## Department of Information Technology

**Academic Year: 2024-25** **Name of Student: Sahil Ghag**
**Semester: VI** **Student ID:22104057**
**Class / Branch / Div: TE- IT A** **Roll No.37**
**Subject: MAD & PWA Lab** **Date of Submission:3/04/25**
**Name of Instructor: Prof.Saylee Lipalikar**

# Experiment No.:7

**Aim:** **To** Implement fireBase connectivity to connect with Flutter UI

**Prerequisites:** Android studio, flutter SDK.

**Software:** Android studio, flutter SDK.

**Problem Statement:** Implement firebase connectivity for Email-Password authentication.

**Code:**

1. **Main.dart**

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

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

class MyApp extends StatelessWidget {
  const MyApp({super.key});

  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Demo',
      theme: ThemeData(
        // This is the theme of your application.
        //
        // TRY THIS: Try running your application with "flutter run". You'll see
        // the application has a purple toolbar. Then, without quitting the app,
```

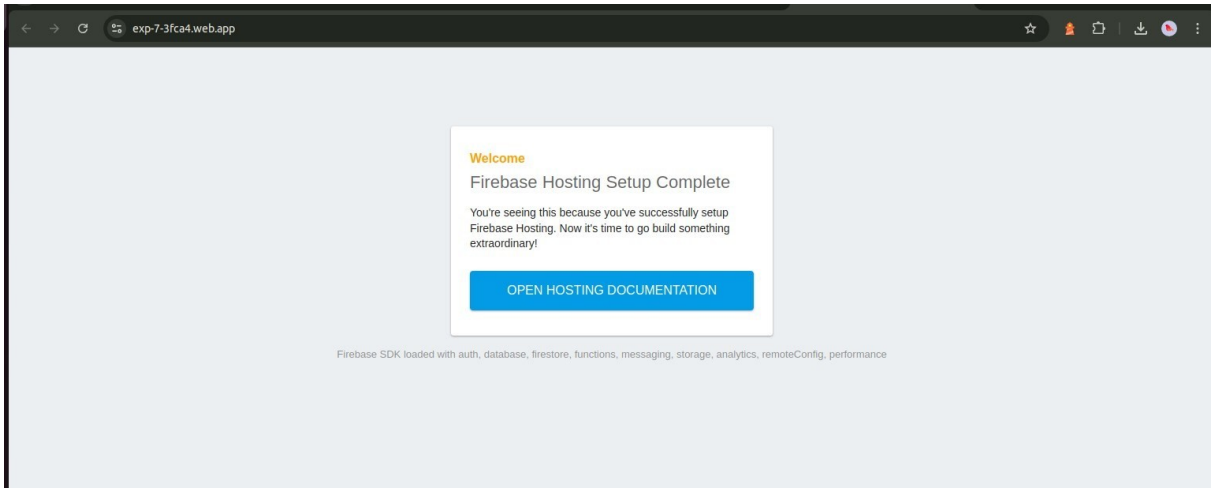
```
        // try changing the seedColor in the colorScheme below to Colors.green
        // and then invoke "hot reload" (save your changes or press the "hot
        // reload" button in a Flutter-supported IDE, or press "r" if you used
        // the command line to start the app).
        //
        // Notice that the counter didn't reset back to zero; the application
        // state is not lost during the reload. To reset the state, use hot
        // restart instead.
        //
        // This works for code too, not just values: Most code changes can be
        // tested with just a hot reload.
        colorScheme: ColorScheme.fromSeed(seedColor: Colors.deepPurple),
        useMaterial3: true,
      ),
      home: const MyHomePage(title: 'Flutter Demo Home Page'),
    );
  }
}

class MyHomePage extends StatefulWidget {
  const MyHomePage({super.key, required this.title});

  // This widget is the home page of your application. It is stateful, meaning
  // that it has a State object (defined below) that contains fields that affect
  // how it looks.

  // This class is the configuration for the state. It holds the values (in this
  // case the title) provided by the parent (in this case the App widget) and
  // used by the build method of the State. Fields in a Widget subclass are
  // always marked "final".

  final String title;

  @override
  State<MyHomePage> createState() => _MyHomePageState();
}
```

```
class _MyHomePageState extends State<MyHomePage> {
 int _counter = 0;

 void _incrementCounter() {
  setState(() {
   // This call to setState tells the Flutter framework that something has
   // changed in this State, which causes it to rerun the build method below
   // so that the display can reflect the updated values. If we changed
   // _counter without calling setState(), then the build method would not be
   // called again, and so nothing would appear to happen.
   _counter++;
  });
 }

 @override
 Widget build(BuildContext context) {
  // This method is rerun every time setState is called, for instance as done
  // by the _incrementCounter method above.
  //
  // The Flutter framework has been optimized to make rerunning build methods
  // fast, so that you can just rebuild anything that needs updating rather
  // than having to individually change instances of widgets.
  return Scaffold(
   appBar: AppBar(
    // TRY THIS: Try changing the color here to a specific color (to
    // Colors.amber, perhaps?) and trigger a hot reload to see the AppBar
    // change color while the other colors stay the same.
    backgroundColor: Theme.of(context).colorScheme.inversePrimary,
    // Here we take the value from the MyHomePage object that was created by
    // the App.build method, and use it to set our appbar title.
    title: Text(widget.title),
   ),
   body: Center(
    // Center is a layout widget. It takes a single child and positions it
    // in the middle of the parent.
```

```
        child: Column(
          // Column is also a layout widget. It takes a list of children and
          // arranges them vertically. By default, it sizes itself to fit its
          // children horizontally, and tries to be as tall as its parent.
          //
          // Column has various properties to control how it sizes itself and
          // how it positions its children. Here we use mainAxisAlignment to
          // center the children vertically; the main axis here is the vertical
          // axis because Columns are vertical (the cross axis would be
          // horizontal).
          //
          // TRY THIS: Invoke "debug painting" (choose the "Toggle Debug Paint"
          // action in the IDE, or press "p" in the console), to see the
          // wireframe for each widget.
          mainAxisAlignment: MainAxisAlignment.center,
          children: <Widget>[
            const Text(
              'You have pushed the button this many times:',
            ),
            Text(
              '$_counter',
              style: Theme.of(context).textTheme.headlineMedium,
            ),
          ],
        ),
      ),
      floatingActionButton: FloatingActionButton(
        onPressed: _incrementCounter,
        tooltip: 'Increment',
        child: const Icon(Icons.add),
      ), // This trailing comma makes auto-formatting nicer for build methods.
    );
  }
}
```

**2.**

**Output:**




**Conclusion:** In this experiment we have Implemented fireBase connectivity to connect with Flutter UI