

Homework - 02

CSC 4360 - Mobile App Development

Due 11/18/2025

Message Board App

Chatboards for the New Age

The objective of this assignment is to get you comfortable with the use of the API firebase, and collaboration with fellow students. The details for the assignment are as follows:

1. Create a **Splash Screen**
 - a. Style as you choose
2. Integrate the **Firestore** into your mobile application
3. Set up **User Registration** and **User Login** pages
 - a. Should leverage **Firestore Authentication** and **Firestore**
 - i. **Firestore Authentication** -
<https://firebase.flutter.dev/docs/auth/overview>
 - ii. **Firestore** -
<https://firebase.flutter.dev/docs/firestore/overview>
 - b. Firestore should store **unique user id, user first name, user last name, user role, and registration datetime**
 - c. Firestore Authentication should be able to accept email and password.
4. **After logging in** users should be able to see an ordered list of all message boards name with image icons to represent each board.
 - a. **Maybe hard coded**
5. There should be an icon in the menu bar of the scaffold area that allows user to open a sliding navigation menu. This menu should have the following options
 - a. **Message Boards**
 - i. Home page described in #4
 - b. **Profile**
 - i. Page allows users to change information about their profile
 - c. **Settings**
 - i. Page that allows users to log out, change login information, and personal information like dob, etc
6. Selecting any **message board** option, should open a chat window that shows a list of all messages posted in that conversation
 - a. Datetime, message, and username (or display name) that posted should be in every message listed
 - b. Board name should be the title bar
 - c. Messages should be displayed in real time

Helpful References for Flutter & Firestore Development

Here is a curated list of valuable resources to support your learning:

1. Flutter & Firebase Auth Tutorial

- Title: Flutter & Firebase App Tutorial #12 - Register With Email & Password
- Link: <https://www.youtube.com/watch?v=jI5E0UfAGVs>
- Description: A hands-on video tutorial walking through the process of implementing email and password registration with Firebase in a Flutter app.

2. Building a Chat App with Flutter and Firebase

- Title: Building a Chat App with Flutter and Firebase
- Link: <https://medium.com/flutter-community/building-a-chat-app-with-flutter-and-firebase-1-2-1d1c2c95c730>
- Description: A multi-part article series that provides a practical example of using Firebase (Firestore, Auth) to build a core app feature.

3. Flutter Chat UI Package on pub.dev

- Title: flutter_chat_ui on pub.dev
- Link: https://pub.dev/packages/flutter_chat_ui
- Description: The official package page for a pre-built, customizable chat interface for Flutter. Useful for when you want to add messaging features without building the UI from scratch.

4. Ultimate Guide to Building a Chat App

- Title: How to Build a Chat App: The Ultimate Guide
- Link: <https://getstream.io/chat/build-chat-app/>
- Description: A comprehensive conceptual guide from a leading chat API provider, covering the key features, architecture, and considerations for building a modern messaging application.

This is a sample – You can create your own design or mimic the same layout as demonstrated.

Select A Room

