

## Link to Repository:

<https://github.com/SLIIT-FacultyOfComputing/lab-protfolio-Dilanka-Nirmal.git>

## UI Screenshots:

## Code Snippets:

### Signup\_screen.dart

```
// ignore_for_file: library_private_types_in_public_api,
use_build_context_synchronously

import 'package:firebase_auth/firebase_auth.dart';
import 'package:firebase_database/firebase_database.dart';
import 'package:flutter/material.dart';
import 'package:fluttertoast/fluttertoast.dart';
import 'package:ndialog/ndialog.dart';

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

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

class _SignUpScreenState extends State<SignUpScreen> {
  var fullNameController = TextEditingController();
  var emailController = TextEditingController();
  var passwordController = TextEditingController();
  var confirmController = TextEditingController();

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: const Text('Sign Up Please'),
      ),
      body: Padding(
        padding: const EdgeInsets.all(8.0),
        child: Column(
          children: [
```

```

TextField(
  controller: fullNameController,
  decoration: const InputDecoration(
    hintText: 'Enter the fullname',
  ),
),
const SizedBox(
  height: 10,
),
TextField(
  controller: emailController,
  decoration: const InputDecoration(
    hintText: 'Enter the email',
  ),
),
const SizedBox(
  height: 10,
),
TextField(
  controller: passwordController,
  obscureText: true,
  decoration: const InputDecoration(
    hintText: 'Enter the password',
  ),
),
const SizedBox(
  height: 10,
),
TextField(
  controller: confirmController,
  obscureText: true,
  decoration: const InputDecoration(
    hintText: 'Confirm the password',
  ),
),
const SizedBox(
  height: 10,
),
ElevatedButton(
  onPressed: () async {
    var fullName = fullNameController.text.trim();
    var email = emailController.text.trim();
    var password = passwordController.text.trim();
  }
)

```

```

var confirmPass = confirmPasswordController.text.trim();

if (fullName.isEmpty ||
    email.isEmpty ||
    password.isEmpty ||
    confirmPass.isEmpty) {
  // show error toast

  Fluttertoast.showToast(msg: 'Please fill all fields');
  return;
}

if (password.length < 6) {
  // show error toast
  Fluttertoast.showToast(
    msg:
      'Weak password, at least 6 characters are required');

  return;
}

if (password != confirmPass) {
  // show error toast
  Fluttertoast.showToast(msg: 'Passwords do not match');

  return;
}

// request to firebase auth

ProgressDialog progressDialog = ProgressDialog(
  context,
  title: const Text('Signing up'),
  message: const Text('Please wait'),
);

progressDialog.show();
try {
  FirebaseAuth auth = FirebaseAuth.instance;

  UserCredential userCredential =
    await auth.createUserWithEmailAndPassword(
      email: email, password: password);

```

```

    if (userCredential.user != null) {
      // store user information in Realtime database

      DatabaseReference userRef =
        FirebaseDatabase.instance.ref().child('users');

      String uid = userCredential.user!.uid;
      int dt = DateTime.now().millisecondsSinceEpoch;

      await userRef.child(uid).set({
        'fullName': fullName,
        'email': email,
        'uid': uid,
        'dt': dt,
      });

      Fluttertoast.showToast(msg: 'Success');

      Navigator.of(context).pop();
    } else {
      Fluttertoast.showToast(msg: 'Failed');
    }

    progressDialog.dismiss();
  } on FirebaseAuthException catch (e) {
    progressDialog.dismiss();
    if (e.code == 'email-already-in-use') {
      Fluttertoast.showToast(msg: 'Email is already in Use');
    } else if (e.code == 'weak-password') {
      Fluttertoast.showToast(msg: 'Password is weak');
    }
  } catch (e) {
    progressDialog.dismiss();
    Fluttertoast.showToast(msg: 'Something went wrong');
  }
},
    child: const Text('Sign Up')),
const SizedBox(
  height: 10,
),
],
),

```

```

    ),
  );
}
}

```

## Login\_screen.dart

```

// ignore_for_file: library_private_types_in_public_api,
use_build_context_synchronously

import 'package:firebase_auth/firebase_auth.dart';
import 'package:flutter/material.dart';
import 'package:fluttertoast/fluttertoast.dart';
import 'package:ndialog/ndialog.dart';
import 'package:in_lab_test_01/screens/signup_screen.dart';
import 'package:in_lab_test_01/screens/recipe_list_screen.dart';

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

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

class _LoginScreenState extends State<LoginScreen> {
  var emailController = TextEditingController();
  var passwordController = TextEditingController();

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: const Text('Login Please'),
      ),
      body: Padding(
        padding: const EdgeInsets.all(8.0),
        child: Column(
          children: [
            TextField(
              controller: emailController,
              decoration: const InputDecoration(
                hintText: 'Email',
              ),
            ),

```

```

    ),
    const SizedBox(
      height: 10,
    ),
    TextField(
      controller: passwordController,
      obscureText: true,
      decoration: const InputDecoration(
        hintText: 'Password',
      ),
    ),
  ),
  const SizedBox(
    height: 10,
  ),
  ElevatedButton(
    onPressed: () async {
      var email = emailController.text.trim();
      var password = passwordController.text.trim();
      if (email.isEmpty || password.isEmpty) {
        // show error toast
        Fluttertoast.showToast(msg: 'Please fill all the fields');
        return;
      }

      // request to firebase auth

      ProgressDialog progressDialog = ProgressDialog(
        context,
        title: const Text('Logging in'),
        message: const Text('Please wait'),
      );

      progressDialog.show();

      try {
        FirebaseAuth auth = FirebaseAuth.instance;

        UserCredential userCredential =
          await auth.signInWithEmailAndPassword(
            email: email, password: password);

        if (userCredential.user != null) {
          progressDialog.dismiss();
        }
      }
    },
  ),

```

```

        Navigator.of(context).pushReplacement(
          MaterialPageRoute(builder: (context) {
            return const RecipeListScreen();
          }));
      }
    } on FirebaseAuthException catch (e) {
      progressDialog.dismiss();

      if (e.code == 'user-not-found') {
        Fluttertoast.showToast(msg: 'User not found');
      } else if (e.code == 'wrong-password') {
        Fluttertoast.showToast(msg: 'Wrong password');
      }
    } catch (e) {
      Fluttertoast.showToast(msg: 'Something went wrong');
      progressDialog.dismiss();
    }
  },
  child: const Text('Login')),
const SizedBox(
  height: 10,
),
Row(
  mainAxisAlignment: MainAxisAlignment.center,
  children: [
    const Text('Not Registered Yet'),
    TextButton(
      onPressed: () {
        Navigator.of(context)
          .push(MaterialPageRoute(builder: (context) {
            return const SignUpScreen();
          }));
      },
      child: const Text('Register now')),
  ],
),
],
),
),
);
}
}

```

## Recipe\_list\_screen.dart

```
// ignore_for_file: library_private_types_in_public_api,
use_build_context_synchronously

import 'package:firebase_auth/firebase_auth.dart';
import 'package:flutter/material.dart';
import 'package:fluttertoast/fluttertoast.dart';
import 'package:ndialog/ndialog.dart';
import 'package:in_lab_test_01/screens/signup_screen.dart';
import 'package:in_lab_test_01/screens/recipe_list_screen.dart';

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

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

class _LoginScreenState extends State<LoginScreen> {
  var emailController = TextEditingController();
  var passwordController = TextEditingController();

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: const Text('Login Please'),
      ),
      body: Padding(
        padding: const EdgeInsets.all(8.0),
        child: Column(
          children: [
            TextField(
              controller: emailController,
              decoration: const InputDecoration(
                hintText: 'Email',
              ),
            ),
            const SizedBox(
```



```

        height: 10,
      ),
      TextField(
        controller: passwordController,
        obscureText: true,
        decoration: const InputDecoration(
          hintText: 'Password',
        ),
      ),
    ),
    const SizedBox(
      height: 10,
    ),
    ElevatedButton(
      onPressed: () async {
        var email = emailController.text.trim();
        var password = passwordController.text.trim();
        if (email.isEmpty || password.isEmpty) {
          // show error toast
          Fluttertoast.showToast(msg: 'Please fill all the fields');
          return;
        }

        // request to firebase auth

        ProgressDialog progressDialog = ProgressDialog(
          context,
          title: const Text('Logging in'),
          message: const Text('Please wait'),
        );

        progressDialog.show();

        try {
          FirebaseAuth auth = FirebaseAuth.instance;

          UserCredential userCredential =
            await auth.signInWithEmailAndPassword(
              email: email, password: password);

          if (userCredential.user != null) {
            progressDialog.dismiss();
            Navigator.of(context).pushReplacement(
              MaterialPageRoute(builder: (context) {

```

```

        return const RecipeListScreen();
      }));
    }
  } on FirebaseAuthException catch (e) {
    progressDialog.dismiss();

    if (e.code == 'user-not-found') {
      Fluttern.toast.show(msg: 'User not found');
    } else if (e.code == 'wrong-password') {
      Fluttern.toast.show(msg: 'Wrong password');
    }
  } catch (e) {
    Fluttern.toast.show(msg: 'Something went wrong');
    progressDialog.dismiss();
  }
},
child: const Text('Login')),
const SizedBox(
  height: 10,
),
Row(
  mainAxisAlignment: MainAxisAlignment.center,
  children: [
    const Text('Not Registered Yet'),
    TextButton(
      onPressed: () {
        Navigator.of(context)
          .push(MaterialPageRoute(builder: (context) {
            return const SignUpScreen();
          }));
      },
      child: const Text('Register now')),
  ],
),
],
),
),
);
}
}

```

## Add\_recipe\_screen.dart

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

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

  @override
  State<AddRecipeScreen> createState() => _AddRecipeScreenState();
}

class _AddRecipeScreenState extends State<AddRecipeScreen> {
  var taskController = TextEditingController();

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: const Text('Add Recipe'),
      ),
      body: Padding(
        padding: const EdgeInsets.all(8.0),
        child: Column(
          children: [
            TextField(
              controller: taskController,
              decoration: const InputDecoration(hintText: 'Recipe Name'),
            ),
            const SizedBox(
              height: 10,
            ),
            ElevatedButton(
              onPressed: () async {
                String title = taskController.text.trim();
                String description = taskController.text.trim();
                String ingredients = taskController.text.trim();
```

```

        if (title.isEmpty) {
            Fluttertoast.showToast(msg: 'Please provide recipe name');
            return;
        } else if (description.isEmpty) {
            Fluttertoast.showToast(msg: 'Please provide description');
            return;
        } else if (ingredients.isEmpty) {
            Fluttertoast.showToast(msg: 'Please provide ingredients');
            return;
        }

        User? user = FirebaseAuth.instance.currentUser;

        if (user != null) {
            String uid = user.uid;
            int dt = DateTime.now().millisecondsSinceEpoch;

            DatabaseReference taskRef = FirebaseDatabase.instance
                .ref()
                .child('recipe')
                .child(uid);

            String? recipeId = taskRef.push().key;

            await taskRef.child(recipeId!).set({
                'dt': dt,
                'title': title,
                'description': description,
                'ingredients': ingredients,
                'recipeId': recipeId,
            });
        }
    },
    child: const Text('Save')),
],
),
),
);
}
}

```

## Update\_recipe\_screen.dart

```
// ignore_for_file: library_private_types_in_public_api

import 'package:firebase_auth/firebase_auth.dart';
import 'package:firebase_database/firebase_database.dart';
import 'package:flutter/material.dart';
import 'package:fluttertoast/fluttertoast.dart';
import 'package:in_lab_test_01/models/recipe_model.dart';

class UpdateRecipeScreen extends StatefulWidget {
  final RecipeModel task;

  const UpdateRecipeScreen({Key? key, required this.task}) : super(key: key);

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

class _UpdateRecipeScreenState extends State<UpdateRecipeScreen> {
  var nameController = TextEditingController();

  @override
  void initState() {
    super.initState();
    nameController.text = widget.task.title;
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: const Text('Update Recipe'),
      ),
      body: Padding(
        padding: const EdgeInsets.all(8.0),
        child: Column(
          children: [
            TextField(
```

```

        controller: nameController,
        decoration: const InputDecoration(hintText: 'Recipe title'),
      ),
      const SizedBox(
        height: 10,
      ),
      ElevatedButton(
        onPressed: () async {
          var title = nameController.text.trim();
          if (title.isEmpty) {
            Fluttertoast.showToast(msg: 'Please provide recipe name');
            return;
          }

          User? user = FirebaseAuth.instance.currentUser;

          if (user != null) {
            DatabaseReference taskRef = FirebaseDatabase.instance
              .ref()
              .child('tasks')
              .child(user.uid)
              .child(widget.task.recipeId);

            await taskRef.update({
              'title': title,
            });
          }
        },
        child: const Text('Update')),
    ],
  ),
);
}
}

```

Main.dart

```

import 'package:flutter/material.dart';
import 'package:firebase_core/firebase_core.dart';
import 'package:firebase_auth/firebase_auth.dart';
import 'package:in_lab_test_01/screens/login_screen.dart';

```

```

import 'package:in_lab_test_01/screens/recipe_list_screen.dart';

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

  runApp(const MyApp());
}

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

  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Food Recipe App',
      theme: ThemeData(
        primarySwatch: Colors.blue,
      ),
      home: FirebaseAuth.instance.currentUser == null
        ? const LoginScreen()
        : const RecipeListScreen(),
    );
  }
}

```

### Generated\_plugin\_registrant.dart

```

//
// Generated file. Do not edit.
//

// ignore_for_file: directives_ordering
// ignore_for_file: lines_longer_than_80_chars
// ignore_for_file: depend_on_referenced_packages

import 'package:firebase_auth_web/firebase_auth_web.dart';
import 'package:firebase_core_web/firebase_core_web.dart';
import 'package:firebase_database_web/firebase_database_web.dart';
import 'package:fluttertoast/fluttertoast_web.dart';

```

```
import 'package:flutter_web_plugins/flutter_web_plugins.dart';

// ignore: public_member_api_docs
void registerPlugins(Registrar registrar) {
  FirebaseAuthWeb.registerWith(registrar);
  FirebaseCoreWeb.registerWith(registrar);
  FirebaseDatabaseWeb.registerWith(registrar);
  FluttertoastWebPlugin.registerWith(registrar);
  registrar.registerMessageHandler();
}
```