Assignment 2

Due date	Sunday, September 24, 2023, midnight (11:55 PM)
Where to submit	Omnivox Lea
Weight	20%
Late policy	-10% every 24 hours, up to 48 hours. Grace period of 15 minutes.
Individual submission	

Overview

In this assignment, you will be creating a daily wellness app.
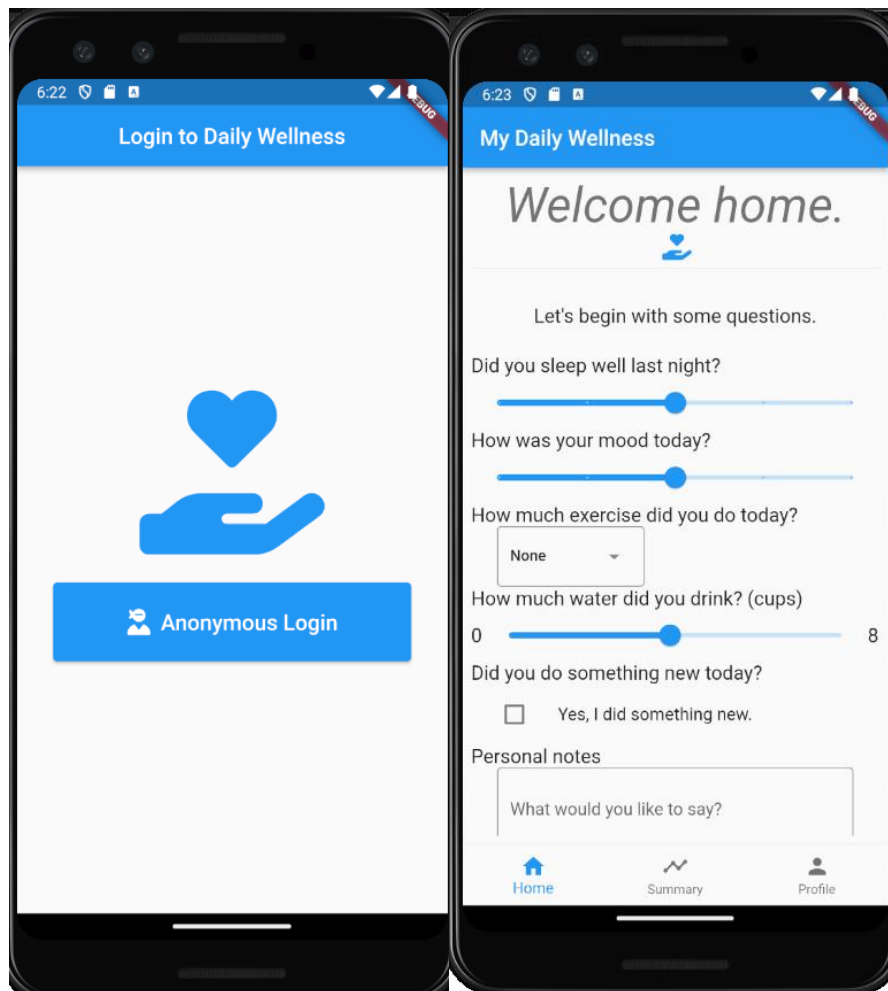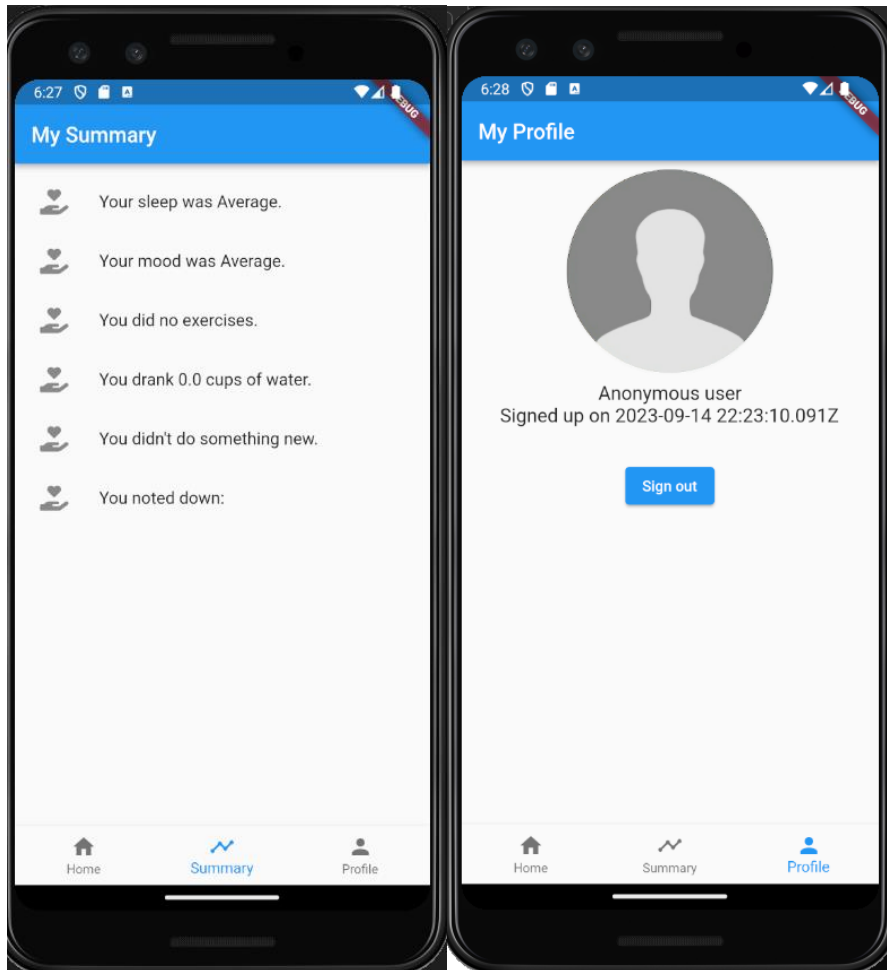
Description

Authentication

- The app starts on an authentication screen. In this course, we use Firebase as our authentication backend service.
- Users are invited to sign in as an anonymous user if they have never signed in before or if they have signed out.
- If the user has already signed in, this screen is skipped.
- After a successful sign in, the user is directed to the home page of the app.
- Do not track your Firebase API key with Git.

Home

- The home page of the app boasts a welcoming message with the logo of the app.
- The home page shows a series of questions to the user, as shown in the screenshot.
  - You must implement all the 6 questions.
    - Sleep
    - Mood
    - Exercise

- - Water intake
- - "Trying something new today"
- - Personal notes
- The home, as all other non-login pages, contains a bottom navigation bar.
  - o BottomNavigationBar is a widget used for this. It is given to the Scaffold of a screen.
- For the questions about sleep and mood, the slider has the following discrete values
  - o Horrible
  - o Bad
  - o Average
  - o Good
  - o Excellent
- For the dropdown for physical exercise, the choices are
  - o None
  - o Little
  - o Some
  - o A lot
- For the water intake question, the slider value is continuous from 0 to 8 (cups).
- "Did you try something new today?" is a yes/no question with a checkbox answer field.
- "Personal notes" is a large area of text input for the user to type.
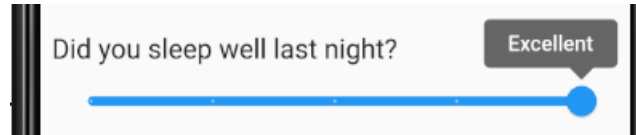
Summary

- By default, the summary shows a list of collected information from the user on the home page.
- If the user has not interacted with the home page, the summary still shows the default answers to the questions on the home page.
- If the user has interacted with the home page, the summary updates accordingly.
- Switching back to the home page should display the same values again. It must not clean up all the previously added data.

Profile

- After logging in, the profile page shows a stock image of the anonymous user.
- The page also shows the date the user signed up.
- A sign out button follows.
  - o Signing out brings the user to the login page.
  - o Signing out resets the data to the questions.

How to submit your work

Similar to the first assignment, you can use a command in Git to produce a zip file automatically. This assumes you have set up your repository and a gitignore.

```
git archive --format=zip -o submission.zip HEAD
```

Alternatively, you would have to copy paste folders in your project into a temporary folder and then zip it. The files and folders you need are:

- Everything in the highest directory.
  - o pubspec.yaml, analysis_options.yaml, pubspec.lock, .gitignore, etc.

- The lib/ folder with all your Dart files
- The assets/ folder or where you decided to put your images
- The android/ folder

Your submission zip should be < 1 MB in size. Check what is inside your zip to see if you have everything!

Saving space

Most of the space in a Flutter project is taken by the build/ folder. Each time you run Flutter, it will be generated back. So, to save space, you could just delete it! Flutter has a built-in command that cleans up temporarily data like this. The command is "flutter clean", which will remove all the third party Dart packages your IDE uses. To reverse that, do "dart pub get" to remove all your IDE errors.

If you don't plan on building for other platforms, you can delete all the OS specific folders you don't want in your project, e.g. windows, web, MacOS, Linux.

Security keys

Due to cybersecurity concerns, you should not track your Firebase API key in your repo. But then, I cannot connect to your Firebase service and use your app. In that case, take note of the API key for your Firebase project and write it as a comment in the assignment submission on Lea Omnivox.

Evaluation

Criteria	Share
Features	80%
Code quality	20%

Features

Marks	
10	No red screen of death or unwanted exceptions
10	Black and yellow stripes
10	Login page
10	Anonymous authentication
10	Home page general layout, welcome message & logo
10	Sleep question
10	Mood question
10	Exercise question
10	Water question
10	Question about trying out new things
10	Personal notes
40	Summary page, content, and layout
10	Profile page
10	Sign out feature
10	Bottom navigation bar

Code quality

Marks	
10	Naming convention
10	Good names
10	Usage convention
5	Barrel pattern
10	Minimum quantity of blue warnings
20	Proper use of the DRY principle
10	Proper project file and folder organization
10	Secure practice of secret keys (don't commit them into your git)
5	Provider

Miscellaneous

Criteria	Penalty
English language quality	Up to -5% on total grade
No source code	-100%

Plagiarism

This assignment is individual. You cannot work in teams and submit the same thing. Though you can talk to other students, copy pasting their work is not allowed.

If you consult online sources (as you should be) and you take their code with little modification, you must cite the source with a comment containing a URL to the source. The same applies to code from the teacher's solutions. Give a URL to the specific file on GitHub in that case.

Your entire work cannot be one citation. Cited sources should be only small segments of your work.