Nama: Dwita Isma Aprilia

NIM: H1D022034 Shift: B Shift Asli: B

Responsi

Hasil Modulo NIM : 2 3 digit terakhir : 034

## **Segment Satu**

- 1. Paket: 2
- 2. Jenis Aplikasi: Aplikasi Manajemen Keuangan

# **Segment Dua**

- 1. Digit Puluhan: 3
- 2. Nama Tabel: saldo
- 3. Kolom 1: id (int, PK, increment)
- 4. Kolom 2: account (String)
- 5. Kolom 3: balance (Integer)
- 6. Kolom 4: status (String)

#### **Segment Tiga**

- 1. Digit Satuan: 4
- 2. Kustomisasi Tampilan UI: Tema Gradien Biru-Ungu, Font Courier New

## Source Code saldo page.dart

```
import 'package:flutter/material.dart';
import 'package:keuangan/bloc/logout bloc.dart';
import 'package:keuangan/bloc/saldo bloc.dart';
import 'package:keuangan/model/saldo.dart';
import 'package:keuangan/ui/login page.dart';
import 'package:keuangan/ui/saldo detail.dart';
import 'package:keuangan/ui/saldo form.dart';
class SaldoPage extends StatefulWidget {
 const SaldoPage({Key? key}) : super(key: key);
 @override
 _SaldoPageState createState() => _SaldoPageState();
class SaldoPageState extends State<SaldoPage> {
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(
    title: const Text('List Saldo'),
```

```
actions: [
  Padding(
     padding: const EdgeInsets.only(right: 20.0),
     child: GestureDetector(
      child: const Icon(Icons.add, size: 26.0),
      onTap: () async {
       Navigator.push(context,
          MaterialPageRoute(builder: (context) => SaldoForm()));
      },
    ))
],
),
drawer: Drawer(
 child: ListView(
  children: [
   ListTile(
    title: const Text('Logout'),
     trailing: const Icon(Icons.logout),
     onTap: () async {
      await LogoutBloc.logout().then((value) => {
       Navigator.of(context).pushAndRemoveUntil(
         MaterialPageRoute(builder: (context) => LoginPage()),
            (route) => false)
      });
body: FutureBuilder<List>(
 future: SaldoBloc.getSaldos(),
 builder: (context, snapshot) {
  if (snapshot.hasError) print(snapshot.error);
  return snapshot.hasData
     ? ListSaldo(
   list: snapshot.data,
  )
    : const Center(
   child: CircularProgressIndicator(),
```

```
class ListSaldo extends StatelessWidget {
 final List? list;
 const ListSaldo({Key? key, this.list}) : super(key: key);
 @override
 Widget build(BuildContext context) {
  return ListView.builder(
     itemCount: list == null ? 0 : list!.length,
     itemBuilder: (context, i) {
      return ItemSaldo(
       saldo: list![i],
      );
     });
class ItemSaldo extends StatelessWidget {
 final Saldo saldo;
 const ItemSaldo({Key? key, required this.saldo}) : super(key: key);
 @override
 Widget build(BuildContext context) {
  return GestureDetector(
   onTap: () {
     Navigator.push(
       context,
       MaterialPageRoute(
          builder: (context) => SaldoDetail(
           saldo: saldo,
          )));
   },
   child: Card(
     child: ListTile(
      title: Text(saldo.accountSaldo!),
      subtitle: Text(saldo.statusSaldo.toString()),
```

```
Source Code saldo form.dart
import 'package:flutter/material.dart';
import 'package:keuangan/bloc/saldo bloc.dart';
import 'package:keuangan/model/saldo.dart';
import 'package:keuangan/ui/saldo page.dart';
import 'package:keuangan/widget/warning dialog.dart';
// ignore: must be immutable
class SaldoForm extends StatefulWidget {
 Saldo? saldo;
 SaldoForm({Key? key, this.saldo}): super(key: key);
 @override
 _SaldoFormState createState() => _SaldoFormState();
class SaldoFormState extends State<SaldoForm> {
 final formKey = GlobalKey<FormState>();
 bool isLoading = false;
 String judul = "TAMBAH SALDO";
 String tombolSubmit = "SIMPAN";
 final accountSaldoTextboxController = TextEditingController();
 final balanceSaldoTextboxController = TextEditingController();
 final statusSaldoTextboxController = TextEditingController();
 @override
 void initState() {
  super.initState();
  isUpdate();
 }
 isUpdate() {
  if (widget.saldo != null) {
   setState(() {
    judul = "UBAH SALDO";
    tombolSubmit = "UBAH";
     accountSaldoTextboxController.text = widget.saldo!.accountSaldo!;
    balanceSaldoTextboxController.text = widget.saldo!.balanceSaldo.toString();
    statusSaldoTextboxController.text = widget.saldo!.statusSaldo.toString();
   });
  } else {
   judul = "TAMBAH SALDO";
   tombolSubmit = "SIMPAN";
```

```
}
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(title: Text(judul)),
   body: SingleChildScrollView(
    child: Padding(
      padding: const EdgeInsets.all(8.0),
      child: Form(
       key: formKey,
       child: Column(
        children: [
         _accountSaldoTextField(),
         balanceSaldoTextField(),
         statusSaldoTextField(),
         buttonSubmit()
//Membuat Textbox Kode Saldo
 Widget accountSaldoTextField() {
  return TextFormField(
   decoration: const InputDecoration(labelText: "Account Saldo"),
   keyboardType: TextInputType.text,
   controller: accountSaldoTextboxController,
   validator: (value) {
    if (value!.isEmpty) {
     return "Account Saldo harus diisi";
    return null;
   },
//Membuat Textbox Balance Saldo
 Widget balanceSaldoTextField() {
  return TextFormField(
```

```
decoration: const InputDecoration(labelText: "Balance Saldo"),
   keyboardType: TextInputType.text,
   controller: balanceSaldoTextboxController,
   validator: (value) {
    if (value!.isEmpty) {
      return "Balance Saldo harus diisi";
    return null;
   },
//Membuat Textbox Status Saldo
 Widget statusSaldoTextField() {
  return TextFormField(
   decoration: const InputDecoration(labelText: "Status"),
   keyboardType: TextInputType.number,
   controller: statusSaldoTextboxController,
   validator: (value) {
    if (value!.isEmpty) {
      return "Status harus diisi";
    return null;
   },
//Membuat Tombol Simpan/Ubah
 Widget buttonSubmit() {
  return OutlinedButton(
    child: Text(tombolSubmit),
     onPressed: () {
      var validate = formKey.currentState!.validate();
      if (validate) {
       if (! isLoading) {
        if (widget.saldo != null) {
//kondisi update saldo
         ubah();
        } else {
//kondisi tambah saldo
         simpan();
```

```
});
simpan() {
 setState(() {
  isLoading = true;
 });
 Saldo createSaldo = Saldo(id: null);
 createSaldo.accountSaldo = accountSaldoTextboxController.text;
 createSaldo.balanceSaldo = int.parse( balanceSaldoTextboxController.text);
 createSaldo.statusSaldo = statusSaldoTextboxController.text;
 SaldoBloc.addSaldo(saldo: createSaldo).then((value) {
  Navigator.of(context).push(MaterialPageRoute(
    builder: (BuildContext context) => const SaldoPage()));
 }, onError: (error) {
  showDialog(
    context: context,
     builder: (BuildContext context) => const WarningDialog(
      description: "Simpan gagal, silahkan coba lagi",
    ));
 });
 setState(() {
  isLoading = false;
 });
}
ubah() {
 setState(() {
   isLoading = true;
 });
 Saldo updateSaldo= Saldo(id: widget.saldo!.id!);
 updateSaldo.accountSaldo = accountSaldoTextboxController.text;
 updateSaldo.balanceSaldo = int.tryParse(_balanceSaldoTextboxController.text) ?? 0;
 updateSaldo.statusSaldo = statusSaldoTextboxController.text;
 SaldoBloc.updateSaldo(saldo: updateSaldo).then((value) {
  Navigator.of(context).push(MaterialPageRoute(
     builder: (BuildContext context) => const SaldoPage()));
 }, onError: (error) {
  showDialog(
     context: context,
    builder: (BuildContext context) => const WarningDialog(
      description: "Permintaan ubah data gagal, silahkan coba lagi",
```

```
));
  });
  setState(() {
   isLoading = false;
  });
Source Code saldo detail.dart
import 'package:flutter/material.dart';
import 'package:keuangan/bloc/saldo bloc.dart';
import 'package:keuangan/model/saldo.dart';
import 'package:keuangan/ui/saldo form.dart';
import 'package:keuangan/ui/saldo page.dart';
import 'package:keuangan/widget/warning dialog.dart';
// ignore: must be immutable
class SaldoDetail extends StatefulWidget {
 Saldo? saldo;
SaldoDetail({Key? key, this.saldo}) : super(key: key);
 @override
 _SaldoDetailState createState() => SaldoDetailState();
class SaldoDetailState extends State<SaldoDetail> {
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(
    title: const Text('Detail Saldo'),
   ),
   body: Center(
    child: Column(
      children: [
       Text(
        "Account: ${widget.saldo!.accountSaldo}",
        style: const TextStyle(fontSize: 20.0),
       ),
       Text(
        "Balance: ${widget.saldo!.balanceSaldo}",
        style: const TextStyle(fontSize: 18.0),
```

```
),
       Text(
        "Status: ${widget.saldo!.statusSaldo}",
        style: const TextStyle(fontSize: 18.0),
        tombolHapusEdit()
 Widget _tombolHapusEdit() {
  return Row(
   mainAxisSize: MainAxisSize.min,
   children: [
// Tombol Edit
     OutlinedButton(
      child: const Text("EDIT"),
      onPressed: () {
       Navigator.push(
        context,
        MaterialPageRoute(
         builder: (context) => SaldoForm(
           saldo: widget.saldo!,
// Tombol Hapus
    OutlinedButton(
      child: const Text("DELETE"),
      onPressed: () => confirmHapus(),
 void confirmHapus() {
  AlertDialog alertDialog = AlertDialog(
   content: const Text("Yakin ingin menghapus data ini?"),
   actions: [
```

```
//tombol hapus
    OutlinedButton(
      child: const Text("Ya"),
      onPressed: () {
       SaldoBloc.deleteSaldo(id: widget.saldo!.id!).then(
            (value) \Rightarrow \{
           Navigator.of(context).push(MaterialPageRoute(
             builder: (context) => const SaldoPage()))
          }, onError: (error) {
        showDialog(
           context: context,
           builder: (BuildContext context) => const WarningDialog(
            description: "Hapus gagal, silahkan coba lagi",
           ));
       });
//tombol batal
    OutlinedButton(
      child: const Text("Batal"),
      onPressed: () => Navigator.pop(context),
   ],
  );
  showDialog(builder: (context) => alertDialog, context: context);
Source Code Registrasi
import 'package:flutter/material.dart';
import 'package:keuangan/bloc/registrasi bloc.dart';
import 'package:keuangan/widget/success dialog.dart';
import 'package: keuangan/widget/warning dialog.dart';
class RegistrasiPage extends StatefulWidget {
 const RegistrasiPage({Key? key}) : super(key: key);
 @override
 RegistrasiPageState createState() => RegistrasiPageState();
class RegistrasiPageState extends State<RegistrasiPage> {
 final formKey = GlobalKey<FormState>();
```

```
bool isLoading = false;
final namaTextboxController = TextEditingController();
final emailTextboxController = TextEditingController();
final passwordTextboxController = TextEditingController();
@override
Widget build(BuildContext context) {
 return Scaffold(
  appBar: AppBar(
   title: const Text(
     "Registrasi",
    style: TextStyle(
      fontFamily: 'Courier New',
      fontWeight: FontWeight.bold,
      color: Colors.white,
    ),
   flexibleSpace: Container(
     decoration: const BoxDecoration(
      gradient: LinearGradient(
       colors: [Colors.blue, Colors.purple],
       begin: Alignment.topLeft,
       end: Alignment.bottomRight,
  body: Container(
   decoration: const BoxDecoration(
     gradient: LinearGradient(
      colors: [Colors.blue, Colors.purple],
      begin: Alignment.topLeft,
      end: Alignment.bottomRight,
    ),
   child: SingleChildScrollView(
    child: Padding(
      padding: const EdgeInsets.all(16.0),
      child: Column(
       children: [
        const SizedBox(height: 40),
        logo(),
        const SizedBox(height: 40),
```

```
registrationForm(),
        const SizedBox(height: 20),
        buttonRegistrasi(),
        const SizedBox(height: 30),
        menuLogin(),
// Logo atau ikon di atas form
Widget logo() {
 return Center(
  child: Text(
   'Keuangan App',
   style: TextStyle(
    fontFamily: 'Courier New',
    fontSize: 30,
    fontWeight: FontWeight.bold,
    color: Colors.white,
// Form Registrasi
Widget registrationForm() {
 return Container(
  padding: const EdgeInsets.all(16.0),
  decoration: BoxDecoration(
   color: Colors.white.withOpacity(0.8),
   borderRadius: BorderRadius.circular(16),
  ),
  child: Form(
   key: formKey,
   child: Column(
    children: [
      _namaTextField(),
     const SizedBox(height: 16),
      _emailTextField(),
```

```
const SizedBox(height: 16),
      passwordTextField(),
     const SizedBox(height: 16),
      passwordKonfirmasiTextField(),
// Membuat Textbox Nama
Widget namaTextField() {
 return TextFormField(
  decoration: const InputDecoration(
   labelText: "Nama",
   labelStyle: TextStyle(fontFamily: 'Courier New', color: Colors.blue),
   enabledBorder: UnderlineInputBorder(
    borderSide: BorderSide(color: Colors.blue),
   ),
  ),
  keyboardType: TextInputType.text,
  controller: namaTextboxController,
  style: const TextStyle(fontFamily: 'Courier New', color: Colors.black),
  validator: (value) {
   if (value!.length < 3) {
    return "Nama harus diisi minimal 3 karakter";
   return null;
  },
// Membuat Textbox Email
Widget emailTextField() {
 return TextFormField(
  decoration: const InputDecoration(
   labelText: "Email",
   labelStyle: TextStyle(fontFamily: 'Courier New', color: Colors.blue),
   enabledBorder: UnderlineInputBorder(
    borderSide: BorderSide(color: Colors.blue),
   ),
  keyboardType: TextInputType.emailAddress,
```

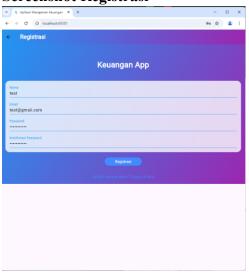
```
controller: emailTextboxController,
    style: const TextStyle(fontFamily: 'Courier New', color: Colors.black),
    validator: (value) {
     if (value!.isEmpty) {
      return 'Email harus diisi';
     Pattern pattern =
       r'^{(([^{<<}()[^]\setminus,.,:^{<}()[^]\setminus,.,:^{<}()[^]\setminus,.,:^{<}()[^]))}|(^{"}+^{"}))@((^{[0-9]}\{1,3\}\setminus.[0-9]\})
9]{1,3}\.[0-9]{1,3}\.[0-9]{1,3}\])(([a-zA-Z\-0-9]+\.)+[a-zA-Z]{2,}))$';
     RegExp regex = RegExp(pattern.toString());
     if (!regex.hasMatch(value)) {
      return "Email tidak valid";
     return null;
    },
  );
 // Membuat Textbox Password
 Widget passwordTextField() {
  return TextFormField(
    decoration: const InputDecoration(
     labelText: "Password",
     labelStyle: TextStyle(fontFamily: 'Courier New', color: Colors.blue),
     enabledBorder: UnderlineInputBorder(
      borderSide: BorderSide(color: Colors.blue),
     ),
    keyboardType: TextInputType.text,
    obscureText: true,
    controller: passwordTextboxController,
    style: const TextStyle(fontFamily: 'Courier New', color: Colors.black),
   validator: (value) {
     if (value!.length < 6) {
      return "Password harus diisi minimal 6 karakter";
     return null;
    },
  );
 // Membuat Textbox Konfirmasi Password
 Widget passwordKonfirmasiTextField() {
```

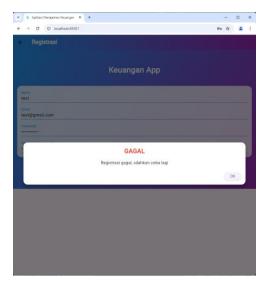
```
return TextFormField(
  decoration: const InputDecoration(
   labelText: "Konfirmasi Password",
   labelStyle: TextStyle(fontFamily: 'Courier New', color: Colors.blue),
    enabledBorder: UnderlineInputBorder(
    borderSide: BorderSide(color: Colors.blue),
   ),
  ),
  keyboardType: TextInputType.text,
  obscureText: true,
  style: const TextStyle(fontFamily: 'Courier New', color: Colors.black),
  validator: (value) {
   if (value != passwordTextboxController.text) {
     return "Konfirmasi Password tidak sama";
   return null;
  },
 );
// Tombol Registrasi
Widget buttonRegistrasi() {
 return ElevatedButton(
  style: ElevatedButton.styleFrom(
   backgroundColor: Colors.blueAccent, // background color
   foregroundColor: Colors.white, // text (foreground) color
   textStyle: const TextStyle(fontFamily: 'Courier New'),
   padding: const EdgeInsets.symmetric(vertical: 14, horizontal: 40),
    shape: RoundedRectangleBorder(
    borderRadius: BorderRadius.circular(30),
   ),
  ),
  child: const Text("Registrasi"),
  onPressed: () {
   var validate = formKey.currentState!.validate();
   if (validate) {
    if (! isLoading) submit();
// Fungsi untuk handle registrasi
```

```
void submit() {
 formKey.currentState!.save();
 setState(() {
  isLoading = true;
 });
 RegistrasiBloc.registrasi(
  nama: namaTextboxController.text,
  email: emailTextboxController.text,
  password: passwordTextboxController.text,
 ).then((value) {
  showDialog(
   context: context,
   barrierDismissible: false,
   builder: (BuildContext context) => SuccessDialog(
    description: "Registrasi berhasil, silahkan login",
    okClick: () {
      Navigator.pop(context);
      Navigator.pop(context); // Kembali ke halaman login
    },
   ),
  ):
 }, onError: (error) {
  showDialog(
   context: context,
   barrierDismissible: false,
   builder: (BuildContext context) => const WarningDialog(
     description: "Registrasi gagal, silahkan coba lagi",
   ),
  );
 });
 setState(() {
  isLoading = false;
 });
}
// Menu untuk berpindah ke halaman login
Widget menuLogin() {
 return Center(
  child: InkWell(
   child: const Text(
     "Sudah punya akun? Login di sini",
     style: TextStyle(
      color: Colors.blueAccent.
```

```
fontFamily: 'Courier New',
    fontSize: 16,
),
),
onTap: () {
    Navigator.pop(context); // Kembali ke halaman login
    },
),
);
}
```

**Screenshot Registrasi** 





# **Source Code Login**

```
import 'package:flutter/material.dart';
import 'package:keuangan/bloc/login_bloc.dart';
import 'package:keuangan/helpers/user_info.dart';
import 'package:keuangan/ui/saldo_page.dart';
import 'package:keuangan/ui/registrasi_page.dart';
import 'package:keuangan/widget/warning_dialog.dart';
import 'package:keuangan/widget/warning_dialog.dart';
class LoginPage extends StatefulWidget {
   const LoginPage({Key? key}) : super(key: key);
   @override
   _LoginPageState createState() => _LoginPageState();
}
class _LoginPageState extends State<LoginPage> {
```

```
final formKey = GlobalKey<FormState>();
bool isLoading = false;
final emailTextboxController = TextEditingController();
final passwordTextboxController = TextEditingController();
@override
Widget build(BuildContext context) {
 return Scaffold(
  appBar: AppBar(
   title: const Text(
    'Login',
    style: TextStyle(fontFamily: 'Courier New', fontWeight: FontWeight.bold),
   flexibleSpace: Container(
    decoration: const BoxDecoration(
      gradient: LinearGradient(
       colors: [Colors.blue, Colors.purple],
       begin: Alignment.topLeft,
       end: Alignment.bottomRight,
  body: Container(
   decoration: const BoxDecoration(
    gradient: LinearGradient(
      colors: [Colors.blue, Colors.purple],
     begin: Alignment.topLeft,
      end: Alignment.bottomRight,
    ),
   child: SingleChildScrollView(
    child: Padding(
      padding: const EdgeInsets.all(16.0),
      child: Column(
       children: [
        const SizedBox(height: 40),
        logo(),
        const SizedBox(height: 40),
        loginForm(),
        const SizedBox(height: 20),
         buttonLogin(),
        const SizedBox(height: 30),
```

```
menuRegistrasi(),
// Logo atau ikon di atas form
Widget logo() {
 return Center(
  child: Text(
   'Keuangan App',
   style: TextStyle(
    fontFamily: 'Courier New',
     fontSize: 30,
    fontWeight: FontWeight.bold,
    color: Colors.white,
// Membuat form login
Widget loginForm() {
 return Container(
  padding: const EdgeInsets.all(16.0),
  decoration: BoxDecoration(
   color: Colors.white.withOpacity(0.8),
   borderRadius: BorderRadius.circular(16),
  ),
  child: Form(
   key: _formKey,
   child: Column(
     children: [
      emailTextField(),
      const SizedBox(height: 16),
      _passwordTextField(),
```

```
}
// Membuat Textbox email
Widget emailTextField() {
 return TextFormField(
  decoration: const InputDecoration(
   labelText: "Email",
   labelStyle: TextStyle(fontFamily: 'Courier New', color: Colors.blue),
   enabledBorder: UnderlineInputBorder(
    borderSide: BorderSide(color: Colors.blue),
   ),
  ),
  keyboardType: TextInputType.emailAddress,
  controller: emailTextboxController,
  style: const TextStyle(fontFamily: 'Courier New', color: Colors.black),
  validator: (value) {
   if (value!.isEmpty) {
    return 'Email harus diisi';
   return null;
  },
// Membuat Textbox password
Widget passwordTextField() {
 return TextFormField(
  decoration: const InputDecoration(
   labelText: "Password",
   labelStyle: TextStyle(fontFamily: 'Courier New', color: Colors.blue),
   enabledBorder: UnderlineInputBorder(
    borderSide: BorderSide(color: Colors.blue),
   ),
  keyboardType: TextInputType.text,
  obscureText: true,
  controller: passwordTextboxController,
  style: const TextStyle(fontFamily: 'Courier New', color: Colors.black),
  validator: (value) {
   if (value!.isEmpty) {
    return "Password harus diisi";
   return null;
```

```
},
// Membuat Tombol Login
Widget buttonLogin() {
 return ElevatedButton(
  style: ElevatedButton.styleFrom(
   backgroundColor: Colors.blueAccent, // Warna latar belakang tombol
   foregroundColor: Colors.white, // Warna teks tombol
   textStyle: const TextStyle(fontFamily: 'Courier New', fontSize: 16),
   padding: const EdgeInsets.symmetric(vertical: 14, horizontal: 40),
   shape: RoundedRectangleBorder(
    borderRadius: BorderRadius.circular(30),
   ),
  ),
  child: const Text("Login"),
  onPressed: () {
   var validate = formKey.currentState!.validate();
   if (validate) {
    if (! isLoading) _submit();
void submit() {
 formKey.currentState!.save();
 setState(() {
   isLoading = true;
 });
 LoginBloc.login(
   email: emailTextboxController.text,
   password: passwordTextboxController.text)
   .then((value) async {
  if (value.code == 200) {
   await UserInfo().setToken(value.token.toString());
   await UserInfo().setUserID(int.parse(value.userID.toString()));
   Navigator.pushReplacement(context,
      MaterialPageRoute(builder: (context) => const SaldoPage()));
  } else {
   showDialog(
      context: context,
```

```
barrierDismissible: false,
      builder: (BuildContext context) => const WarningDialog(
       description: "Login gagal, silahkan coba lagi",
      ));
  }
 }, onError: (error) {
  print(error);
  showDialog(
    context: context,
     barrierDismissible: false,
     builder: (BuildContext context) => const WarningDialog(
     description: "Login gagal, silahkan coba lagi",
    ));
 });
 setState(() {
  _isLoading = false;
});
}
// Membuat menu untuk membuka halaman registrasi
Widget menuRegistrasi() {
 return Center(
  child: InkWell(
   child: const Text(
     "Registrasi",
     style: TextStyle(
      color: Colors.blueAccent,
      fontFamily: 'Courier New',
      fontSize: 16,
    ),
   ),
   onTap: () {
    Navigator.push(context,
       MaterialPageRoute(builder: (context) => const RegistrasiPage()));
```

