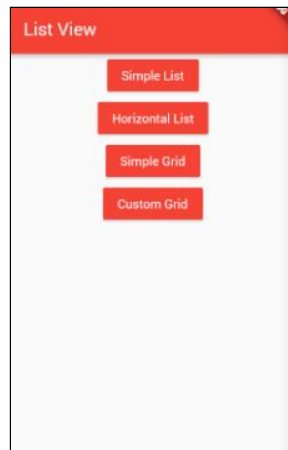


BAB 8 : List View

Kali ini kita akan membuat project yang menampilkan daftar list, pertama buat dulu strukturnya seperti berikut :



halaman-halaman tersebut nanti kita buka melalui tombol-tombol di halaman main.dart :



8.1. Simple List

edit page_basic_list.dart :

```
import 'package:flutter/material.dart';

class PageBasicList extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Page Basic List'),
        backgroundColor: Colors.red,
      ),
    ),
  )
}
```



```
body: ListView(  
  children: <Widget>[  
    Padding(  
      padding: EdgeInsets.all(8.0),  
      child: ListTile(  
        leading: Icon(Icons.access_alarm),  
        title: Text('Alarm'),  
      ),  
    ),  
    ListTile(  
      leading: Icon(Icons.phone),  
      title: Text('Phone'),  
    ),  
    ListTile(  
      leading: Icon(Icons.camera),  
      title: Text('Camera'),  
    ),  
    ListTile(  
      leading: Icon(Icons.message),  
      title: Text('Message'),  
    ),  
  ],  
);  
}
```

8.2. Horizontal List

pada list_horizontal.dart kita isikan seperti berikut :

```
import 'package:flutter/material.dart';  
  
class ListHorizontal extends StatelessWidget {  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      appBar: AppBar(  
        title: Text('List Horizontal'),  
        backgroundColor: Colors.amberAccent,  

```



```
),  
  
body: Container(  
  //margin : jarak antar widget  
  // padding : jarak di dalam objek  
  
  margin: EdgeInsets.symmetric(vertical: 20.0),  
  height: 200.0,  
  child: ListView(  
    // vertical kebawah  
    scrollDirection: Axis.horizontal,  
    children: <Widget>[  
      Container(  
        width: 160.0,  
        height: 200.0,  
        color: Colors.red,  
      ),  
  
      Container(  
        width: 160.0,  
        height: 200.0,  
        color: Colors.blue,  
      ),  
  
      Container(  
        width: 160.0,  
        height: 200.0,  
        color: Colors.yellow,  
      ),  
  
      Container(  
        width: 160.0,  
        height: 200.0,  
        color: Colors.orange,  
      ),  
  
      Container(  
        width: 160.0,  
        height: 200.0,  
        color: Colors.green,  
      )  
    ],  
  ),  
)
```



```
    ),  
  );  
}  
}
```

8.3. Simple Grid

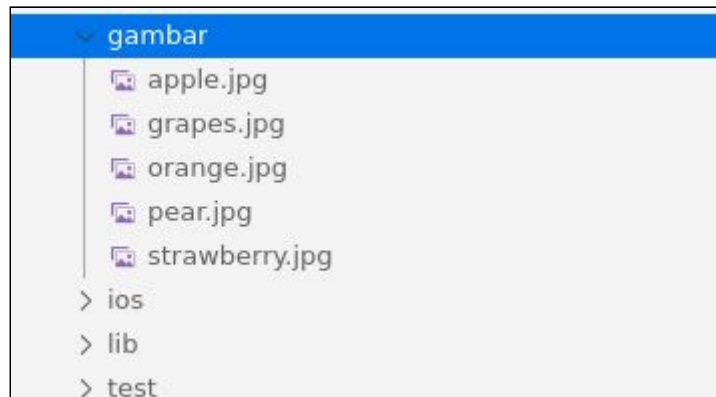
untuk simple grid kita isikan seperti berikut :

```
import 'package:flutter/material.dart';  
  
class SimpleGridView extends StatelessWidget {  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      appBar: AppBar(  
        title: Text('Simple Grid View'),  
        backgroundColor: Colors.amber,  
      ),  
  
      body: GridView.count(  
        crossAxisCount: 3,  
        children: List.generate(12, (index) {  
          int nIndex = index + 1;  
          String dataIndex = "$nIndex";  
  
          return Center (  
            child: Container(  
              margin: EdgeInsets.all(10),  
              color: Colors.amber,  
              height: 100.0,  
              width: 100.0,  
              child: Text(  
                'Data Ke - $dataIndex', style:  
                  Theme.of(context).textTheme.headline,  
              ),  
            ),  
          );  
        })),  
    );  
  }  
}
```



8.4. Custom Grid List

Sebelum itu kita tambahkan dulu gambar-gambarnya, dan daftarkan di pubspec.yaml :



lalu untuk custom grid list kita isikan seperti berikut :

```
import 'package:flutter/cupertino.dart';
import 'package:flutter/material.dart';
import 'package:flutterweek3/screen/DetailCustumGridView.dart';

class PageCustomGridView extends StatefulWidget {
  @override
  _PageCustomGridViewState createState() => _PageCustomGridViewState();
}

class _PageCustomGridViewState extends State<PageCustomGridView> {

  //deklarasi data list
  List<Container> daftarMakananPadang = new List();

  var itemMakanan = [
    {"nama": "Gulai Banak", "gambar": "gulai-banak.jpg", "Keterangan": "Ini Makanan Gulai Banak"},
    {"nama": "Kalio Daging", "gambar": "kalio-dagiang.jpg", "Keterangan": "Ini Makanan Kalio Dagiang"},
    {"nama": "Kalio Jariang", "gambar": "kalio-jariang.jpg", "Keterangan": "Ini Makanan Kalio Jariang"},
    {"nama": "Lompong Sagu", "gambar": "lompong-sagu.jpg", "Keterangan": "Ini Makanan Lompong Sagu"},
    {"nama": "Sala Lauk", "gambar": "sala-lauak.jpg", "Keterangan": "Ini Makanan Sala Lauk"},
    {"nama": "Soto Padang", "gambar": "soto-padang.jpg", "Keterangan": "Ini Makanan Soto Padang"},
  ];
}
```



```
//method
_buatDataListMakanan() async{
  for(var i=0; i<itemMakanan.length; i++){
    final dataMakanan = itemMakanan[i]; //variable untuk data makanan

    final String gambarMakanan = dataMakanan["gambar"];
    daftarMakananPadang.add(new Container(
      padding: EdgeInsets.all(10),
      child: Card(
        child: InkWell(
          onTap: (){
            //pindah ke detail
            Navigator.push(context, MaterialPageRoute(builder: (context)=>
PageDetailCustomGridView(
          nama: dataMakanan["nama"],
          gambar: gambarMakanan,
          keterangan: dataMakanan["Keterangan"],
        ));
      },
      child: Column(
        children: [
          Hero(
            tag: dataMakanan["nama"],
            child: Image.asset('gambar/$gambarMakanan', height: 85.0,width: 125, fit:
BoxFit.contain,),
          ),

          Padding(
            padding: EdgeInsets.all(10),
          ),

          Text(dataMakanan["nama"], style: TextStyle(fontSize: 14.0, fontWeight:
FontWeight.bold, color: Colors.deepOrange),)
        ],
      ),
    ),
  );
}

//proses background
@override
void initState() {
```




```
// TODO: implement initState
super.initState();
_buatDataListMakanan();
}

//menampilkan ke view
@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
      title: Text('Apps Makanan Padang'),
      backgroundColor: Colors.deepOrange,
    ),
    body: GridView.count(crossAxisCount: 2, children: daftarMakananPadang,),
  );
}
```

Lalu kita tambahkan halaman detailnya :

```
import 'package:flutter/material.dart';

class PageDetailCustomGridview extends StatefulWidget {
  String nama, gambar, keterangan;

  PageDetailCustomGridview({this.nama, this.gambar, this.keterangan});

  @override
  _PageDetailCustomGridviewState createState() =>
    _PageDetailCustomGridviewState();
}

class _PageDetailCustomGridviewState extends State<PageDetailCustomGridview>
{
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('${widget.nama}'),
        backgroundColor: Colors.deepOrange,
      ),
      body: ListView(
        children: [
```

```
Container(
    height: 240.0,
    child: Hero(
      tag: widget.nama,
      child: Material(
        child: InkWell(
          child: Image.asset(
            'gambar/${widget.gambar}',
            fit: BoxFit.contain,
          ),
        ),
      ),
    ),
  ),
),
BagianNama(
  nama: widget.nama,
),
BagianKeterangan(
  keterangan: widget.keterangan,
)
],
),
);
}
}
```

```
class BagianNama extends StatelessWidget {
  BagianNama({this.nama});

  String nama;

  @override
  Widget build(BuildContext context) {
    return Container(
      padding: EdgeInsets.all(10),
      child: Row(
        children: [
          Expanded(
            child: Column(
              crossAxisAlignment: CrossAxisAlignment.start,
              children: [
                Text(
                  nama,
                  style: TextStyle(fontSize: 20, color: Colors.brown),
                ),
                Text(
```



```
        '$nama\@gmail.com',
        style: TextStyle(
          fontSize: 17.0,
          color: Colors.green,
          fontWeight: FontWeight.bold),
      ),
    ],
  ),
),
Row(
  children: [
    Icon(
      Icons.star,
      size: 40.0,
      color: Colors.deepOrange,
    ),
    Text(
      "14",
      style: TextStyle(fontSize: 18.0),
    ),
  ],
)
],
),
);
}
}

class BagianKeterangan extends StatelessWidget {

  String keterangan;
  BagianKeterangan({this.keterangan});

  @override
  Widget build(BuildContext context) {
    return Container(
      padding: EdgeInsets.all(10),
      child: Card(
        child: Padding(
          padding: EdgeInsets.all(6),
          child: Text(
            '$keterangan', style: TextStyle(fontSize: 14.0) ,textAlign:
TextAlign.justify,
          ),
        ),
      ),
    ),
  ),
);
```



```
);  
}  
}
```

8.5. Halaman Main

pada halaman main kita buat tombol-tombol untuk membuat keempat list tersebut :

```
import 'package:day3_night/ui_view/simpe_grid_view.dart';  
import 'package:flutter/material.dart';  
import 'ui_view/page_basic_list.dart';  
import 'ui_view/list_horizontal.dart';  
import 'ui_view/custom_grid_view.dart';  
  
void main() => runApp(MyApp());  
  
class MyApp extends StatelessWidget {  
  // This widget is the root of your application.  
  @override  
  Widget build(BuildContext context) {  
    return MaterialApp(  
      title: 'Flutter Demo',  
      theme: ThemeData(  
        primarySwatch: Colors.blue,  
      ),  
      home: PageHome(),  
    );  
  }  
}  
  
class PageHome extends StatelessWidget {  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      appBar: AppBar(  
        title: Text('List View'),  
        backgroundColor: Colors.red,  
      ),  
  
      body: Center(  
        child: Column(  
          children: <Widget>[
```

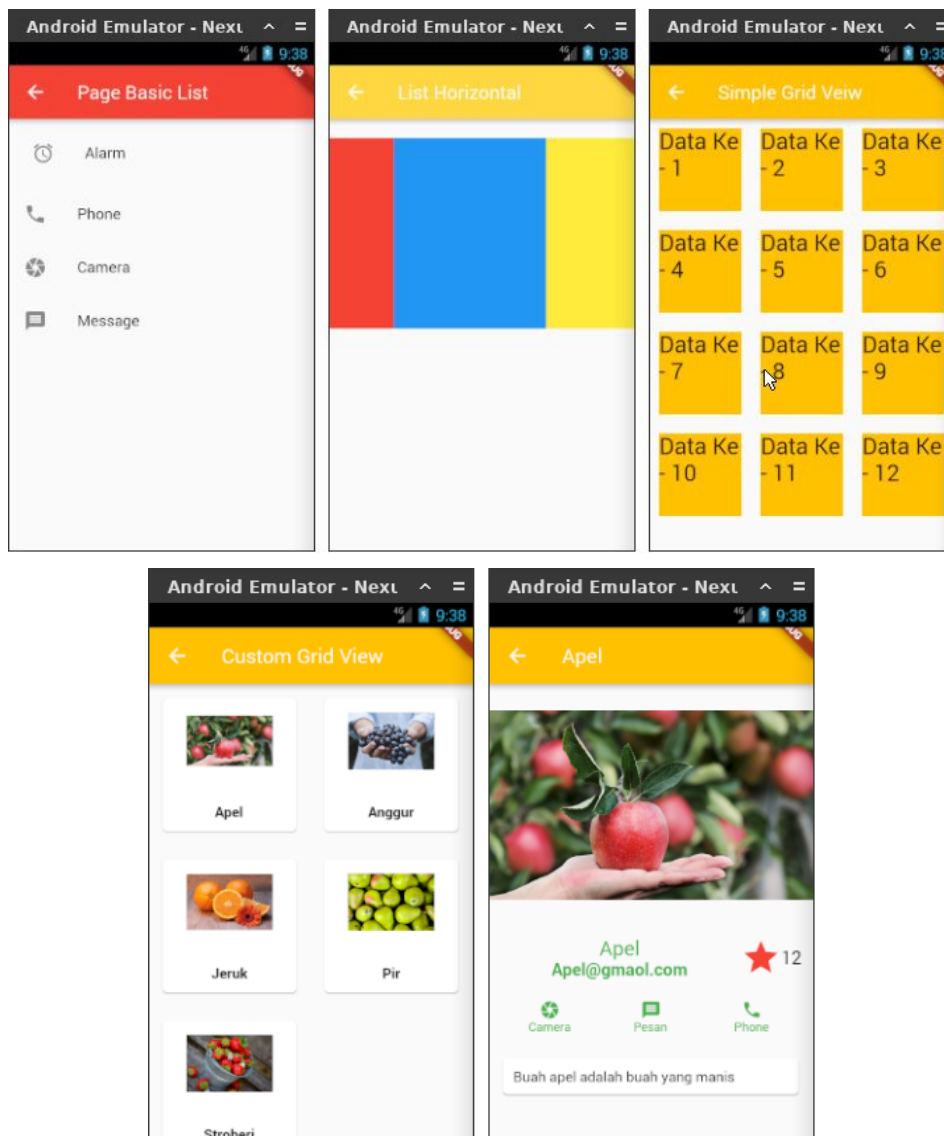


```
Container(  
  child: MaterialButton(  
    onPressed: () {  
      Navigator.push(context, MaterialPageRoute(  
        builder: (context) => PageBasicList()  
      ));  
    },  
    color: Colors.red,  
    textColor: Colors.white,  
    child: Text('Simple List'),  
  ),  
,  
Container(  
  child: MaterialButton(  
    onPressed: () {  
      Navigator.push(context, MaterialPageRoute(  
        builder: (context) => ListHorizontal()  
      ));  
    },  
    color: Colors.red,  
    textColor: Colors.white,  
    child: Text('Horizontal List'),  
  ),  
,  
Container(  
  child: MaterialButton(  
    onPressed: () {  
      Navigator.push(context, MaterialPageRoute(  
        builder: (context) => SimpleGridView()  
      ));  
    },  
    color: Colors.red,  
    textColor: Colors.white,  
    child: Text('Simple Grid'),  
  ),  
,  
Container(  
  child: MaterialButton(  
    onPressed: () {  
      Navigator.push(context, MaterialPageRoute(  
        builder: (context) => CustomGridView()  
      ));  
    },  
  ),  
,
```



```
        color: Colors.red,  
        textColor: Colors.white,  
        child: Text('Custom Grid'),  
      ),  
    ),  
  ],  
,  
,  
,  
);  
}
```

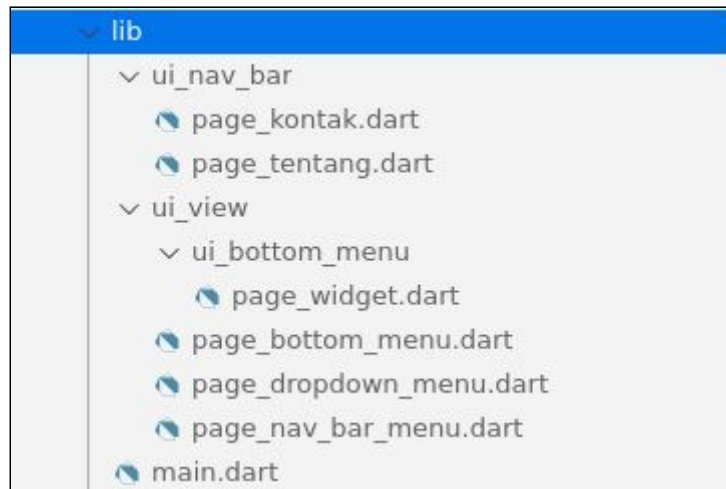
Dan hasilnya seperti berikut :





BAB 9 : Navigation Menu

Untuk navigation menu kita buat struktur file seperti berikut :



9.1. Navigation Drawer

pada page_nav_bar_menu.dart kita isikan seperti berikut :

```
import 'package:flutter/material.dart';

class PageNavBarMenu extends StatefulWidget {
  @override
  _PageNavBarMenuState createState() => _PageNavBarMenuState();
}

class _PageNavBarMenuState extends State<PageNavBarMenu> {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Page Nav Bar'),
        backgroundColor: Colors.brown,
      ),
      drawer: Drawer(
        child: ListView(children: <Widget>[
          ListTile(
            title: Text('Welcome'),
```



```
    ),  
    Divider(),  
    ListTile(  
      title: Text('Tentang'),  
      trailing: Icon(Icons.info),  
      onTap: () {  
        Navigator.of(context).pop();  
        Navigator.of(context).pushNamed('/tentang');  
      },  
    ),  
    ListTile(  
      title: Text('Kontak'),  
      trailing: Icon(Icons.phone),  
      onTap: () {  
        Navigator.of(context).pop();  
        Navigator.of(context).pushNamed('/kontak');  
      },  
    ),  
  ],),  
,  
  body: Center(  
    child: Text('Home Page',  
      style: TextStyle(fontWeight: FontWeight.bold, fontSize:  
30.0))),  
  );  
}
```

Akan ada dua halaman untuk kontak dan tentang, untuk halaman tentang kita isikan seperti berikut :

page_tentang.dart

```
import 'package:flutter/material.dart';  
  
class PageTentang extends StatelessWidget {  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      appBar: AppBar(  
        title: Text('Tentang'),  
        backgroundColor: Colors.brown,
```




```
    ),  
    body: Center(  
      child: Text('Page Halaman Tentang', style: TextStyle(  
        fontSize: 30.0  
      )),  
    ),  
  );  
}
```

page_kontak.dart :

```
import 'package:flutter/material.dart';  
  
class PageKontak extends StatelessWidget {  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      appBar: AppBar(  
        title: Text('Kontak'),  
        backgroundColor: Colors.brown,  
      ),  
  
      body: Center(  
        child: Text('Page Halaman Kontak', style: TextStyle(  
          fontSize: 30.0  
        )),  
      ),  
    );  
  }  
}
```

9.2. Bottom Bar Menu

Selanjutnya kita buat halaman yang berisi Bottom bar, edit file page_bottom_menu.dart, lalu isikan seperti berikut :

```
import 'package:flutter/material.dart';  
import 'ui_bottom_menu/page_widget.dart';  
  
class PageHomeBottomMenu extends StatefulWidget {
```



```
@override
_PageHomeBottomMenuState createState() => _PageHomeBottomMenuState();
}

class _PageHomeBottomMenuState extends State<PageHomeBottomMenu> {
  int currentIndex = 0;

  final List<Widget> _listColorMenu = [
    PageWidget(Colors.blue),
    PageWidget(Colors.deepOrange),
    PageWidget(Colors.green)
  ];

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Page Bottom Bar'),
        backgroundColor: Colors.brown,
      ),

      body: _listColorMenu[currentIndex],

      bottomNavigationBar: BottomNavigationBar(
        onTap: onTabTapped,
        currentIndex: currentIndex,
        items: [
          BottomNavigationBarItem(
            icon: Icon(Icons.home),
            title: Text('Home')
          ),

          BottomNavigationBarItem(
            icon: Icon(Icons.message),
            title: Text('Message')
          ),

          BottomNavigationBarItem(
            icon: Icon(Icons.person),
            title: Text('Person')
          )
        ],
      ),
    );
  }
}
```



```
    );  
  }  
  
  void onTabTapped(int index) {  
    setState(() {  
      currentIndex = index;  
    });  
  }  
}
```

lalu pada `page_widget.dart` ini kita menampilkan halaman berwarna, isikan seperti berikut :

```
import 'package:flutter/material.dart';  
  
class PageWidget extends StatelessWidget {  
  final Color color;  
  
  PageWidget(this.color);  
  
  @override  
  Widget build(BuildContext context) {  
    return Container(  
      color: color,  
    );  
  }  
}
```

9.3. Dropdown Menu

pada `page_dropdown_menu.dart`, kita isikan seperti berikut :

```
import 'package:flutter/material.dart';  
  
class PageDropDownMenu extends StatefulWidget {  
  @override  
  _PageDropDownMenuState createState() => _PageDropDownMenuState();  
}  
  
class _PageDropDownMenuState extends State<PageDropDownMenu> {  
  
  List<String> listKota = ["DKI Jakarta", "Tangerang", "Bekasi",  
    "Bogor", "Bandung"];
```



```
String nKota = "DKI Jakarta";
int nilaiKota;

void pilihKota (String value) {
  setState(() {
    nKota = value;
  });
}

@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
      title: Text('Page Drop Down Menu'),
      backgroundColor: Colors.brown,
    ),

    body: Form(
      child: ListView(
        children: <Widget>[
          Container(
            padding: EdgeInsets.only(left: 16.0),
            child: Row(
              children: <Widget>[
                Text('Lokasi ', style: TextStyle(fontSize: 18.0,
color: Colors.brown)),
                DropdownButton(
                  onChanged: (String value) {
                    pilihKota(value);
                    nilaiKota = listKota.indexOf(value);
                  },
                  value: nKota,
                  items: listKota.map(
                    (String value) {
                      return DropdownMenuItem(
                        child: Text(value),
                        value: value
                      );
                    }).toList(),
                )
              ],
            ),
          ),
        ],
      ),
    ),
  );
}
```



```
    ),  
    Container(  
      child: MaterialButton(  
        child: Text('Submit'),  
        color: Colors.brown,  
        textColor: Colors.white,  
        onPressed: () {  
          print("Kota yang dipilih: "+" $nilaiKota "+ nKota);  
        },  
      ),  
    ),  
  ],  
,  
,  
,  
,  
,  
,  
,  
);  
}  
}
```

9.4 Halaman Main

Pada halaman main kita isikan seperti berikut :

```
import 'package:flutter/material.dart';  
import 'ui_view/page_bottom_menu.dart';  
import 'ui_view/page_nav_bar_menu.dart';  
import 'ui_nav_bar/page_kontak.dart';  
import 'ui_nav_bar/page_tentang.dart';  
import 'ui_view/page_dropdown_menu.dart';  
  
void main() => runApp(MyApp());  
  
class MyApp extends StatelessWidget {  
  // This widget is the root of your application.  
  @override  
  Widget build(BuildContext context) {  
    return MaterialApp(  
      title: 'Flutter Demo',  
      theme: ThemeData(  
        primarySwatch: Colors.blue,  
      ),  
      home: PageHome(),  
    );  
  }  
}
```



```
// deklarasi file yang akan dipanggil
routes: <String, WidgetBuilder>{
  '/home' : (BuildContext context) => PageNavBarMenu(),
  '/tentang' : (BuildContext context) => PageTentang(),
  '/kontak' : (BuildContext context) => PageKontak()
},

debugShowCheckedModeBanner: false,
);
}
}

class PageHome extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Page Home'),
        backgroundColor: Colors.green,
      ),

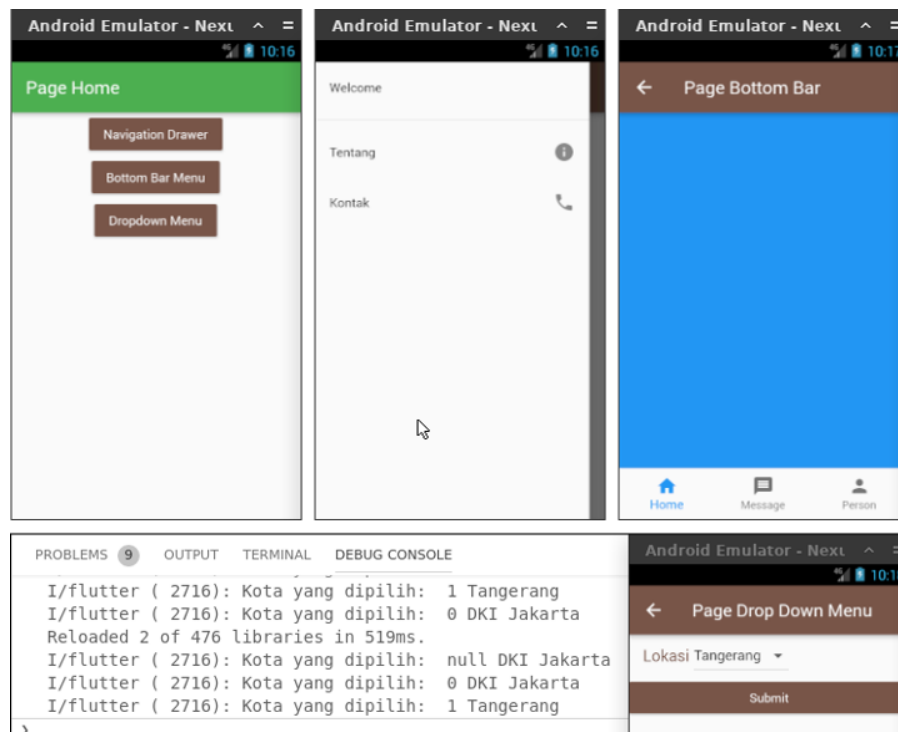
      body: Center(
        child: Column(
          children: <Widget>[
            MaterialButton(
              color: Colors.brown,
              textColor: Colors.white,
              child: Text('Navigation Drawer'),
              onPressed: () {
                Navigator.push(context,
                  MaterialPageRoute(builder: (context) {
                    return PageNavBarMenu();
                  })
                );
              },
            ),

            MaterialButton(
              color: Colors.brown,
              textColor: Colors.white,
              child: Text('Bottom Bar Menu'),
              onPressed: () {
                Navigator.push(context,
```



```
                MaterialPageRoute(builder: (context) {  
                    return PageHomeBottomMenu();  
                })  
            );  
        },  
    ),  
  
    MaterialButton(  
        color: Colors.brown,  
        textColor: Colors.white,  
        child: Text('Dropdown Menu'),  
        onPressed: () {  
            Navigator.push(context, MaterialPageRoute(  
                builder: (context) {  
                    return PageDropDownMenu();  
                }));  
        },  
    ),  
    ],  
),  
),  
);  
}
```

hasilnya :



9.5. Latihan Form

Buat lah halaman RegisterForm seperti berikut, lalu ketikkan seperti berikut :

```
import 'package:flutter/material.dart';
import 'package:fluttertoast/fluttertoast.dart';

class RegisterForm extends StatefulWidget {
  @override
  _RegisterFormState createState() => _RegisterFormState();
}

class _RegisterFormState extends State<RegisterForm> {
  List<String> _agama = ['Islam', 'Kristen', 'Budha', 'Hindhu', 'Konghucu'];
  String _nAgama = "Islam";
  int _groupValue1 = 0;

  TextEditingController nama = TextEditingController();
  TextEditingController pass = TextEditingController();
  TextEditingController moto = TextEditingController();

  @override
  Widget build(BuildContext context) {
```




```
return Scaffold(  
  appBar: AppBar(  
    title: Text("Register Form"),  
  ),  
  
  body: Padding(  
    padding: EdgeInsets.all(16.0),  
    child: Form(  
      child: Column(  
        children: <Widget>[  
          TextFormField(  
            controller: nama,  
            decoration: InputDecoration(  
              hintText: 'Nama Lengkap',  
              border: OutlineInputBorder(borderRadius:  
BorderRadius.circular(8.0))  
            ),  
          ),  
  
          TextFormField(  
            controller: pass,  
            obscureText: true,  
            decoration: InputDecoration(  
              hintText: 'Password',  
              border: OutlineInputBorder(borderRadius:  
BorderRadius.circular(8.0))  
            ),  
          ),  
  
          TextFormField(  
            controller: moto,  
            minLines: 3,  
            maxLines: 10,  
            decoration: InputDecoration(  
              hintText: 'Moto Hidup',  
              border: OutlineInputBorder(borderRadius:  
BorderRadius.circular(8.0))  
            ),  
          ),  
  
          Row(children: <Widget>[  
            Radio(  
              onChanged: (int i) {
```



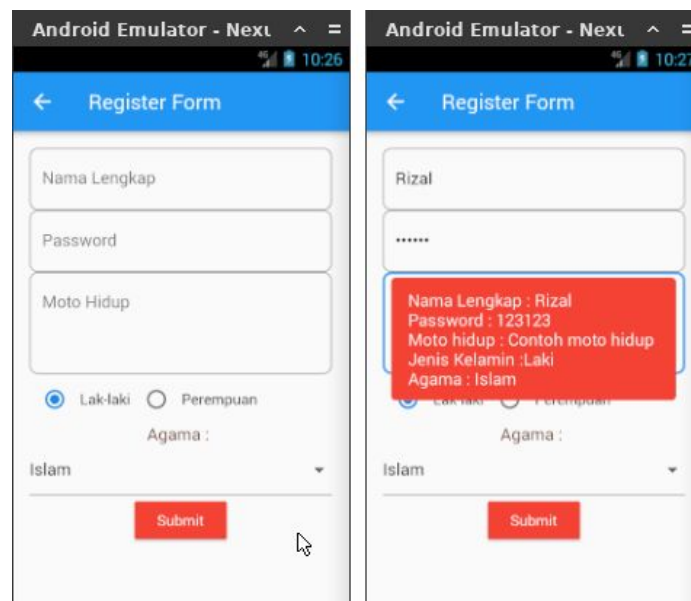
```
        setState(() {
          _groupValue1 = i;
        });
      },
      value: 0,
      groupValue: _groupValue1,),
    Text('Lak-laki'),
    Radio(
      onChanged: (int i) {
        setState(() {
          _groupValue1 = i;
        });
      },
      value: 1,
      groupValue: _groupValue1,),
    Text('Perempuan'),
  ],),
  Text("Agama : ", style : TextStyle(color: Colors.brown,
fontSize: 16.0)),
  DropdownButtonFormField(
    onChanged: (String value) {
      setState(() {
        _nAgama = value;
      });
    },
    value: _nAgama,
    items: _agama.map((String value) {
      return DropdownMenuItem(child: Text(value), value:
value,);
    }).toList(),
  ),

  MaterialButton(
    color: Colors.red,
    textColor: Colors.white,
    child: Text("Submit"),
    onPressed: () {
      Fluttertoast.showToast(
        msg: "Nama Lengkap : "+nama.text.toString()+"\n"+
          "Password : "+pass.text.toString()+"\n"+
          "Moto hidup : "+moto.text.toString()+"\n"+
          "Jenis Kelamin : " +((_groupValue1 == 0) ? "Laki"
: "Wanita")+"\n"+
```



```
        "Agama : "+_nAgama,  
        toastLength: Toast.LENGTH_SHORT,  
        gravity: ToastGravity.CENTER,  
        timeInSecForIos: 1,  
        backgroundColor: Colors.red,  
        textColor: Colors.white,  
        fontSize: 16.0  
    );  
    },  
    )  
    ],  
    ),  
    ),  
    );  
    }  
}
```

hasilnya :



BAB 10 : Number Picker

Untuk membuat number picker kita perlu dependency

<https://pub.dev/packages/numberpicker>, install seperti biasa, jika sudah kita ketikkan kode berikut :



```
import 'package:flutter/material.dart';
import 'dart:async';
import 'package:numberpicker/numberpicker.dart';

class PageNumberPicker extends StatefulWidget {
  @override
  _PageNumberPickerState createState() => _PageNumberPickerState();
}

class _PageNumberPickerState extends State<PageNumberPicker> {
  int currentIntValue = 10;
  double currentDoubleValue = 3.0;

  NumberPicker intNumberPicker, decNumberPicker;

  // method untuk menghandle value ketika berubah
  handleValueChanged(num value) {
    if (value != null) {
      if (value is int) {
        setState(() {
          currentIntValue = value;
        });
      } else {
        setState(() {
          currentDoubleValue = value;
        });
      }
    }
  }

  // method untuk menghandle value ketika berubah dari luar
  handleValueChangedExternally(num value) {
    if (value != null) {
      if (value is int) {
        setState(() {
          currentIntValue = value;
          intNumberPicker.animateInt(value);
        });
      } else {
        setState(() {
          currentDoubleValue = value;
          decNumberPicker.animateDecimal(currentDoubleValue.toInt());
        });
      }
    }
  }
}
```



```
    });  
  }  
}  
  
@override  
Widget build(BuildContext context) {  
  intNumberPicker = new NumberPicker.integer(  
    initialValue: currentIntValue,  
    minValue: 0,  
    maxValue: 100,  
    step: 10,  
    onChanged: handleValueChanged);  
  
  decNumberPicker = new NumberPicker.decimal(  
    initialValue: currentDoubleValue,  
    minValue: 1,  
    maxValue: 5,  
    decimalPlaces: 2, // mengatur 2 angka di belakang koma  
    onChanged: handleValueChanged);  
  
  return Scaffold(  
    appBar: AppBar(  
      title: Text('Page Number Picker'),  
      backgroundColor: Colors.brown,  
    ),  
    body: Center(  
      child: Column(  
        mainAxisAlignment: MainAxisAlignment.spaceAround,  
        children: <Widget>[  
          intNumberPicker,  
          RaisedButton(  
            child: Text('Current int value : $currentIntValue'),  
            color: Colors.green,  
            onPressed: () {  
              showDialogInteger();  
            },  
          ),  
          decNumberPicker,  
          RaisedButton(  
            child: Text('Current Decimal Value :  
$currentDoubleValue'),  
            onPressed: () {
```



```
        showDialogDouble();
    },
    )
  ],
),
));
}

// saat menekan tombol Current int value
Future showDialogInteger() async {
  await showDialog<int>(
    context: context,
    builder: (BuildContext context) {
      return NumberPickerDialog.integer(
        minValue: 0,
        maxValue: 100,
        initialIntegerValue: currentIntValue,
      );
    }).then(handleValueChangedExternally);
}

// saat menekan tombol Current dec value
Future showDialogDouble() async {
  await showDialog<double>(
    context: context,
    builder: (BuildContext context) {
      return NumberPickerDialog.decimal(
        minValue: 1,
        maxValue: 5,
        initialDoubleValue: currentDoubleValue,
        decimalPlaces: 2,
        title: Text("Silahkan pilih bilangan desimal"),
      );
    });
}
}
```

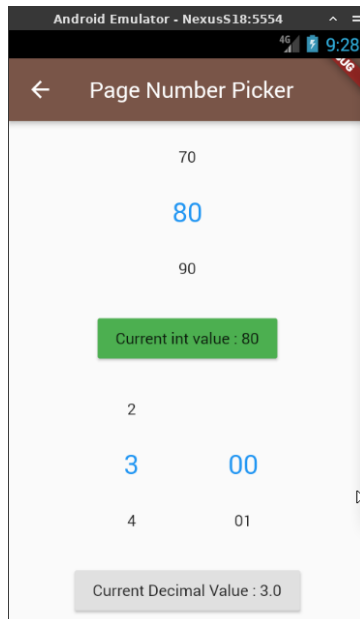
Penjelasan :

1. `handleValueChanged(num value)`, yaitu fungsi yang dijalankan saat kita menggeser nilai angkanya
2. `handleValueChangedExternally(num value)`, yaitu fungsi yang dijalankan saat kita menggeser nilai dari dialog yang muncul



3. showDialogInteger() = menampilkan dialog numberpicker integer
4. showDialogDouble() = menampilkan dialog numberpicker decimal

hasilnya :



BAB 11 : Membuat Search

Untuk membuat halaman search kita ketikkan kode berikut :

```
import 'package:flutter/material.dart';

class SearchListPage extends StatefulWidget {
  @override
  _SearchListPageState createState() => _SearchListPageState();
}

class _SearchListPageState extends State<SearchListPage> {
  var etSearce = new TextEditingController();

  bool isSearch = true;

  String query = "";

  List<String> dataList;
  List<String> filterList;
```



```
@override
void initState() {
  // TODO: implement initState
  super.initState();

  dataList = new List<String>();

  dataList = ["Snake", "Elephant", "cats", "dog", "orion",
"boomerang",
  "pelican", "ghost", "eagle", "horse head", "elephant trunk",
"butterfly"];

  dataList.sort();
}

_SearchListPageState() {
  etSearce.addListener((){
    if (etSearce.text.isEmpty) {
      setState(() {
        isSearch = false;
        query = "";
      });
    } else {
      setState(() {
        isSearch = true;
        query = etSearce.text;
      });
    }
  });
}

@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
      title: Text('Page Search Listview'),
      backgroundColor: Colors.brown,
    ),

    body: Container(
      margin: EdgeInsets.all(10.0),
      child: Column(
        children: <Widget>[
```




```
        _createSearchView(),
        isSearch ? _performSearch() : _createSearchView(),
    ],
),
),
);
}

// membuat form search
Widget _createSearchView () {
    return Container(
        decoration: BoxDecoration(
            border: Border.all(width: 1.0)
        ),
        child: TextField(
            controller: etSearce,
            decoration: InputDecoration(
                hintText: "Search",
                hintStyle: TextStyle(color: Colors.green)
            ),
            textAlign: TextAlign.center,
        ),
    );
}

// membuat form
Widget _createListView() {
    return Flexible(child: ListView.builder(
        itemCount: dataList.length,
        itemBuilder: (BuildContext context, int index){
            return Card(
                child: Container(margin: EdgeInsets.all(10.0)),
                color: Colors.white,
                elevation: 5.0,);
        },
    ));
}

// Lakukan search dengan fungsi contains
Widget _performSearch() {
    filterList = new List<String>();
    for (int i = 0; i < dataList.length; i++ ) {
```

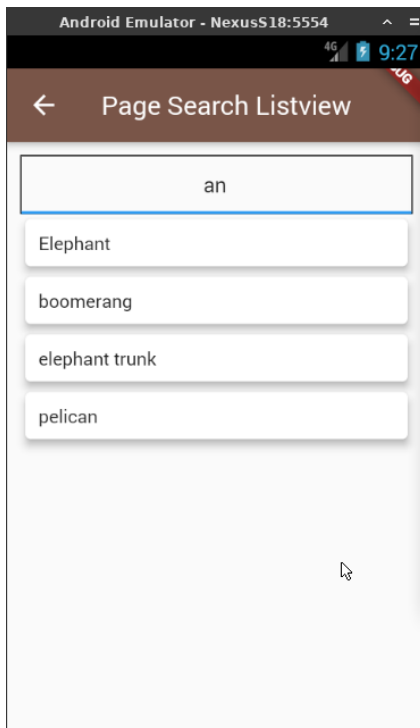


```
        var item = dataList[i];

        if (item.toLowerCase().contains(query.toLowerCase())){
            filterList.add(item);
        }
    }
    return _createFilteredListView();
}

// tampilkan daftar hasil pencarian
Widget _createFilteredListView() {
    return Flexible(
        child: ListView.builder(
            itemCount: filterList.length,
            itemBuilder: (BuildContext context, int index) {
                return Card (
                    color: Colors.white,
                    elevation: 5.0,
                    child: Container(
                        margin: EdgeInsets.all(10.0),
                        child: Text('${filterList[index]}'),
                    ),
                );
            },),
    );
}
```

Hasilnya :



BAB 12 : Menggunakan API

Pada BAB ini kita akan menggunakan API untuk mendapatkan data, untuk mengambil data menggunakan API, kita memerlukan dependency http, pertama-tama buat project baru, lalu silahkan tambahkan pada pubspec.yaml

```
18
19 dependencies:
20   http: ^0.12.0+2
21   flutter:
22     sdk: flutter
23
```

lalu flutter pub get seperti biasa.

12.1. Membuat model

API yang kita gunakan kali ini adalah :

<https://jsonplaceholder.typicode.com/users>

1. Buka <https://jsonplaceholder.typicode.com/users>
2. copy seluruh jsonnya dan pastikan bukan json dalam format html yang dicopy.



```
[
  {
    "id": 1,
    "name": "Leanne Graham",
    "username": "Bret",
    "email": "Sincere@april.biz",
    "address": {
      "street": "Kulas Light",
      "suite": "Apt. 556",
      "city": "Gwenborough",
      "zipcode": "92998-3874",
      "geo": {
        "lat": "-37.3159",
        "lng": "81.1496"
      }
    },
    "phone": "1-770-736-8031 x56442",
    "website": "hildegard.org"
  }
]
```

pilih yang Raw Data dan Copy

3. Buka web <https://quicktype.io/>



lalu klik OPEN QUICKTYPE

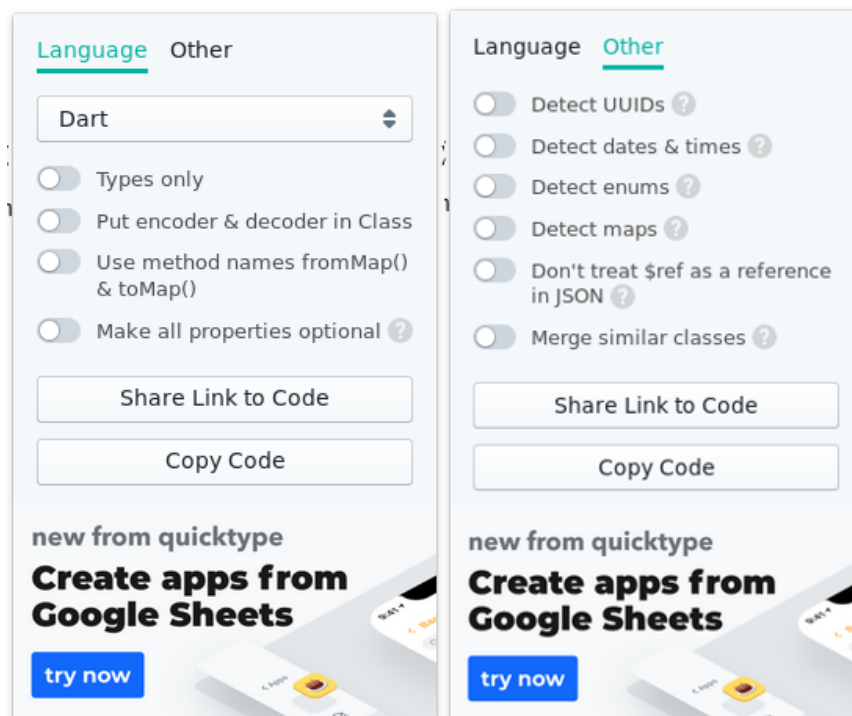
4. Paste kan dan ubah namanya menjadi Users



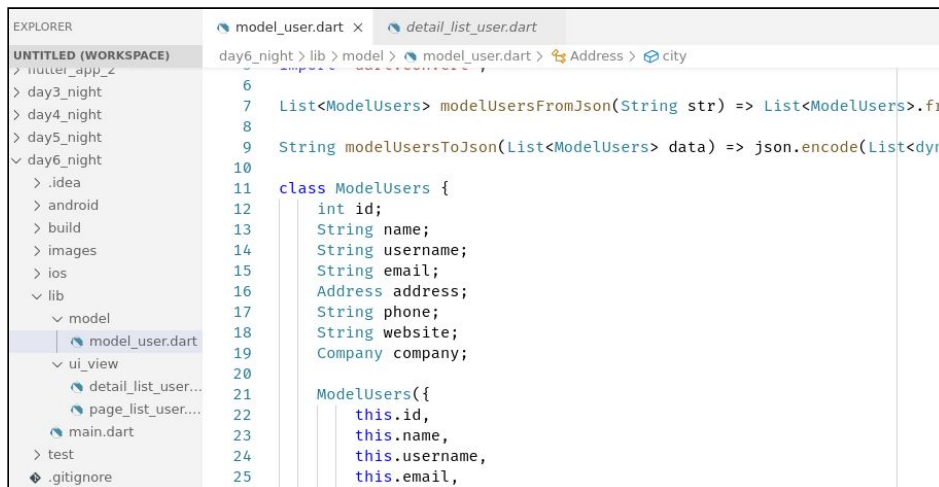
```
Name      Source type
ModelUsers JSON

[
  {
    "id": 1,
    "name": "Leanne Graham",
    "username": "Bret",
    "email": "Sincere@april.biz",
    "address": {
      "street": "Kulas Light",
      "suite": "Apt. 556",
      "city": "Gwenborough",
      "zipcode": "92998-3874",
      "geo": {
        "lat": "-37.3159",
        "lng": "81.1496"
      }
    },
    "phone": "1-770-736-8031 x56442",
    "website": "hildegard.org",
    "company": {
```

5. Lalu pada sidebar kanan kita pilih yang Dart, dan atur seperti gambar berikut :



6. pada project buat sebuah folder bernama model didalam lib.
7. Buat sebuah file dart baru beri nama model_user.dart, lalu pastekan model json hasil generatannya.



Jika sudah kita buka main.dart, lalu tambahkan kode berikut :

```
import 'package:flutter/material.dart';
import 'package:http/http.dart' as http;
import 'dart:async';
import 'dart:convert';
import 'package:day6_night/model/model_user.dart';

class PageUserList extends StatefulWidget {
  @override
  _PageUserListState createState() => _PageUserListState();
}

class _PageUserListState extends State<PageUserList> {
  // membuat list dari modelnya

  List<ModelUsers> listModel = [];
  var loading = false;

  Future<Null> getData() async {
    setState(() {
      loading = true;
    });

    final responseData =
      await http.get("https://jsonplaceholder.typicode.com/users");

    if (responseData.statusCode == 200) {
      final data = jsonDecode(responseData.body);
```



```
        setState(() {
          for (Map i in data) {
            listModel.add(ModelUsers.fromJson(i));
          }
          loading = false;
        });
      }
    }

    @override
    void initState() {
      super.initState();
      getData();
    }

    @override
    Widget build(BuildContext context) {
      return Scaffold(
        appBar: AppBar(
          title: Text("Page User List"),
        ),
        body: Container(
          child: loading
            ? Center(child: CircularProgressIndicator())
            : ListView.builder(
                itemCount: listModel.length,
                itemBuilder: (context, i) {
                  final nDataList = listModel[i];

                  return InkWell(
                    onTap: () {
                      //Navigator.push(context, MaterialPageRoute(
                      //  builder: (_) => DetailListUser(nDataList)
                      //));
                    },
                    child: Container(
                      child: Card(
                        margin: EdgeInsets.all(8.0),
                        child: Padding(
                          padding: const EdgeInsets.all(16.0),
                          child: Column(
                            crossAxisAlignment:
CrossAxisAlignment.start,
```




```
List<ModelUsers> listModel = [];  
var loading = false;  
  
Future<Null> getData() async {  
  setState(() {  
    loading = true;  
  });  
  
  final responseData =  
    await http.get("https://jsonplaceholder.typicode.com/users");  
  
  if (responseData.statusCode == 200) {  
    final data = jsonDecode(responseData.body);  
    setState(() {  
      for (Map i in data) {  
        listModel.add(ModelUsers.fromJson(i));  
      }  
      loading = false;  
    });  
  }  
}  
  
@override  
void initState() {  
  super.initState();  
  getData();  
}  
  
@override  
Widget build(BuildContext context) {  
  return Scaffold(  
    appBar: AppBar(  
      title: Text("Page User List"),  
    ),  
    body: Container(  
      child: loading  
        ? Center(child: CircularProgressIndicator())  
        : ListView.builder(  
          itemCount: listModel.length,  
          itemBuilder: (context, i) {  
            final nDataList = listModel[i];  
  
            return InkWell(  

```




```
final ModelUsers user;

DetailListUser(this.user);

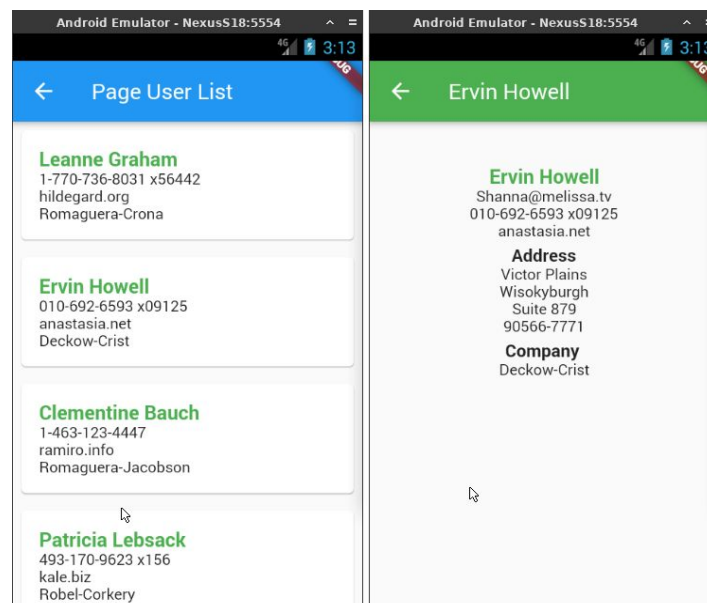
@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
      title: Text(user.name),
      backgroundColor: Colors.green,
    ),
    body: Padding(
      padding: const EdgeInsets.all(40.0),
      child: Center(
        child: Column(
          children: <Widget>[
            Column(
              crossAxisAlignment: CrossAxisAlignment.center,
              children: <Widget>[
                Text(
                  user.name,
                  style: TextStyle(
                    fontWeight: FontWeight.bold,
                    fontSize: 18.0,
                    color: Colors.green,
                  ),
                ),
                Text(user.email),
                Text(user.phone),
                Text(user.website),
                SizedBox(
                  height: 5.0,
                ),
                Text(
                  "Address",
                  style: TextStyle(
                    fontSize: 16.0, fontWeight: FontWeight.bold,
                  ),
                ),
                Text(user.address.street),
                Text(user.address.city),
                Text(user.address.suite),
                Text(user.address.zipcode),
                SizedBox(
```



```
        height: 5.0,  
      ),  
      Text(  
        "Company ",  
        style: TextStyle(  
          fontSize: 16.0, fontWeight: FontWeight.bold),  
      ),  
      Text(user.company.name)  
    ],  
  ),  
],  
,  
,  
,  
,  
,  
,  
);  
}  
}
```

jika sudah uncomment pada onPressed di main.dart, juga onTap pada page_list_user.dart, dan import filenya :

hasilnya :





BAB 13 : Menggunakan API Sendiri dengan PHP

Untuk membuat webservice yang menyediakan layanan API kita memerlukan XAMPP, atau semisalnya, silahkan download dan instal melalui link berikut :

<https://www.apachefriends.org/download.html>

lalu start apache dan mysqlnya

13.1. Membuat database

1. Buka <http://localhost/phpmyadmin/> pilih phpmyadmin
2. Buat database dengan nama db_berita
3. lalu buat table dengan nama tb_user, dan buat columnnya seperti ini

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	id_user	int(11)		No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2	username	varchar(125)	utf8mb4_unicode_ci	No	None			Change Drop More
<input type="checkbox"/>	3	email	varchar(125)	utf8mb4_unicode_ci	No	None			Change Drop More
<input type="checkbox"/>	4	full_name	text	utf8mb4_unicode_ci	No	None			Change Drop More
<input type="checkbox"/>	5	sex	varchar(15)	utf8mb4_unicode_ci	No	None			Change Drop More
<input type="checkbox"/>	6	password	varchar(50)	utf8mb4_unicode_ci	No	None			Change Drop More
<input type="checkbox"/>	7	alamat	text	utf8mb4_unicode_ci	No	None			Change Drop More
<input type="checkbox"/>	8	tgl_daftar	varchar(50)	utf8mb4_unicode_ci	No	None			Change Drop More

4. lalu buat juga table tb_berita, dan buat seperti berikut :

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	id_berita	int(11)		No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2	judul	varchar(125)	utf8mb4_unicode_ci	No	None			Change Drop More
<input type="checkbox"/>	3	isi	text	utf8mb4_unicode_ci	No	None			Change Drop More
<input type="checkbox"/>	4	foto	varchar(255)	utf8mb4_unicode_ci	No	None			Change Drop More
<input type="checkbox"/>	5	tgl_berita	datetime		No	None			Change Drop More

13.2. Membuat web service

Untuk membuat web service

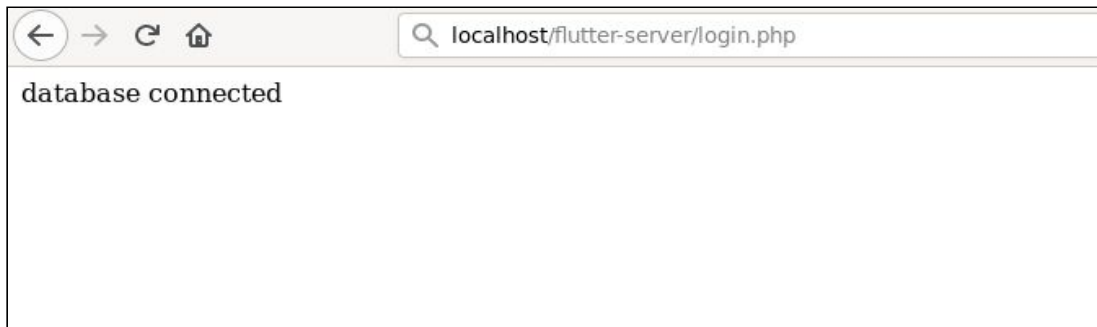
1. masuk ke httdocs, lalu buat sebuah folder dan beri nama dengan flutter-server
2. buat sebuah file bernama koneksi.php dan isikan seperti berikut

```
<?php
    $connect = new mysqli("localhost","root", "", "db_berita");
```



```
if ($connect) {  
    echo "datanse konej";  
} else {  
    echo "database error";  
}  
?>
```

3. tes di browser, buka <http://localhost/flutter-server/login.php>



4. jika berhasil seperti gambar diatas silahkan komentari echo di koneksi.php.

```
<?php  
$connect = new mysqli("localhost","root", "", "db_berita");  
  
if ($connect) {  
    // echo "database connected";  
} else {  
    // echo "database error";  
}  
?>
```

5. lalu buat file **get_berita.php**

```
<?php  
include "koneksi.php";  
  
$queryResult = $connect->query("SELECT * FROM tb_berita");  
$result = array();  
  
while($fetch_data = $queryResult->fetch_assoc()) {  
    $result[] = $fetch_data;  
}  
echo json_encode($result);  
?>
```

6. Jika sudah cobalah untuk mengisi data pada **tb_berita**



Column	Type	Function	Null	Value
id_berita	int(11)			
judul	varchar(125)			Menyemai Karakter Peduli Lingkungan
isi	text			Greta Thunberg dinobatkan sebagai Ambassador of Conscience 2019 oleh Amnesty International pada 19 September lalu. Kegigihannya dalam mendesak pemerintah dan politisi untuk memutuskan kebijakan yang tepat terkait dengan permasalahan perubahan iklim di dunia dianggap memberi pengaruh besar pada gerakan lingkungan untuk perubahan iklim. Gadis belia asal Swedia itu diberi kesempatan membuka KTT Pemuda PBB Pertama Tentang Perubahan Iklim pada 23 September di New York. Di saat Greta konsisten menyuarakan penyelamatan bumi dan perubahan iklim
foto	varchar(255)			berita2.png
tgl_berita	datetime			

Go

Juga tambahkan gambarnya di folder server kita.



cobalah untuk menambah beberapa berita lagi :

+ Options					
		id_berita	judul	isi	foto tgl_berita
<input type="checkbox"/>	Edit Copy Delete	1	Huawei Nova 5T Masuk Indonesia, Tonjolan Kamera S...	Jakarta - Setelah keluar dengan flagship P30, kini...	berita1.jpg 2019-09-27 00:00:00
<input type="checkbox"/>	Edit Copy Delete	2	Facebook Mulai Coba Sembunyikan Tombol Like	Jakarta - Rencana Facebook untuk menguji coba fitu...	berita2.jpg 2019-09-27 00:00:00
<input type="checkbox"/>	Edit Copy Delete	3	Menyemai Karakter Peduli Lingkungan	Greta Thunberg dinobatkan sebagai Ambassador of Co...	berita2.png 2019-10-01 00:00:00
↑ <input type="checkbox"/> Check all With selected: Edit Copy Delete Export					

7. Tes hasilnya, dengan cara buka url http://localhost/flutter-server/get_berita.php



localhost/flutter-server/get_berita.php

```
[{"id_berita": "1", "judul": "Huawei Nova 5T Masuk Indonesia, Tor  
Super Clear", "isi": "Jakarta - Setelah keluar dengan flagship P30,  
main di pasar mid-range dengan mengeluarkan Nova 5T dengan  
canggih.\r\n\r\nPonsel tersebut didesain khusus untuk para mile  
dewasa muda yang mobile dan generasi 'live'.\r\n\r\nHuawei No  
Indonesia, Tonjolkan Kamera Super ClearFoto: Josina\detikINET  
\nHarapannya bisa tembus market di Indonesia karena sekarang  
anak muda zaman sekarang YouTube terus online, gaming, terus  
yang lagi dilakukan anak zaman sekarang,\n" jelas Eddy Supartor  
Manager Huawei Indonesia saat jumpa dengan detikInet.\r\n\r\n\r\nHuawei Klaim Hasil Foto Nova 5T Jernih Meski Di-zoom\r\n\r\n\r\n\r\n\r\nwarna yang diluncurkan yakni Crush Green dan Midsummer Pu  
khusus Midsummer Purple unit yang dijual di Indonesia akan te  
limited. Ponselnya pun ringan dengan berat 174 gram dan ketip  
mm.\r\n\r\n\r\n\r\n\r\nNova 5T menggambarkan bagaimana masyarakat b
```

Jika hasilnya seperti diatas maka berhasil.

13.3. Pembuatan Aplikasi

pada main.dart kita buat tombol untuk membuka daftar beritanya :

```
import 'package:flutter/material.dart';

void main() => runApp(MyApp());

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Demo',
      theme: ThemeData(
        primarySwatch: Colors.blue,
      ),
      home: PageHome(),
    );
  }
}

class PageHome extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
```




```
return Scaffold(  
  appBar:  
    AppBar(title: Text('Apps day 7'), backgroundColor:  
Colors.brown),  
  body: Container(  
    child: Column(children: <Widget>[  
      MaterialButton(  
        onPressed: () {  
          Navigator.push(context,  
            MaterialPageRoute(builder: (context) =>  
PageHomeBerita()));  
        },  
        child: Text('Apps Berita'),  
        color: Colors.brown,  
        textColor: Colors.white)  
      ]))));  
}
```

Lalu kita coba membuat halaman daftar beritanya, buat file baru dengan nama page_home_berita.dart

```
import 'package:flutter/material.dart';  
import 'package:http/http.dart' as http;  
import 'dart:async';  
import 'dart:convert';  
  
class PageHomeBerita extends StatefulWidget {  
  @override  
  _PageHomeBeritaState createState() => _PageHomeBeritaState();  
}  
  
class _PageHomeBeritaState extends State<PageHomeBerita> {  
  Future<List> getData() async {  
    final response = await  
http.get("http://192.168.10.153/flutter-server/get_berita.php");  
  
    return json.decode(response.body);  
  }  
  
  @override  
  Widget build(BuildContext context) {
```



```
return Scaffold(  
  appBar: AppBar(  
    title: Text('Apps Berita'),  
    backgroundColor: Colors.brown,  
  ),  
  body: FutureBuilder<List>(  
    future: getData(),  
    builder: (context, snapshot) {  
      if (snapshot.hasError) print(snapshot.error);  
  
      return snapshot.hasData  
        ? ItemList(list: snapshot.data)  
        : Center(child: CircularProgressIndicator());  
    },  
  ));  
}  
}  
  
class ItemList extends StatelessWidget {  
  final List list;  
  
  ItemList({this.list});  
  
  @override  
  Widget build(BuildContext context) {  
    return ListView.builder(  
      itemCount: list.length,  
      itemBuilder: (context, index) {  
        return Container(  
          padding: EdgeInsets.all(10.0),  
          child: GestureDetector(  
            onTap: () {  
              Navigator.push(context, MaterialPageRoute(builder:  
(context) {  
                return DetailBerita(list, index);  
              }));  
            },  
            child: Card(  
              child: ListTile(  
                title: Text(  
                  list[index]['judul'],
```



```
                style: TextStyle(
                    fontWeight: FontWeight.bold, color:
Colors.brown),
                ),
                subtitle: Text("Tanggal :
${list[index]['tgl_berita']}"),
                trailing: Image.network(
                    'http://192.168.10.153/flutter_day6/' +
list[index]['foto'],
                    fit: BoxFit.cover,
                    width: 60.0,
                    height: 60.0,
                ),
            ),
        ),
    ),
);
},
);
}
}

class DetailBerita extends StatelessWidget {
  List list;
  int index;

  DetailBerita(this.list, this.index);

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text(list[index]['judul']),
        backgroundColor: Colors.brown,
      ),
      body: ListView(
        children: <Widget>[
          Image.network('http://192.168.10.153/flutter_day6/' +
list[index]['foto']),
          Container(
```

```
padding: EdgeInsets.all(32.0),
child: Row(
  children: <Widget>[
    Expanded(
      child: Column(
        crossAxisAlignment: CrossAxisAlignment.start,
        children: <Widget>[
          Container(
            padding : EdgeInsets.only(bottom: 8.0),
            child: Text(list[index]['judul'],
              style: TextStyle(
                fontWeight: FontWeight.bold,
color: Colors.brown),
            ),
          ),
          Text(list[index]['tgl_berita'])
        ],
      ),
    ),
    Icon(Icons.star, color: Colors.brown,)
  ],
),
),

Container(
  padding: EdgeInsets.all(32.0),
  child: Text(list[index]['isi'], softWrap: true,),
)
],
),
);
}
```



BAB 14 : Login Register

Pada BAB ini kita akan membuat sebuah login register sederhana menggunakan API yang akan kita buat sendiri.

pertama-tama kita buat table **tb_user** terlebih dahulu, buat seperti berikut :

#	Nama	Jenis	Penyortiran	Atribut	Tak Ternilai	Bawaan	Komentar	Ekstra	Tindakan
<input type="checkbox"/>	1	id_user	int(11)		Tidak	Tidak ada		AUTO_INCREMENT	Ubah Hapus Lainnya
<input type="checkbox"/>	2	username	varchar(125)	utf8mb4_unicode_ci	Tidak	Tidak ada			Ubah Hapus Lainnya
<input type="checkbox"/>	3	email	varchar(125)	utf8mb4_unicode_ci	Tidak	Tidak ada			Ubah Hapus Lainnya
<input type="checkbox"/>	4	full_name	text	utf8mb4_unicode_ci	Tidak				Ubah Hapus Lainnya
<input type="checkbox"/>	5	sex	varchar(15)	utf8mb4_unicode_ci	Tidak	Tidak ada			Ubah Hapus Lainnya
<input type="checkbox"/>	6	password	varchar(50)	utf8mb4_unicode_ci	Tidak	Tidak ada			Ubah Hapus Lainnya
<input type="checkbox"/>	7	alamat	text	utf8mb4_unicode_ci	Tidak				Ubah Hapus Lainnya
<input type="checkbox"/>	8	tgl_daftar	varchar(50)	utf8mb4_unicode_ci	Tidak	Tidak ada			Ubah Hapus Lainnya

Jika sudah sekarang kita buat APInya.

14.1. Membuat API

Untuk login silahkan buat file php baru, beri nama login.php

```
<?php

require "koneksi.php";

if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    $response = array();
    $username = $_POST['username'];
    $password = md5($_POST['password']);

    // Langkah 2
    $cek = "SELECT * FROM tb_user WHERE username='$username' and
password='$password'";

    $result = mysqli_fetch_array(mysqli_query($connect, $cek));

    if (isset($result)) {
        $response['value'] = 1;
        $response['message'] = "Login berhasil";
    }
}
```



```
$response['username'] = $result['username'];  
$response['nama'] = $result['full_name'];  
  
    echo json_encode($response);  
} else {  
    $response['value'] = 0;  
    $response['message'] = "Login gagal";  
    echo json_encode($response);  
}  
}  
?>
```

lalu untuk register.phpnya

```
<?php  
    require "koneksi.php";  
  
    if ($_SERVER['REQUEST_METHOD'] == "POST") {  
        $response = array();  
        $username = $_POST['username'];  
        $password = md5($_POST['password']);  
        $full_name = $_POST['full_name'];  
        $sex = $_POST['sex'];  
        $alamat = $_POST['alamat'];  
        $email = $_POST['email'];  
  
        // Langkah 2  
        $cek = "SELECT * FROM tb_user WHERE username='$username'";  
        $result = mysqli_fetch_array(mysqli_query($connect, $cek));  
  
        if (isset($result)) {  
            $response['value'] = 2;  
            $response['message'] = "Username telah digunakan";  
  
            echo json_encode($response);  
        } else {  
            $insert = "INSERT INTO tb_user VALUE(NULL,  
            '$username', '$email', '$full_name', '$sex', '$password', '$alamat',  
            NOW())";  
  
            if (mysqli_query($connect, $insert)) {  
                $response['value'] = 1;  
                $response['message'] = "Berhasil didaftarkan";  
            }  
        }  
    }  
}
```



```
        echo json_encode($response);  
    } else {  
        $response['value'] = 0;  
        $response['message'] = "Gagal didaftarkan";  
        echo json_encode($response);  
    }  
}  
}  
?>
```

14.2. Pembuatan Aplikasi

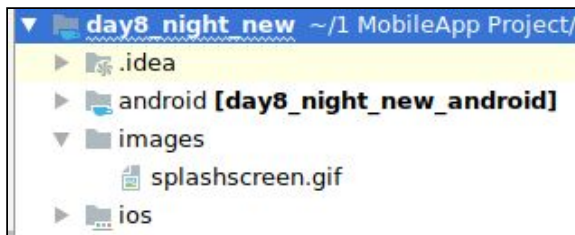
Pada project ini kita akan membuat splashscreen juga, langsung saja kita buat projectnya dengan nama bebas.

Jika sudah kita lanjutkan mengedit main.dart

silahkan kita bersihkan dan isikan seperti berikut :

```
import 'package:flutter/material.dart';  
  
void main() => runApp(MyApp());  
  
class MyApp extends StatelessWidget {  
  // This widget is the root of your application.  
  @override  
  Widget build(BuildContext context) {  
    return MaterialApp(  
      title: 'Flutter Demo',  
      theme: ThemeData(  
        primarySwatch: Colors.blue,  
      ),  
      home: SplashScreen(),  
      debugShowCheckedModeBanner: false,  
    );  
  }  
}
```

lalu kita tambahkan gambar animasi untuk splashscreennya



lalu kita tambahkan di pubspec.yaml



tambahkan juga dependensi yang akan kita pakai :



14.3. SplashScreen

```
import 'dart:async';  
  
import 'package:day8_night_new/ui_view/page_home.dart';  
import 'package:flutter/material.dart';  
  
class SplashScreen extends StatefulWidget {  
  @override  
  _SplashScreenState createState() => _SplashScreenState();  
}  
  
class _SplashScreenState extends State<SplashScreen> {  
  @override  
  void initState() {  
    startTimer();  
    super.initState();  
  }  
  
  @override
```




```
Widget build(BuildContext context) {  
  return Container (  
    child: Center(  
      child: Image.asset("images/splashscreen.gif"),  
    ),  
  );  
}  
  
Future<Timer> startTimer() async {  
  return Timer(Duration(seconds: 3), onDone);  
}  
  
void onDone() {  
  Navigator.of(context).pushReplacement(MaterialPageRoute(  
    builder: (context) => PageLogin()  
  ));  
}  
}
```

Pada splashscreen kita membuat timer yang mana nanti setelah 3 detik dia akan menjalankan onDone dan membuka halaman login.

14.4. Login

Selanjutnya pada halaman Login kita akan membuat formnya juga tombol untuk pindah ke halaman registrasi

buat page_login.dart dan jangan lupa untuk mengganti ipnya sesuai dengan ip kamu.

```
import 'package:day8_night_new/ui_view/page_home.dart';  
import 'package:day8_night_new/ui_view/page_register.dart';  
import 'package:flutter/material.dart';  
import 'package:http/http.dart' as http;  
import 'dart:convert';  
  
import 'package:shared_preferences/shared_preferences.dart';  
  
class PageLogin extends StatefulWidget {  
  @override  
  _PageLoginState createState() => _PageLoginState();  
}  
  
// deklarasi variable
```



```
enum statusLogin { signIn, notSignIn }

class _PageLoginState extends State<PageLogin> {
  statusLogin _loginStatus = statusLogin.notSignIn;
  final _keyForm = GlobalKey<FormState>();
  String nUsername, nPassword;

  // check ketika klik tombol Login
  checkForm() {
    final form = _keyForm.currentState;
    if (form.validate()) {
      form.save();
      submitDataLogin();
    }
  }

  // mengirim request dan menanggapi
  submitDataLogin() async {
    final responseData = await
http.post("http://192.168.10.153/flutter_day6/login.php", body: {
      "username": nUsername,
      "password": nPassword,
    });

    final data = jsonDecode(responseData.body);
    int value = data['value'];
    String pesan = data['message'];
    print(data);

    // get data respon
    String dataUsername = data['username'];
    String dataEmail = data['email'];
    String dataAlamat = data['alamat'];
    String dataSex = data['sex'];
    String dataFullname = data['full_name'];
    String dataTanggalDaftar = data['tgl_daftar'];
    String dataIdUser = data['id_user'];

    // cek value 1 atau 0
    if (value == 1) {
      setState(() {
        // set status loginnya sebagai Login
        _loginStatus = statusLogin.signIn;
      });
    }
  }
}
```



```
// simpan data ke share preferences
saveDataPref(value, dataIdUser, dataUsername, dataEmail,
dataAlamat,
    dataSex, dataFullname, dataTanggalDaftar);
});
} else if (value == 2) {
    print(pesan);
} else {
    print(pesan);
}
}

// method untuk soimpan share pref
saveDataPref(int value, String dIdUser, dUsername, dEmail, dAlamat,
dSex,
    dFullName, dCreated) async {
    SharedPreferences sharedPreferences = await
SharedPreferences.getInstance();
    setState(() {
        sharedPreferences.setInt("value", value);
        sharedPreferences.setString("username", dUsername);
        sharedPreferences.setString("id_user", dIdUser);
        sharedPreferences.setString("email", dEmail);
        sharedPreferences.setString("alamat", dAlamat);
        sharedPreferences.setString("sex", dSex);
        sharedPreferences.setString("full_name", dFullName);
        sharedPreferences.setString("tgl_daftar", dCreated);
    });
}

///
/// method ini digunakan untuk mengecek apakah user sudah login atau
belum
/// jika sudah set valuenya
///
getDataPref() async {
    SharedPreferences sharedPreferences = await
SharedPreferences.getInstance();
    setState(() {
        int nvalue = sharedPreferences.getInt("value");
        _loginStatus = nvalue == 1 ? statusLogin.signIn :
```



```
statusLogin.notSignIn;
    });
}

@override
void initState() {
  getDataPref();
  super.initState();
}

//method untuk sign out
signOut() async{
  SharedPreferences sharedPreferences = await
SharedPreferences.getInstance();
  setState(() {
    sharedPreferences.setInt("value", null);
    sharedPreferences.commit();
    _loginStatus = statusLogin.notSignIn;
  });
}

@override
Widget build(BuildContext context) {
  switch (_loginStatus) {
    case statusLogin.notSignIn:
      return Scaffold(
        backgroundColor: Colors.white,
        body: Form(
          key: _keyForm,
          child: ListView(
            children: <Widget>[
              Center(
                child: Text(
                  'Login Form',
                  style: TextStyle(
                    fontWeight: FontWeight.bold,
                    fontSize: 26.0,
                    color: Colors.brown,)),
              ),
            ),
          ),
        ),
        child: SizedBox(
```



```
        height: 20.0,
      ),
      Image.asset(
        'images/udacoding.jpg',
        height: 100.0,
        width: 100.0,
      ),
      Padding(
        padding: EdgeInsets.all(10.0),
        child: TextFormField(
          validator: (value) {
            //cek kalau value nya kosong
            if (value.isEmpty) {
              return 'Please Input Username';
            }
            return null;
          },
          onSave: (value)=> nUsername = value,
          decoration: InputDecoration(
            hintText: 'Username',
            labelText: 'Input Username',
            border: OutlineInputBorder(
              borderRadius: BorderRadius.circular(20.0),
            ),
          ),
        ),
      ),
      Padding(
        padding: EdgeInsets.all(10),
        child: TextFormField(
          validator: (value) {
            if (value.isEmpty) {
              return 'Please Input Password';
            }
            return null;
          },
          onSave: (value)=> nPassword = value,
          obscureText: true,
          decoration: InputDecoration(
            hintText: 'Password',
            labelText: 'Input Password',
            border: OutlineInputBorder(
              borderRadius: BorderRadius.circular(20.0))),
        ),
      ),
    ),
  ),
),
```



```
    ),  
    Padding(  
      padding: EdgeInsets.fromLTRB(10.0, 40.0, 10.0, 0),  
      child: MaterialButton(  
        color: Colors.blueGrey,  
        textColor: Colors.white,  
        child: Text('Login'),  
        onPressed: () {  
          setState(() {  
            checkForm();  
          });  
        },  
      ),  
    ),  
    Padding(  
      padding: EdgeInsets.fromLTRB(10.0, 20.0, 10.0, 0),  
      child: MaterialButton(  
        textColor: Colors.blueGrey,  
        child: Text('Belum Punya Akun ? Silahkan Daftar'),  
        onPressed: () {  
          Navigator.push(  
            context,  
            MaterialPageRoute(  
              builder: (context) => PageRegister()));  
        },  
      ),  
    ),  
  ],  
),  
),  
);  
  
    break;  
  case statusLogin.signIn:  
    return PageHome(signout);  
    break;  
}  
}  
}
```



14.5. Register

Selanjutnya pada halaman register kita buat seperti berikut :

```
import 'package:day8_night_new/ui_view/page_login.dart';
import 'package:flutter/material.dart';
import 'package:http/http.dart' as http;
import 'dart:convert';

class PageRegister extends StatefulWidget {
  @override
  _PageRegisterState createState() => _PageRegisterState();
}

class _PageRegisterState extends State<PageRegister> {
  TextEditingController cUsername = TextEditingController();
  TextEditingController cFullName = TextEditingController();
  TextEditingController cEmail = TextEditingController();
  TextEditingController cPassword = TextEditingController();
  TextEditingController cAlamat = TextEditingController();

  //deklarasi untuk masing-masing widget
  String nUsername, nFullName, nEmail, nPassword, nAlamat;
  String sex = "";
  //menambahkan key form
  final _keyForm = GlobalKey<FormState>();

  void pilihSex(String value){
    setState(() {
      sex = value;
    });
  }

  // saat user klik tombol register
  checkForm(){
    final form = _keyForm.currentState;
    if(form.validate()){
      form.save();
      submitDataRegister();
    }
  }
}
```



```
// submit data register
submitDataRegister() async{
  final responseData = await
http.post("http://192.168.10.153/flutter_day6/register.php",
  body: {"username" : nUsername, "full_name" : nFullName, "email" :
nEmail, "password" : nPassword,
  "sex": sex, "alamat": nAlamat}
);

  final data = jsonDecode(responseData.body);

  int value = data['value'];
  String pesan = data['message'];

  //cek value 1 atau 0
  if(value == 1){
    setState(() {
      Navigator.pop(context);
    });
  }else if(value == 2){
    print(pesan);
  }else{
    print(pesan);
  }
}

@override
Widget build(BuildContext context) {
  return Scaffold(
    body: Form(
      key: _keyForm,
      child: ListView(
        children: <Widget>[
          Text('', style: TextStyle(fontWeight: FontWeight.bold,
fontSize: 26.0, color: Colors.brown)),
          SizedBox(height: 20.0,),
          Image.asset('images/udacoding.jpg', height: 100.0, width:
100.0,),

          Padding(
            padding: EdgeInsets.all(10.0),
            child: TextFormField(
```




```
        validator: (value){//cek kalau value nya kosong
          if(value.isEmpty){
            return 'Please Input Email';
          }
          return null;
        },
        onSave: (value)=> nEmail = cEmail.text,
        decoration: InputDecoration(
          hintText: 'Email',
          labelText: 'Input Email',
          border: OutlineInputBorder(
            borderRadius: BorderRadius.circular(20.0),
          )
        ),
      ),
    ),
  ),
  Padding(
    padding: EdgeInsets.all(10),
    child: TextFormField(
      controller: cPassword,
      validator: (value){
        if(value.isEmpty){
          return 'Please Input Password';
        }
        return null;
      },
      onSave: (value)=> nPassword = cPassword.text,
      obscureText: true,
      decoration: InputDecoration(
        hintText: 'Password',
        labelText: 'Input Password',
        border: OutlineInputBorder(
          borderRadius: BorderRadius.circular(20.0)
        )
      ),
    ),
  ),
),
//radio button
Padding(
  padding: EdgeInsets.all(10),
```



```
child: RadioListTile(  
  value: "Laki-laki",  
  title: Text('Laki-laki'),  
  groupValue: sex,  
  onChanged: (String value){  
    pilihSex(value);  
  },  
  activeColor: Colors.blueGrey,  
  selected: true,  
  subtitle: Text('Pilih ini jika laki-laki'),  
),  
,  
  
Padding(  
  padding: EdgeInsets.all(10),  
  child: RadioListTile(  
    value: "Perempuan",  
    title: Text('Perempuan'),  
    groupValue: sex,  
    onChanged: (String value){  
      pilihSex(value);  
    },  
    activeColor: Colors.blueGrey,  
    subtitle: Text('Pilih ini jika perempuan'),  
  ),  
,  
  
Padding(  
  padding: EdgeInsets.all(10.0),  
  child: TextFormField(  
    controller: cAlamat,  
    validator: (value){  
      //cek kalau value nya kosong  
      if(value.isEmpty){  
        return 'Please Input Alamat';  
      }  
      return null;  
    },  
    maxLines: 3,  
    onSave: (value)=> nAlamat = cAlamat.text,  
    decoration: InputDecoration(  
      hintText: 'Alamat',  
      labelText: 'Input Alamat',  
      border: OutlineInputBorder(  

```



```
        borderRadius: BorderRadius.circular(20.0),
      ),
    ),
  ),
),

Padding(
  padding: EdgeInsets.fromLTRB(10.0, 40.0, 10.0, 0),
  child: MaterialButton(
    color: Colors.blueGrey,
    textColor: Colors.white,
    child: Text('Register'),
    onPressed: () {
      setState(() {
        checkForm();
      });
    },
  ),
),

Padding(
  padding: EdgeInsets.fromLTRB(10.0, 20.0, 10.0, 0),
  child: MaterialButton(
    textColor: Colors.blueGrey,
    child: Text('Sudah Punya Akun ? Silahkan Login'),

    onPressed: () {
      Navigator.push(context, MaterialPageRoute(builder:
(context)=>PageLogin()));
    },
  ),
),
],
),
),
),
);
}
}
```



Page Home

buatlah sebuah file baru dan kasih nama page_home.dart, setelah itu tambahkan code berikut :

```
import 'package:flutter/material.dart';
import 'dart:convert';
import 'dart:async';
import 'package:shared_preferences/shared_preferences.dart';
import 'page_add_data_pegawai.dart';
import 'package:apps_atambua/model/model_list_pegawai.dart';
import 'package:http/http.dart' as http;

class PageHome extends StatefulWidget {

  final VoidCallback signOut;
  PageHome(this.signOut);

  @override
  _PageHomeState createState() => _PageHomeState();
}

class _PageHomeState extends State<PageHome> {

  List<ModelListPegawai> listPegawai = [];

  var loading = false;

  //proses get data on background
  Future<Null> getData() async{

    setState() {
      loading = true; //ketika proses get data set loading nya true
    };

    final responseData = await
    http.get("http://172.20.10.6/apps_atambua/get_list_pegawai.php");
    //cek status response
    if(responseData.statusCode ==200){
      final data = jsonDecode(responseData.body);
      setState() {
        for (Map i in data){
          //menambahkan data yang sudah berhasil di get ke list model
          listPegawai.add(ModelListPegawai.fromJson(i));
        }
      }
    }
  }
}
```



```
//proses get data berhasil , loading di set false
loading = false;
});
}
}

//tambahan method signout
signOut() async{
  setState() {
    widget.signOut();
  });
}

//mengambil nilai dari shared preferences

String username = "", fullname = "";

getDataPref() async{
  SharedPreferences sharedPreferences = await SharedPreferences.getInstance();
  setState() {
    username = sharedPreferences.getString("username");
    fullname = sharedPreferences.getString("fullname");
  });
}

@override
void initState() {
  // TODO: implement initState
  super.initState();
  getDataPref();
  getData();
}

@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
      title: Text('Hi, ' + username),
      automaticallyImplyLeading: false,//buat hilangin tombol back
      backgroundColor: Colors.blueGrey,
      actions: <Widget>[
        IconButton(
          icon: Icon(
            Icons.exit_to_app,
            color: Colors.white,
          ),

```



```
        onPressed: (){
          signOut();
        },
      ),
    ],
  ),

  body: Container(
    child: loading ? Center(child: CircularProgressIndicator()) : ListView.builder(
      itemCount: listPegawai.length,
      itemBuilder: (context, index){
        final nDataList = listPegawai[index];
        return Card(
          margin: EdgeInsets.all(5.0),
          child: Column(
            crossAxisAlignment: CrossAxisAlignment.start,
            children: <Widget>[
              Text(nDataList.namaPegawai, style: TextStyle(fontWeight: FontWeight.bold,
                fontSize: 16.0, color: Colors.red
              )),

              Text(nDataList.jabatan)
            ],
          ),
        );
      },
    )),

  floatingActionButton: FloatingActionButton(
    onPressed: (){

      Navigator.push(context, MaterialPageRoute(builder:
(context)=>PageAddPegawai()));
    },child: Icon(Icons.add),
    foregroundColor: Colors.white,
    backgroundColor: Colors.blueGrey,
    shape: _DiamondBorder(),
  ),
);
}
}

class _DiamondBorder extends ShapeBorder {
  const _DiamondBorder();

  @override
  EdgeInsetsGeometry get dimensions {
```



```
    return const EdgesInsets.only();
}

@override
Path getInnerPath(Rect rect, { TextDirection textDirection }) {
    return getOuterPath(rect, textDirection: textDirection);
}

@override
Path getOuterPath(Rect rect, { TextDirection textDirection }) {
    return Path()
        ..moveTo(rect.left + rect.width / 2.0, rect.top)
        ..lineTo(rect.right, rect.top + rect.height / 2.0)
        ..lineTo(rect.left + rect.width / 2.0, rect.bottom)
        ..lineTo(rect.left, rect.top + rect.height / 2.0)
        ..close();
}

@override
void paint(Canvas canvas, Rect rect, { TextDirection textDirection }) {}

// This border doesn't support scaling.
@override
ShapeBorder scale(double t) {
    return null;
}
}
```




**PT. KODING
TEKNOLOGI
ASIA**

PT. KODING TEKNOLOGI ASIA
Jl. Bougenvile II No.2, Jombang,
Ciputat, Kota Tangerang Selatan

✉ info@udacoding.com
🌐 www.udacoding.com
☎ 082213761973

Hasilnya :

The image displays three sequential mobile application screens for a user authentication system.

Screen 1: Login Form
Time: 14.20
Title: Login Form
Logo: A green and blue stylized 'U' logo.
Fields: Input Username, Input Password (with a toggle for visibility).
Button: Login
Text: Belum Punya Akun ? Silahkan Daftar

Screen 2: Registration Form
Time: 14.22
Fields: Input Full Name, Input Email, Input Password, Gender selection (Laki-laki / Perempuan), Input Alamat.
Buttons: Register, Login
Text: Sudah Punya Akun ? Silahkan Login

Screen 3: User Profile
Time: 14.23
Header: Hi, rizall
Icon: Logout icon