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MPL EXP 6

Aim: To set up Firebase authentication for the android application.
1.firebase_core Initialization:

- await Firebase.initializeApp(); is crucial. This line initializes Firebase for your app. It's placed in the main() function before runApp().
- WidgetsFlutterBinding.ensureInitialized(); is also important, and is required before Firebase.initializeApp().

2.Firebase Authentication (firebase_auth):

- The code uses FirebaseAuth for user authentication.
- signInWithEmailAndPassword and createUserWithEmailAndPassword are used for login and registration.
- Error handling is improved with FirebaseAuthException catching, providing user friendly messages.
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3.Cloud Firestore (cloud_firestore):

- FirebaseFirestore is used to store user data in the "users" collection.
- set() is used to write data to Firestore.

4.Platform Setup (iOS and Android):
- To make this work, you must follow the Firebase console setup for both iOS and Android. This involves:
- Creating a Firebase project.
- Adding iOS and Android apps to your project.
- Downloading the google-services.json (Android) and GoogleService-Info.plist (iOS) files and placing them in the correct locations within your Flutter project.
- Ensuring the correct Firebase plugins are added to your pubspec.yaml.

5.Error Handling: FirebaseAuth exceptions are now specifically handled, providing better error messages to the user.
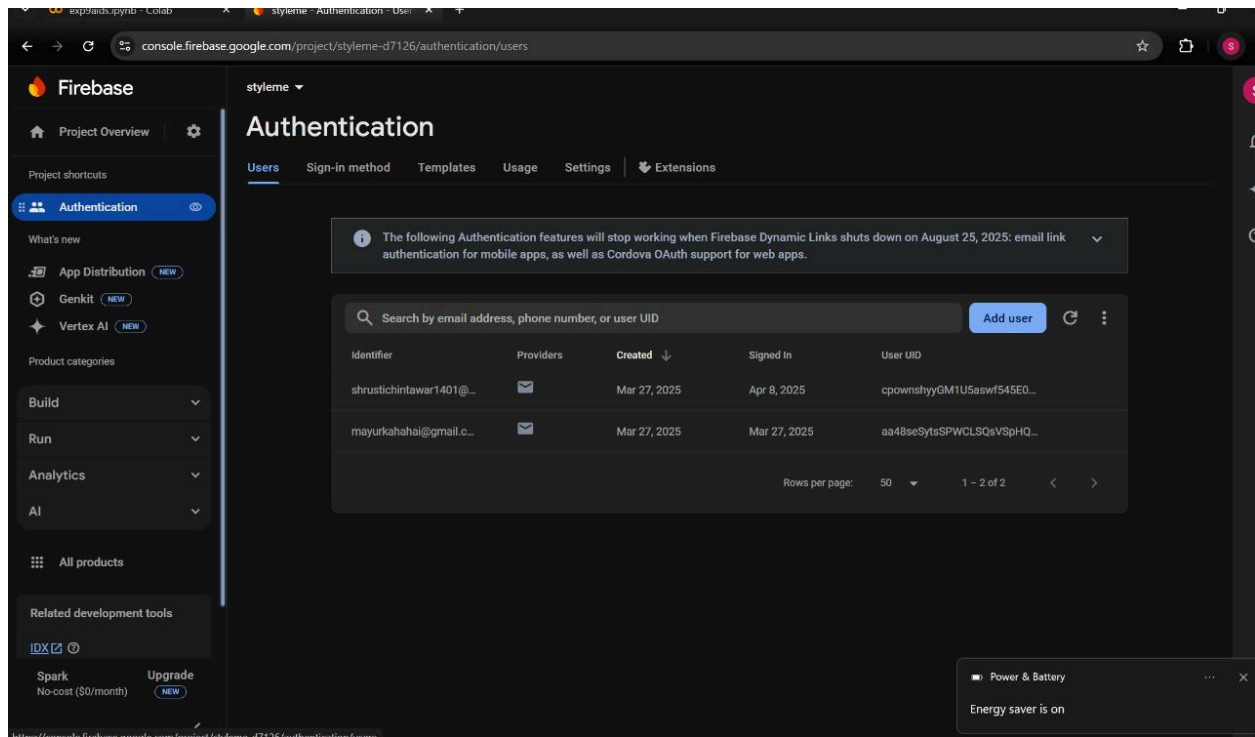
6.Navigation: Navigation is implemented using named routes, allowing for cleaner transitions.

We need the following packages;
import 'package:firebase_auth/firebase_auth.dart';
import 'package:firebase_core/firebase_core.dart';

import 'package:cloud_firestore/cloud_firestore.dart';

OUTPUT