EXPERIMENT NO:- 6

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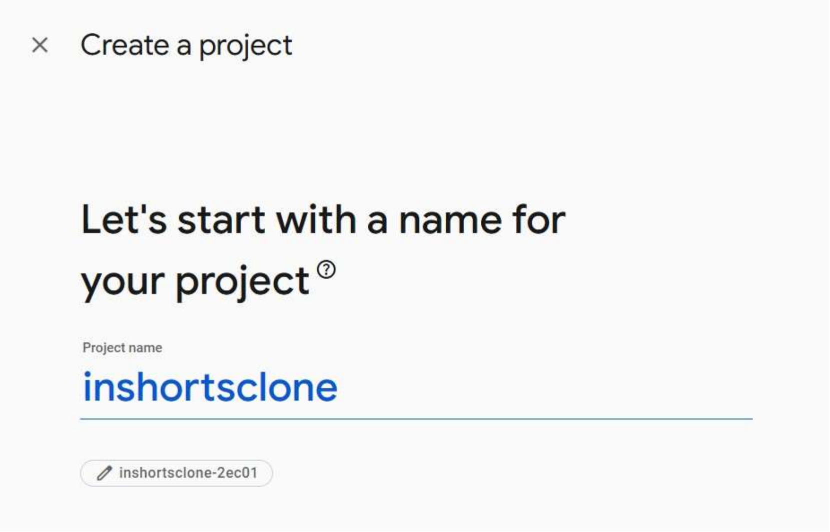
Aim:- To Connect flutter UI with firebase database

- -

Creating a New Firebase Project

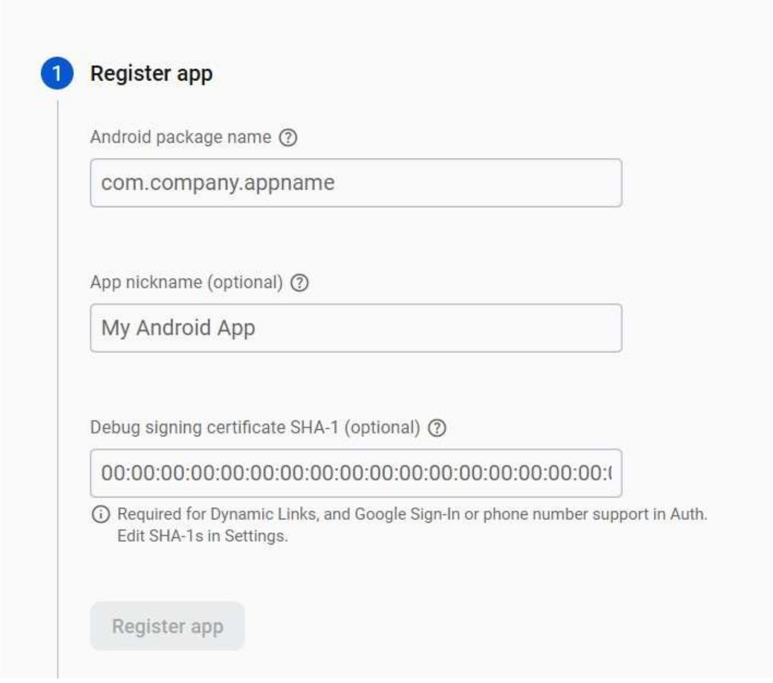


inshortsclone

inshortsclone-2ec01

First, log in with your Google account to manage your Firebase projects. From within the Firebase dashboard, select the Create new project button and give it a name

In order to add Android support to our Flutter application, select the Android logo from the dashboard. This brings us to the following screen:



1 Register app

Android package name ⓘ

com.company.appname

App nickname (optional) ⓘ

My Android App

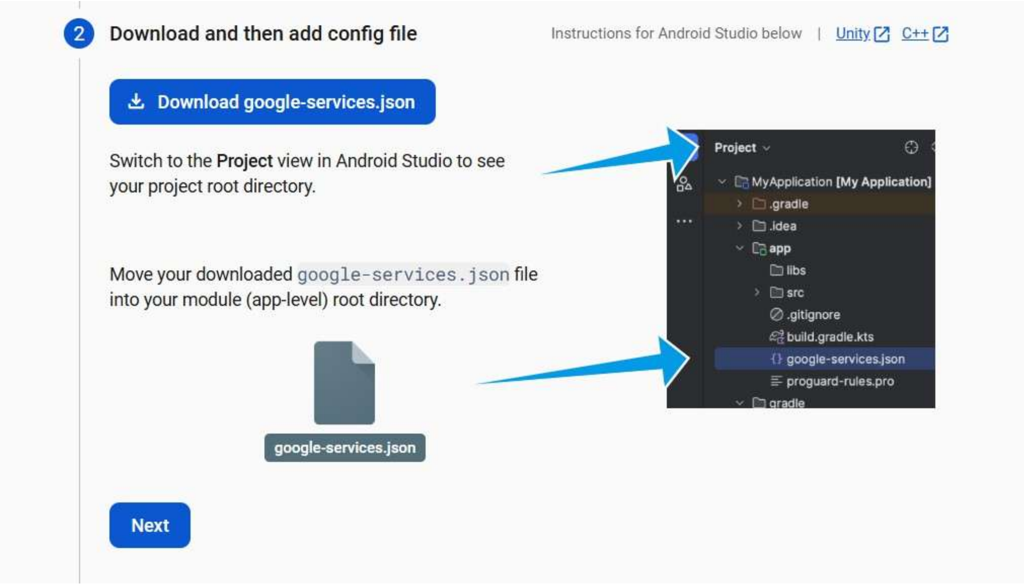
Debug signing certificate SHA-1 (optional) ⓘ

00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:(

ⓘ Required for Dynamic Links, and Google Sign-In or phone number support in Auth. Edit SHA-1s in Settings.

The most important thing here is to match up the Android package name that you choose here with the one inside of our application.

Then download the google-services.json file, that you will get.



2 Download and then add config file

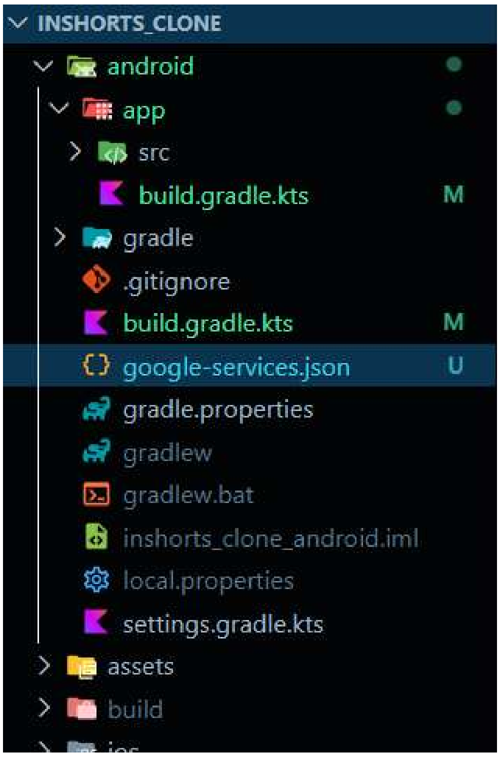
Instructions for Android Studio below | Unity C++

Download google-services.json

Switch to the **Project** view in Android Studio to see your project root directory.

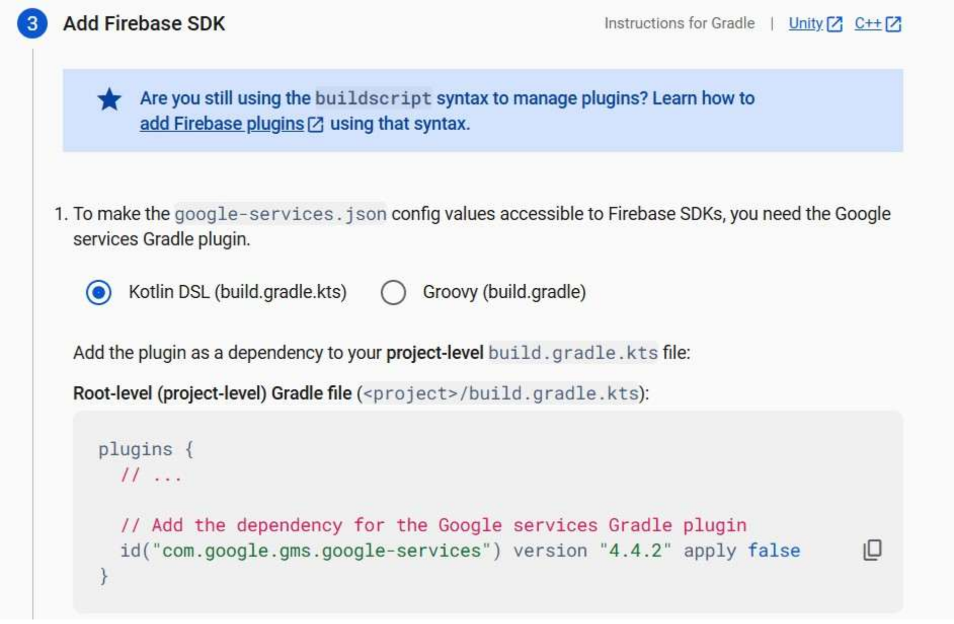
Move your downloaded `google-services.json` file into your module (app-level) root directory.

put that file in the android folder (root level)



```
INSHORTS_CLONE
  android
    app
      src
      build.gradle.kts        M
    gradle
    .gitignore
    build.gradle.kts          M
    google-services.json      U
    gradle.properties
    gradlew
    gradlew.bat
    inshorts_clone_android.iml
    local.properties
    settings.gradle.kts
  assets
  build
  ios
```

then select the build.gradle.kts (Kotlin DSL) part, and then follow the rest instructions



3 Add Firebase SDK

★ Are you still using the `buildscript` syntax to manage plugins? Learn how to add Firebase plugins using that syntax.

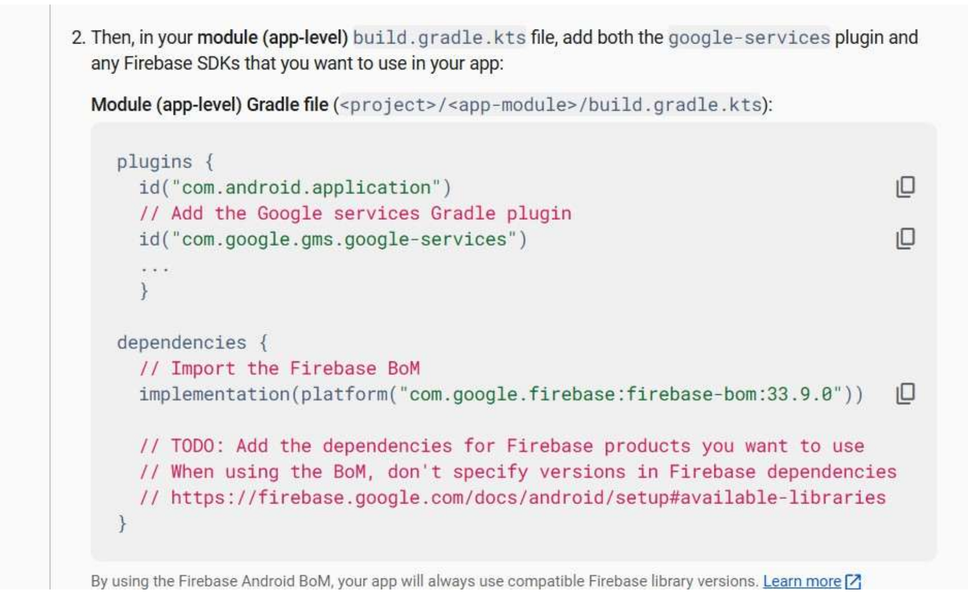
1. To make the `google-services.json` config values accessible to Firebase SDKs, you need the Google services Gradle plugin.

● Kotlin DSL (build.gradle.kts) ○ Groovy (build.gradle)

Add the plugin as a dependency to your **project-level** `build.gradle.kts` file:

Root-level (project-level) Gradle file (`<project>/build.gradle.kts`):

```
plugins {
  // ...

  // Add the dependency for the Google services Gradle plugin
  id("com.google.gms.google-services") version "4.4.2" apply false
}
```

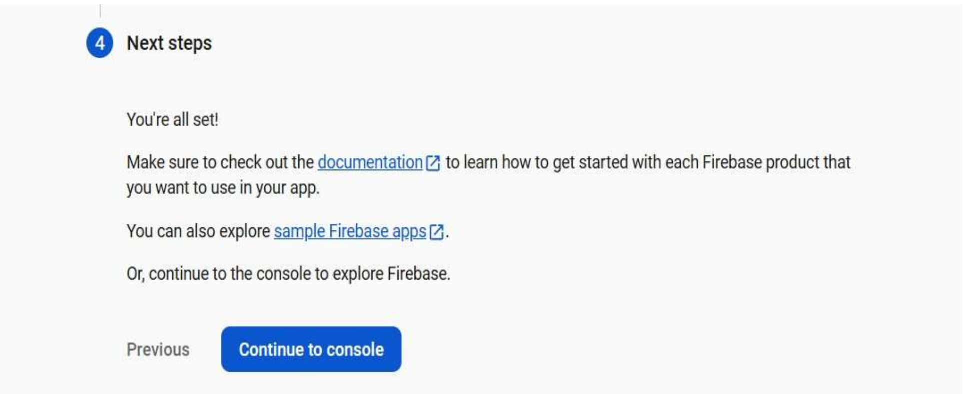


2. Then, in your **module (app-level)** `build.gradle.kts` file, add both the `google-services` plugin and any Firebase SDKs that you want to use in your app:

Module (app-level) Gradle file (`<project>/<app-module>/build.gradle.kts`):

```
plugins {
  id("com.android.application")
  // Add the Google services Gradle plugin
  id("com.google.gms.google-services")
  ...
  }

dependencies {
  // Import the Firebase BoM
  implementation(platform("com.google.firebase:firebase-bom:33.9.0"))

  // TODO: Add the dependencies for Firebase products you want to use
  // When using the BoM, don't specify versions in Firebase dependencies
  // https://firebase.google.com/docs/android/setup#available-libraries
}
```

By using the Firebase Android BoM, your app will always use compatible Firebase library versions. Learn more



4 Next steps

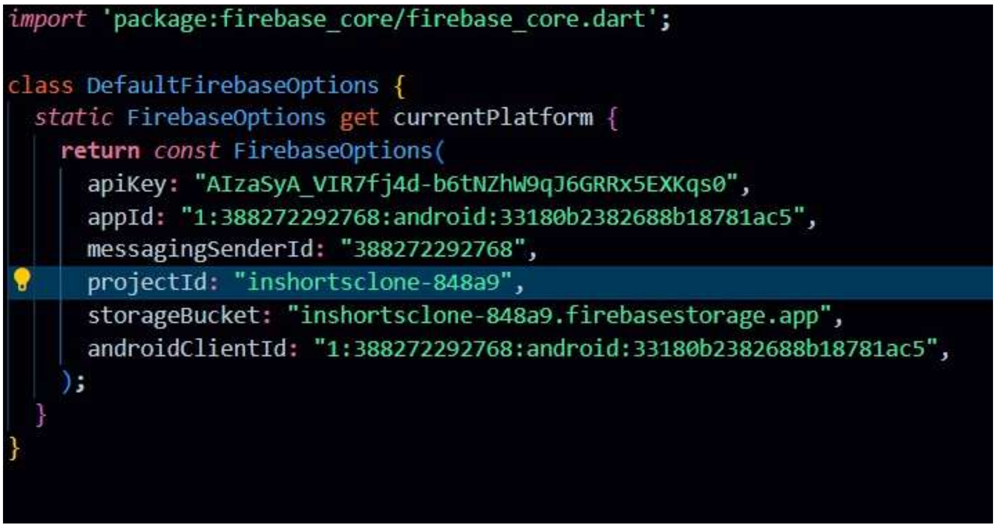
You're all set!

Make sure to check out the documentation to learn how to get started with each Firebase product that you want to use in your app.

You can also explore sample Firebase apps.

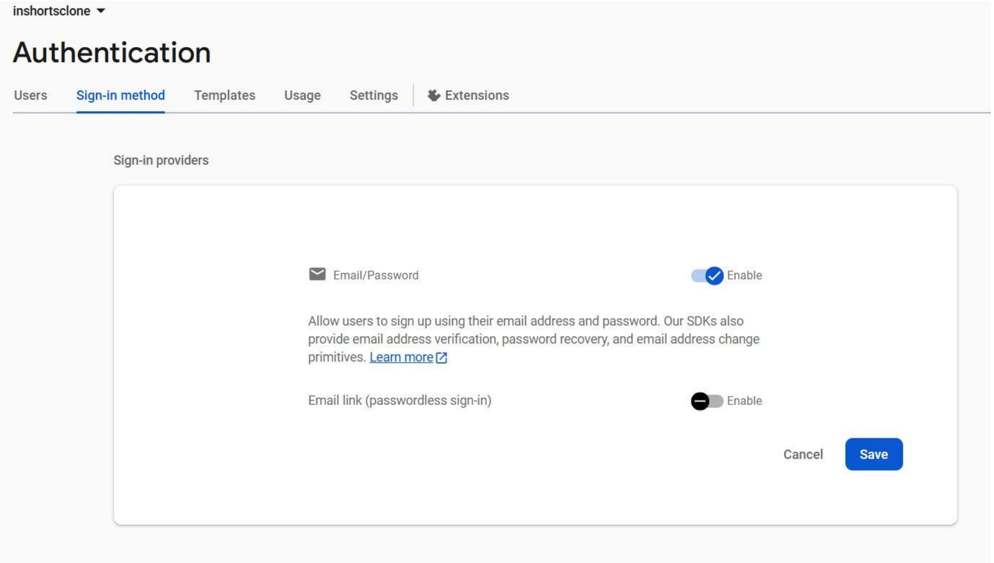
Or, continue to the console to explore Firebase.

Generate the firebase_options.dart file, based on the google-services.json file



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

class DefaultFirebaseOptions {
  static FirebaseOptions get currentPlatform {
    return const FirebaseOptions(
      apiKey: "AIzaSyA_VIR7fj4d-b6tNZhW9qJ6GRRx5EXKqs0",
      appId: "1:388272292768:android:33180b2382688b18781ac5",
      messagingSenderId: "388272292768",
      projectId: "inshortsclone-848a9",
      storageBucket: "inshortsclone-848a9.firebasestorage.app",
      androidClientId: "1:388272292768:android:33180b2382688b18781ac5",
    );
  }
}
```

In your part select the sign-in method and enable it.



Authentication

Sign-in providers

Email/Password ☑ Enable

Allow users to sign up using their email address and password. Our SDKs also provide email address verification, password recovery, and email address change primitives. Learn more

Email link (passwordless sign-in) ○ Enable

Code:-

LOGIN:

```
import 'package:flutter/material.dart';
import
'package:firebase_auth/firebase_auth.dart
';
import 'package:get/get.dart';
import 'signup.dart';
import 'forgot.dart';

class Login extends StatefulWidget {
  const Login({super.key});

  @override
  State<Login> createState() =>
_LoginState();
}

class _LoginState extends State<Login> {
  TextEditingController email =
TextEditingController();
  TextEditingController password =
TextEditingController();

  signIn() async {
    if (email.text.isEmpty ||
password.text.isEmpty) {

ScaffoldMessenger.of(context).showSnac
kBar(
        SnackBar(
          content: Text("Please fill in all
fields"),
          backgroundColor:
Colors.redAccent,
        ),
      );
      return;
    }

    try {
      await
FirebaseAuth.instance.signInWithEmailAn
dPassword(
        email: email.text,
        password: password.text,
      );

ScaffoldMessenger.of(context).showSnac
kBar(
        SnackBar(
          content: Text("Login Successful!"),
          backgroundColor: Colors.green,
        ),
      );
      Get.offAllNamed('/home'); // Navigate
to home page
    } catch (e) {

ScaffoldMessenger.of(context).showSnac
kBar(
        SnackBar(
          content: Text("Error:
${e.toString()}"),
          backgroundColor: Colors.red,
        ),
      );
    }
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.grey[200],
      body: Center(
        child: Padding(
          padding: const EdgeInsets.all(20.0),
          child: Card(
            elevation: 5,
            shape: RoundedRectangleBorder(
              borderRadius:
BorderRadius.circular(20),
            ),
            child: Padding(
              padding: const
EdgeInsets.all(25.0),
              child: Column(
                mainAxisSize:
MainAxisSize.min,
                crossAxisAlignment:
CrossAxisAlignment.center,
                children: [
                  Text(
                    "Welcome Back!",
                    style: TextStyle(
                      fontSize: 24,
           fontWeight:
FontWeight.bold,
           color: Colors.blueAccent,
          ),
         ),
         SizedBox(height: 10),
         Text(
          "Sign in to continue",
          style: TextStyle(fontSize: 16,
color: Colors.grey[700]),
         ),
         SizedBox(height: 20),
         TextField(
          controller: email,
          decoration: InputDecoration(
           labelText: "Email",
           prefixIcon: Icon(Icons.email,
color: Colors.blueAccent),
           border: OutlineInputBorder(
            borderRadius:
BorderRadius.circular(10),
           ),
          ),
          keyboardType:
TextInputType.emailAddress,
         ),
         SizedBox(height: 15),
         TextField(
          controller: password,
          decoration: InputDecoration(
           labelText: "Password",
           prefixIcon: Icon(Icons.lock,
color: Colors.blueAccent),
           border: OutlineInputBorder(
            borderRadius:
BorderRadius.circular(10),
           ),
          ),
          obscureText: true,
         ),
         SizedBox(height: 20),
         ElevatedButton(
          onPressed: signIn,
          style:
ElevatedButton.styleFrom(
           backgroundColor:
Colors.blueAccent,
```

```
           foregroundColor:
Colors.white,
           shape:
RoundedRectangleBorder(
            borderRadius:
BorderRadius.circular(10),
           ),
           padding:
EdgeInsets.symmetric(vertical: 12,
horizontal: 40),
          ),
          child: Text(
           "Login",
           style: TextStyle(fontSize:
18),
          ),
         ),
         SizedBox(height: 15),
         TextButton(
          onPressed: () => Get.to(() =>
Forgot()),
          child: Text(
           "Forgot Password?",
           style: TextStyle(color:
Colors.blueAccent),
          ),
         ),
         Divider(thickness: 1, height:
30),
         TextButton(
          onPressed: () => Get.to(() =>
Signup()),
          child: Text(
           "Don't have an account?
Sign Up now",
           style: TextStyle(color:
Colors.blueAccent),
          ),
         ),
        ],
       ),
      ),
     ),
    ),
   ),
  );
 }
```

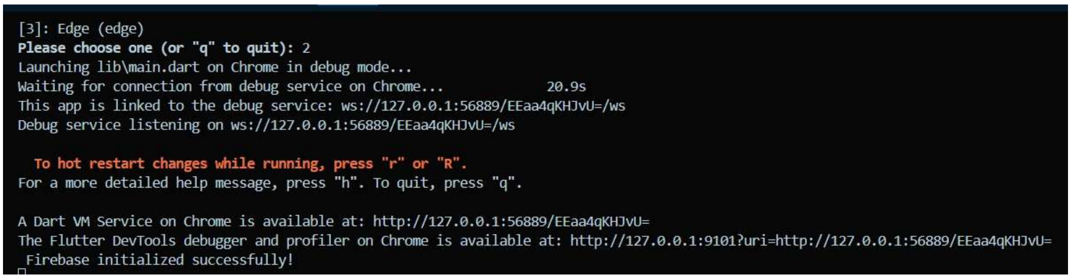
```
}
```

SIGN UP :

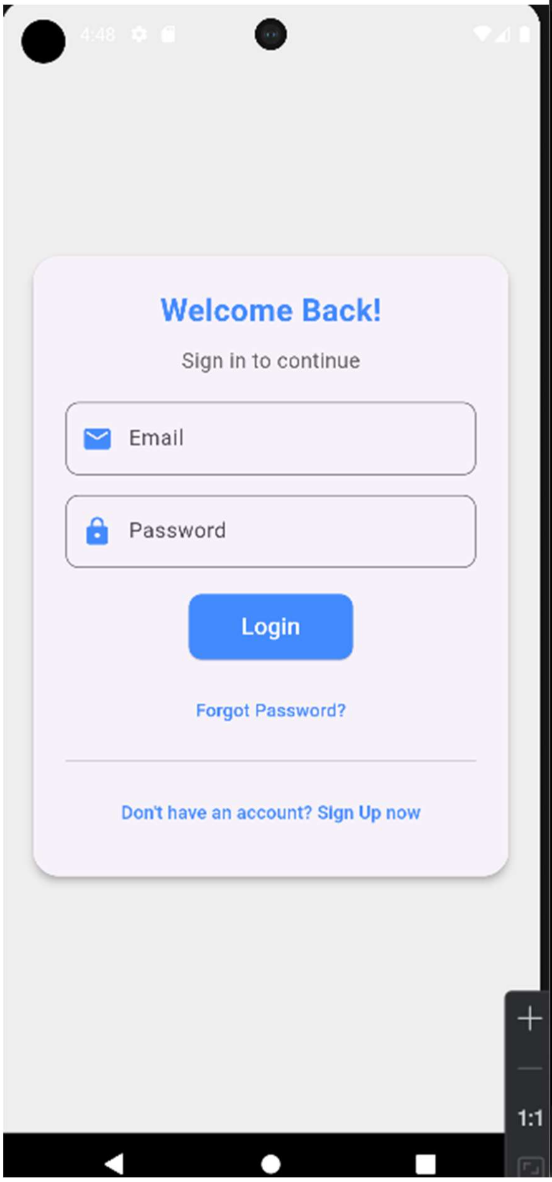
```
import '/wrapper.dart';
import
'package:firebase_auth/firebase_auth.dart
';
import 'package:flutter/material.dart';
import 'package:get/get.dart';

class Signup extends StatefulWidget {
  const Signup({super.key});

  @override
  State<Signup> createState() =>
_SignupState();
}

class _SignupState extends
State<Signup> {
  TextEditingController email =
TextEditingController();
  TextEditingController password =
TextEditingController();

  signup() async {
    if (email.text.isEmpty ||
password.text.isEmpty) {
      Get.snackbar(
        "Error",
        "Please fill in all fields",
        snackPosition:
SnackPosition.BOTTOM,
        backgroundColor: Colors.redAccent,
        colorText: Colors.white,
      );
      return;
    }

    try {
      await
FirebaseAuth.instance.createUserWithEm
ailAndPassword(
        email: email.text.trim(),
        password: password.text.trim(),
      );
      Get.offAll(Wrapper()); // Navigate to
Wrapper after successful signup
      Get.snackbar(
        "Success",
        "Account created successfully!",
        snackPosition:
SnackPosition.BOTTOM,
        backgroundColor: Colors.green,
        colorText: Colors.white,
      );
    } catch (e) {
      Get.snackbar(
        "Signup Failed",
        e.toString(),
        snackPosition:
SnackPosition.BOTTOM,
        backgroundColor: Colors.red,
        colorText: Colors.white,
      );
    }
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.grey[200],
      body: Center(
        child: Padding(
          padding: const EdgeInsets.all(20.0),
          child: Card(
            elevation: 5,
            shape: RoundedRectangleBorder(
              borderRadius:
BorderRadius.circular(20),
            ),
            child: Padding(
              padding: const
EdgeInsets.all(25.0),
              child: Column(
                mainAxisSize:
MainAxisSize.min,
                crossAxisAlignment:
CrossAxisAlignment.center,
                children: [
                  Text(
                    "Create Account",
                    style: TextStyle(
                      fontSize: 24,
                      fontWeight:
```

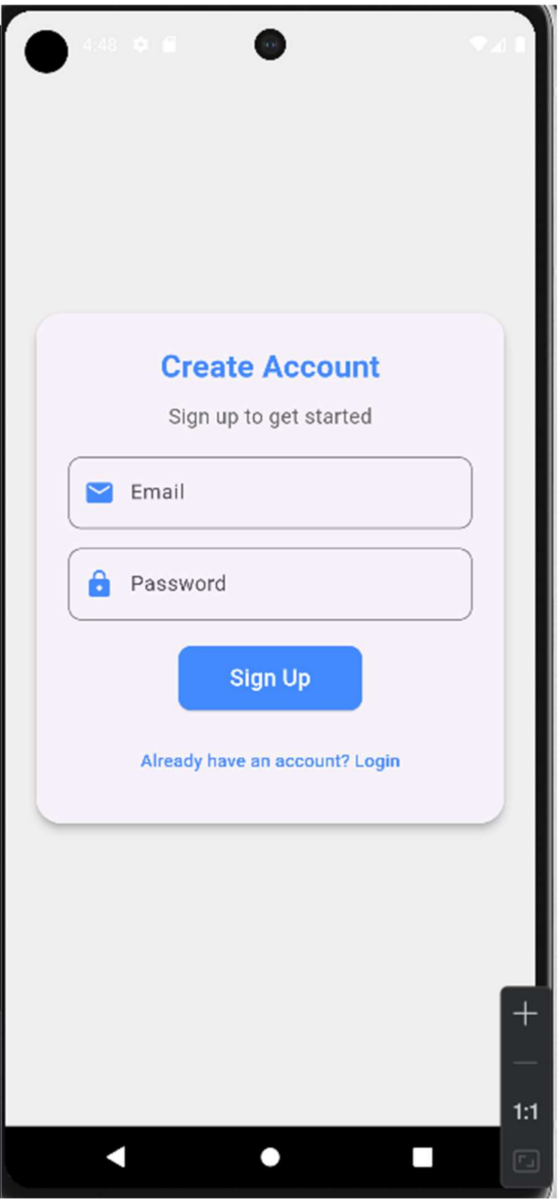
```
FontWeight.bold,
                      color: Colors.blueAccent,
                    ),
                  ),
                  SizedBox(height: 10),
                  Text(
                    "Sign up to get started",
                    style: TextStyle(fontSize: 16,
color: Colors.grey[700]),
                  ),
                  SizedBox(height: 20),
                  TextField(
                    controller: email,
                    decoration: InputDecoration(
                      labelText: "Email",
                      prefixIcon: Icon(Icons.email,
color: Colors.blueAccent),
                      border: OutlineInputBorder(
                        borderRadius:
BorderRadius.circular(10),
                      ),
                    ),
                    keyboardType:
TextInputType.emailAddress,
                  ),
                  SizedBox(height: 15),
                  TextField(
                    controller: password,
                    decoration: InputDecoration(
                      labelText: "Password",
                      prefixIcon: Icon(Icons.lock,
color: Colors.blueAccent),
                      border: OutlineInputBorder(
                        borderRadius:
BorderRadius.circular(10),
                      ),
                    ),
                    obscureText: true,
                  ),
                  SizedBox(height: 20),
                  ElevatedButton(
                    onPressed: signup,
                    style:
ElevatedButton.styleFrom(
                      backgroundColor:
Colors.blueAccent,
                      foregroundColor:
Colors.white,
                      shape:
RoundedRectangleBorder(
                        borderRadius:
BorderRadius.circular(10),
                      ),
                      padding:
EdgeInsets.symmetric(vertical: 12,
horizontal: 40),
                    ),
                    child: Text(
                      "Sign Up",
                      style: TextStyle(fontSize:
18),
                    ),
                  ),
                  SizedBox(height: 15),
                  TextButton(
                    onPressed: () => Get.back(),
                    child: Text(
                      "Already have an account?
Login",
                      style: TextStyle(color:
Colors.blueAccent),
                    ),
                  ),
                ],
              ),
            ),
          ),
        ),
      ),
    );
  }
}
```

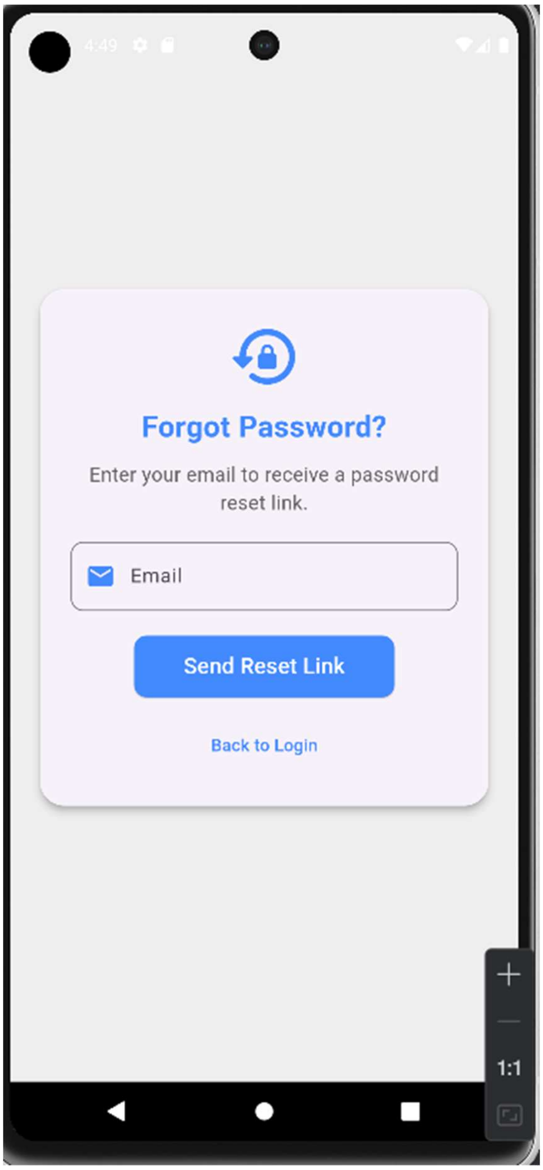
OUTPUT :



```
[3]: Edge (edge)
Please choose one (or "q" to quit): 2
Launching lib\main.dart on Chrome in debug mode...
Waiting for connection from debug service on Chrome...             20.9s
This app is linked to the debug service: ws://127.0.0.1:56889/EEaa4qKHJvU=/ws
Debug service listening on ws://127.0.0.1:56889/EEaa4qKHJvU=/ws

  To hot restart changes while running, press "r" or "R".
For a more detailed help message, press "h". To quit, press "q".

A Dart VM Service on Chrome is available at: http://127.0.0.1:56889/EEaa4qKHJvU=
The Flutter DevTools debugger and profiler on Chrome is available at: http://127.0.0.1:9101?uri=http://127.0.0.1:56889/EEaa4qKHJvU=
 Firebase initialized successfully!
```







Forgot Password?

Enter your email to receive a password reset link.