

Flutter- DEMO-LAB-6

Demo.dart

```
import 'package:flutter/material.dart';
void main()
{
  runApp(const MyApp());
}
class MyApp extends StatelessWidget
{
  const MyApp({super.key});
  @override
  Widget build(BuildContext context)
  {
    return MaterialApp
    (
      title: 'Flutter Demo',
      theme: ThemeData(
        colorScheme: ColorScheme.fromSeed(seedColor: Colors.blue),
        useMaterial3: true,
      ),
      home: const MyHomePage(title: 'I Love My College:CMRIT'),
    );
  }
}
class MyHomePage extends StatefulWidget
{
  const MyHomePage({super.key, required this.title});
  final String title;
  @override
  State<MyHomePage> createState() => _MyHomePageState();
}
class _MyHomePageState extends State<MyHomePage>
{
  int _counter = 0;
  void _incrementCounter()
  {
    setState(()
    {
      _counter++;
    });
  }
  @override
  Widget build(BuildContext context)
  {
    return Scaffold(
      appBar: AppBar(
```

```

        backgroundColor: Theme.of(context).colorScheme.inversePrimary,
        title: Text(widget.title),
    ),
    body: Center(
      child: Column(
        mainAxisAlignment: MainAxisAlignment.end,
        children: <Widget>
        [
          const Text(
            'Please pushed the button:',
          ),
          Text(
            '$_counter',
            style: Theme.of(context).textTheme.headlineMedium,
          ),
        ],
      ),
    ),
    floatingActionButton: FloatingActionButton(
      onPressed: _incrementCounter,
      tooltip: 'Increment',
      child: const Icon(Icons.add),
    ),
  );
}
}

```

LAB-7-IntelliJ-Example

Example.dart

```

import 'dart:io';
import 'dart:math' as math;
void main()
{
  print("pizza price ,small: 150 Rs, Medium: 190 Rs, Large: 240 Rs");
  print("please enter your pizza size (Small, Medium, Large):");
  String pizzaSize=stdin.readLineSync()!;
  print("How Many pizza do you want to $pizzaSize");
  int pizzaQty=int.parse(stdin.readLineSync()!);
  //condition
  if(pizzaSize=='Small')
  {
    var result=pizzaQty*150;
    print("Your Total Payment is :$result");
  }
  else if(pizzaSize=='Medium')
  {
    var result=pizzaQty*190;
    print("Your Total Payment is:$result");
  }
}

```

```

    }
else if(pizzaSize=='Large')
{
    var result=pizzaQty*240;
    print("Your Total Payment is:$result");
}
else
{
    print("Invalid Pizza Size Input");

}
}
}

```

LAB-8 main.dart

```

import 'package:flutter/material.dart';
import 'package:lab8/Dashboard.dart';

void main() async{
    runApp(MyApp());
}

class MyApp extends StatelessWidget {
    @override
    Widget build(BuildContext context) {
        return MaterialApp(
            title: 'pizza dashboard',
            theme: ThemeData(
                primarySwatch: Colors.deepPurple,
            ),
            debugShowCheckedModeBanner: false,
            home: Dashboard(),
        );
        // });
    }
}

```

Dashboard.dart

```

import 'package:flutter/material.dart';
import 'package:lab8/top_navigation_bar.dart';

class Dashboard extends StatelessWidget {
    const Dashboard({Key? key}) : super(key: key);

    @override
    Widget build(BuildContext context) {
        // Material App
        return MaterialApp(
            home:Scaffold(

```

```

appBar: AppBar(
  title: Text("Welcome to WOW PIZZA!"),
  centerTitle: true,
  backgroundColor: Colors.deepOrange,
),
body: Column(children:[
  Image.asset('Images/meal.jpg',
    width:400.0,
    height:300.0,),
  Text("Wanna Order Something... ",
    style: TextStyle(decoration:TextDecoration.none,fontSize:30.0),
    textAlign: TextAlign.center,
  ),
  ElevatedButton(
    onPressed: () async => {
      Navigator.pushAndRemoveUntil(
        context,
        MaterialPageRoute(
          builder: (context) => TopNavigationBar(),
        ),
        (route) => false)
    },
    child: Text('Lets Go'),
    style: ElevatedButton.styleFrom(primary: Colors.amber),
  )
]
)
));
}
}

```

Navigationbar.dart

```

import 'package:flutter/material.dart';
class TopNavigationBar extends StatelessWidget{
  @override
  Widget build(BuildContext context){
    return DefaultTabController(length: 3,
      child: Scaffold(
        appBar: AppBar(
          backgroundColor: Colors.redAccent,
          title: Row(children: [
            Text('WOW Pizza',
              style:TextStyle(fontSize: 20.0),),
            SizedBox(width:160.0,),
            Container(child:GestureDetector(
              child:Image.asset(
                'Images/twitter.png',

```

```

        fit: BoxFit.contain,
        height: 30,),
    ),),
    SizedBox(width: 10.0,),
    Container(child: GestureDetector(
      child: Image.asset(
        'Images/facebook.png',
        fit: BoxFit.contain,
        height: 40,),
    ),),
  ],
),
bottom: TabBar(indicatorColor: Colors.red,
  tabs:[
    Tab(icon: Container(height: 40,
      child: Image.asset('lib/icons/pizza.png')),
      text: 'Vegitable Pizza'
    ),
    Tab(icon: Container(height: 40,
      child: Image.asset('lib/icons/pizza.png')),
      text: 'Cheese Pizza'
    ),
    Tab(icon: Container(height: 40,
      child: Image.asset('lib/icons/french-fries.png')),
      text: 'Fries'
    ),
  ]
),
),
body: TabBarView(
  children: [
    MaterialApp(home: Center(child: Column(children: [
      Image.asset('Images/Vpizza.png',
        width: 400.0,
        height: 300.0,),
      Text("Hi, I'm Pizza Assistant, what can I help you order?",
        style: TextStyle(decoration: TextDecoration.none, fontSize: 30.0),
        textAlign: TextAlign.center,
      ),
    ]
    ),
  ),
),
MaterialApp(home: Center(child: Column(children: [
  Image.asset('Images/cheesepizza.png',
    width: 400.0,
    height: 300.0,),
  Text("Hi, I'm Pizza Assistant, what can I help you order?",

```

```

        style: TextStyle(decoration:TextDecoration.none,fontSize:30.0),
        textAlign: TextAlign.center,
    ),
]
)
),
),
MaterialApp(home:Center(child:Column(children:[
    Image.asset('Images/Fpizza.png',
        width:400.0,
        height:300.0,),
    Text("Hi, I'm Pizza Assistant, what can I help you order?",
        style: TextStyle(decoration:TextDecoration.none,fontSize:30.0),
        textAlign: TextAlign.center,
    ),
]
)
),
),
),
],
),
));
}
}

```

LAB-10

main.dart

```

import 'package:firebase_core/firebase_core.dart';
import 'package:flutter/material.dart';
import 'package:lab10/login.dart';

void main() async{
  WidgetsFlutterBinding.ensureInitialized();
  await Firebase.initializeApp();
  runApp(MyApp());
}

class MyApp extends StatelessWidget {
  final Future<FirebaseApp> _initialization = Firebase.initializeApp();
  @override
  Widget build(BuildContext context) {
    return FutureBuilder(
      future: _initialization,
      builder: (context, snapshot) {
        // Check for Errors
        if (snapshot.hasError) {
          print("Something Went Wrong");
        }
        if (snapshot.connectionState == ConnectionState.waiting) {
          return Center(child: CircularProgressIndicator());
        }
      }
    );
  }
}

```

```

    }
    return MaterialApp(
      title: 'Flutter Firebase EMail Password Auth',
      theme: ThemeData(
        primarySwatch: Colors.deepOrange,
      ),
      debugShowCheckedModeBanner: false,
      home: Login(),
    );
  });
}
}

```

Login.dart

```

import 'package:firebase_auth/firebase_auth.dart';
import 'package:flutter/material.dart';
import 'package:lab10/signup.dart';
import 'package:lab10/dashboard.dart';

class Login extends StatefulWidget {
  Login({Key? key}) : super(key: key);

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

class _LoginState extends State<Login> {
  final _formKey = GlobalKey<FormState>();

  var email = "";
  var password = "";
  // Create a text controller and use it to retrieve the current value
  // of the TextField.
  final emailController = TextEditingController();
  final passwordController = TextEditingController();

  userLogin() async {
    try {
      await FirebaseAuth.instance
        .signInWithEmailAndPassword(email: email, password: password);
      Navigator.pushReplacement(
        context,
        MaterialPageRoute(
          builder: (context) => Dashboard(),
        ),
      );
    } on FirebaseAuthException catch (e) {

```

```

if (e.code == 'user-not-found') {
  print("No User Found for that Email");
  ScaffoldMessenger.of(context).showSnackBar(
    SnackBar(
      backgroundColor: Colors.orangeAccent,
      content: Text(
        "No User Found for that Email",
        style: TextStyle(fontSize: 18.0, color: Colors.black),
      ),
    ),
  );
} else if (e.code == 'wrong-password') {
  print("Wrong Password Provided by User");
  ScaffoldMessenger.of(context).showSnackBar(
    SnackBar(
      backgroundColor: Colors.orangeAccent,
      content: Text(
        "Wrong Password Provided by User",
        style: TextStyle(fontSize: 18.0, color: Colors.black),
      ),
    ),
  );
}
}
}

```

```

@override
void dispose() {
  // Clean up the controller when the widget is disposed.
  emailController.dispose();
  passwordController.dispose();
  super.dispose();
}

```

```

@override
Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
      title: Text("User Login"),
    ),
    body: Form(
      key: _formKey,
      child: Padding(
        padding: EdgeInsets.symmetric(vertical: 20, horizontal: 30),
        child: ListView(
          children: [
            Container(
              margin: EdgeInsets.symmetric(vertical: 10.0),

```



```

child: TextFormField(
  autofocus: false,
  decoration: InputDecoration(
    labelText: 'Email: ',
    labelStyle: TextStyle(fontSize: 20.0),
    border: OutlineInputBorder(),
    errorStyle:
      TextStyle(color: Colors.redAccent, fontSize: 15),
  ),
  controller: emailController,
  validator: (value) {
    if (value == null || value.isEmpty) {
      return 'Please Enter Email';
    } else if (!value.contains('@')) {
      return 'Please Enter Valid Email';
    }
    return null;
  },
),
),
Container(
  margin: EdgeInsets.symmetric(vertical: 10.0),
  child: TextFormField(
    autofocus: false,
    obscureText: true,
    decoration: InputDecoration(
      labelText: 'Password: ',
      labelStyle: TextStyle(fontSize: 20.0),
      border: OutlineInputBorder(),
      errorStyle:
        TextStyle(color: Colors.redAccent, fontSize: 15),
    ),
    controller: passwordController,
    validator: (value) {
      if (value == null || value.isEmpty) {
        return 'Please Enter Password';
      }
      return null;
    },
  ),
),
Container(
  margin: EdgeInsets.only(left: 60.0),
  child: Row(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      ElevatedButton(
        onPressed: () {

```

```

// Validate returns true if the form is valid, otherwise false.
if (_formKey.currentState!.validate()) {
  setState(() {
    email = emailController.text;
    password = passwordController.text;
  });
  userLogin();
}
},
child: Text(
  'Login',
  style: TextStyle(fontSize: 18.0),
),
),
TextButton(
  onPressed: () => {
  },
  child: Text(
    'Forgot Password ?',
    style: TextStyle(fontSize: 14.0),
  ),
),
],
),
),
Container(
  child: Row(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      Text("Don't have an Account? "),
      TextButton(
        onPressed: () => {
          Navigator.pushAndRemoveUntil(
            context,
            PageRouteBuilder(
              pageBuilder: (context, a, b) => Signup(),
              transitionDuration: Duration(seconds: 0),
            ),
            (route) => false)
        },
        child: Text('Signup'),
      ),
    ],
  ),
),
],

```

```

    ),
  ),
),
);
}
}

```

SignUp.dart

```

import 'package:firebase_auth/firebase_auth.dart';
import 'package:flutter/material.dart';
import 'package:lab10/Login.dart';

class Signup extends StatefulWidget {
  Signup({Key? key}) : super(key: key);

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

class _SignupState extends State<Signup> {
  final _formKey = GlobalKey<FormState>();

  var email = "";
  var password = "";
  var confirmPassword = "";
  // Create a text controller and use it to retrieve the current value
  // of the TextField.
  final emailController = TextEditingController();
  final passwordController = TextEditingController();
  final confirmPasswordController = TextEditingController();

  @override
  void dispose() {
    // Clean up the controller when the widget is disposed.
    emailController.dispose();
    passwordController.dispose();
    confirmPasswordController.dispose();
    super.dispose();
  }

  registration() async {
    if (password == confirmPassword) {
      try {
        UserCredential userCredential = await FirebaseAuth.instance
          .createUserWithEmailAndPassword(email: email, password: password);
        print(userCredential);
        ScaffoldMessenger.of(context).showSnackBar(

```

```

SnackBar(
  backgroundColor: Colors.redAccent,
  content: Text(
    "Registered Successfully. Please Login..",
    style: TextStyle(fontSize: 20.0),
  ),
),
);
Navigator.pushReplacement(
  context,
  MaterialPageRoute(
    builder: (context) => Login(),
  ),
);
} on FirebaseAuthException catch (e) {
  if (e.code == 'weak-password') {
    print("Password Provided is too Weak");
    ScaffoldMessenger.of(context).showSnackBar(
      SnackBar(
        backgroundColor: Colors.orangeAccent,
        content: Text(
          "Password Provided is too Weak",
          style: TextStyle(fontSize: 18.0, color: Colors.black),
        ),
      ),
    );
  } else if (e.code == 'email-already-in-use') {
    print("Account Already exists");
    ScaffoldMessenger.of(context).showSnackBar(
      SnackBar(
        backgroundColor: Colors.orangeAccent,
        content: Text(
          "Account Already exists",
          style: TextStyle(fontSize: 18.0, color: Colors.black),
        ),
      ),
    );
  }
} else {
  print("Password and Confirm Password doesn't match");
  ScaffoldMessenger.of(context).showSnackBar(
    SnackBar(
      backgroundColor: Colors.orangeAccent,
      content: Text(
        "Password and Confirm Password doesn't match",
        style: TextStyle(fontSize: 16.0, color: Colors.black),
      ),
    ),
  );
}

```

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

@override

```
Widget build(BuildContext context) {  
  return Scaffold(  
    appBar: AppBar(  
      title: Text("User SignUp"),  
    ),  
    body: Form(  
      key: _formKey,  
      child: Padding(  
        padding: EdgeInsets.symmetric(vertical: 20, horizontal: 30),  
        child: ListView(  
          children: [  
            Container(  
              margin: EdgeInsets.symmetric(vertical: 10.0),  
              child: TextFormField(  
                autofocus: false,  
                decoration: InputDecoration(  
                  labelText: 'Email: ',  
                  labelStyle: TextStyle(fontSize: 20.0),  
                  border: OutlineInputBorder(),  
                  errorStyle:  
                    TextStyle(color: Colors.redAccent, fontSize: 15),  
                ),  
                controller: emailController,  
                validator: (value) {  
                  if (value == null || value.isEmpty) {  
                    return 'Please Enter Email';  
                  } else if (!value.contains('@')) {  
                    return 'Please Enter Valid Email';  
                  }  
                  return null;  
                },  
              ),  
            ),  
            Container(  
              margin: EdgeInsets.symmetric(vertical: 10.0),  
              child: TextFormField(  
                autofocus: false,  
                obscureText: true,  
                decoration: InputDecoration(  
                  labelText: 'Password: ',  
                  labelStyle: TextStyle(fontSize: 20.0),  
                  border: OutlineInputBorder(),
```

```

        errorStyle:
        TextStyle(color: Colors.redAccent, fontSize: 15),
    ),
    controller: passwordController,
    validator: (value) {
        if (value == null || value.isEmpty) {
            return 'Please Enter Password';
        }
        return null;
    },
),
),
Container(
    margin: EdgeInsets.symmetric(vertical: 10.0),
    child: TextFormField(
        autofocus: false,
        obscureText: true,
        decoration: InputDecoration(
            labelText: 'Confirm Password: ',
            labelStyle: TextStyle(fontSize: 20.0),
            border: OutlineInputBorder(),
            errorStyle:
            TextStyle(color: Colors.redAccent, fontSize: 15),
        ),
        controller: confirmPasswordController,
        validator: (value) {
            if (value == null || value.isEmpty) {
                return 'Please Enter Password';
            }
            return null;
        },
    ),
),
Container(
    child: Row(
        mainAxisAlignment: MainAxisAlignment.center,
        children: [
            ElevatedButton(
                onPressed: () {
                    // Validate returns true if the form is valid, otherwise false.
                    if (_formKey.currentState!.validate()) {
                        setState(() {
                            email = emailController.text;
                            password = passwordController.text;
                            confirmPassword = confirmPasswordController.text;
                        });
                        registration();
                    }
                }
            )
        ]
    )
)

```

```

    },
    child: Text(
      'Sign Up',
      style: TextStyle(fontSize: 18.0),
    ),
  ),
],
),
),
Container(
  child: Row(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      Text("Already have an Account? "),
      TextButton(
        onPressed: () => {
          Navigator.pushReplacement(
            context,
            MaterialPageRoute(
              pageBuilder:
                (context, animation1, animation2) =>
                  Login(),
              transitionDuration: Duration(seconds: 0),
            ),
          )
        },
        child: Text('Login'))
    ],
  ),
)
],
),
),
);
}
}

```

Dashboard.dart

```

import 'package:flutter/material.dart';

class Dashboard extends StatelessWidget {
  const Dashboard({Key? key}) : super(key: key);

  @override
  Widget build(BuildContext context) {
    // Material App
  }
}

```

```

return MaterialApp(
  home: Scaffold(
    appBar: AppBar(
      title: Text("CMR INSTITUTE OF TECHNOLOGY"),
      centerTitle: true,
      backgroundColor: Colors.deepOrange,
    ),
    body: Center(
      child: Image(
        image: NetworkImage('https://i0.wp.com/cmrihyderabad.edu.in/wp-content/uploads/2021/09/cropped-
CMR-IT-logo-1.webp?w=731&ssl=1'),
      ),
    )
  ));
}
}

```

LAB-9

main.dart
SignUp.dart
Login.dart
Dashboard.dart

For Above four files Refer: **Lab-10**

ForgotPassword.dart

```

import 'package:firebase_auth/firebase_auth.dart';
import 'package:flutter/material.dart';
import 'package:lab9/login.dart';
import 'package:lab9/signup.dart';

class ForgotPassword extends StatefulWidget {
  ForgotPassword({Key? key}) : super(key: key);
  @override
  _ForgotPasswordState createState() => _ForgotPasswordState();
}

class _ForgotPasswordState extends State<ForgotPassword> {
  final _formKey = GlobalKey<FormState>();
  var email = "";
  final emailController = TextEditingController();
  @override
  void dispose() {
    // Clean up the controller when the widget is disposed.
    emailController.dispose();
    super.dispose();
  }
  resetPassword() async {
    try {
      await FirebaseAuth.instance.sendPasswordResetEmail(email: email);

```



```

        errorStyle:
        TextStyle(color: Colors.redAccent, fontSize: 15),
    ),
    controller: emailController,
    validator: (value) {
      if (value == null || value.isEmpty) {
        return 'Please Enter Email';
      } else if (!value.contains('@')) {
        return 'Please Enter Valid Email';
      }
      return null;
    },
  ),
Container(
  margin: EdgeInsets.only(left: 60.0),
  child: Row(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      ElevatedButton(
        onPressed: () {
          // Validate returns true if the form is valid, otherwise false.
          if (_formKey.currentState!.validate()) {
            setState(() {
              email = emailController.text;
            });
            resetPassword();
          }
        },
        child: Text(
          'Send Email',
          style: TextStyle(fontSize: 18.0),
        ),
      ),
      TextButton(
        onPressed: () => {
          Navigator.pushAndRemoveUntil(
            context,
            PageRouteBuilder(
              pageBuilder: (context, a, b) => Login(),
              transitionDuration: Duration(seconds: 0),
            ),
            (route) => false)
        },
        child: Text(
          'Login',
          style: TextStyle(fontSize: 14.0),
        ),
      ),
    ],
  ),
Container(
  child: Row(

```

```

mainAxisAlignment: MainAxisAlignment.center,
children: [
  Text("Don't have an Account? "),
  TextButton(
    onPressed: () => {
      Navigator.pushAndRemoveUntil(
        context,
        PageRouteBuilder(
          pageBuilder: (context, a, b) =>
            Signup(),
          transitionDuration:
            Duration(seconds: 0),
        ),
        (route) => false)
    },
    child: Text('Signup'))
], ), )
], ), ), ), ), ), ), ); } }

```

ChangePassword.dart

```

import 'package:firebase_auth/firebase_auth.dart';
import 'package:flutter/material.dart';
import 'package:lab9/login.dart';

class ChangePassword extends StatefulWidget {
  ChangePassword({ Key? key }) : super(key: key);
  @override
  _ChangePasswordState createState() => _ChangePasswordState();
}

class _ChangePasswordState extends State<ChangePassword> {
  final _formKey = GlobalKey<FormState>();
  var newPassword = "";
  final newPasswordController = TextEditingController();
  @override
  void dispose() {
    // Clean up the controller when the widget is disposed.
    newPasswordController.dispose();
    super.dispose();
  }
  final currentUser = FirebaseAuth.instance.currentUser;
  changePassword() async {
    try {
      await currentUser!.updatePassword(newPassword);
      FirebaseAuth.instance.signOut();
      Navigator.pushReplacement(
        context,
        MaterialPageRoute(builder: (context) => Login()),
      );
      ScaffoldMessenger.of(context).showSnackBar(

```

```

SnackBar(
  backgroundColor: Colors.orangeAccent,
  content: Text(
    'Your Password has been Changed. Login again !',
    style: TextStyle(fontSize: 18.0),
  ),
);
}

catch (e) {
  }
}

@override
Widget build(BuildContext context) {
  return Form(
    key: _formKey,
    child: Padding(
      padding: EdgeInsets.symmetric(vertical: 20, horizontal: 30),
      child: ListView(
        children: [
          Container(
            margin: EdgeInsets.symmetric(vertical: 10.0),
            child: TextFormField(
              autofocus: false,
              obscureText: true,
              decoration: InputDecoration(
                labelText: 'New Password: ',
                hintText: 'Enter New Password',
                labelStyle: TextStyle(fontSize: 20.0),
                border: OutlineInputBorder(),
                errorStyle: TextStyle(color: Colors.redAccent, fontSize: 15),
              ),
            controller: newPasswordController,
            validator: (value) {
              if (value == null || value.isEmpty) {
                return 'Please Enter Password';
              }
              return null;
            },
          ),
          ElevatedButton(
            onPressed: () {
              if (_formKey.currentState!.validate()) {
                setState(() {
                  newPassword = newPasswordController.text;
                });
                changePassword();
              }
            },
            child: Text(
              'Change Password',
              style: TextStyle(fontSize: 18.0),
            ),
          ),
        ],
      ),
    ),
  );
}

```