PAWGO

USER MANUAL

By FRIEND5

Table of Contents

1. **Application Overview**

   Description

2. **Guidelines for software installation and operation**

   2.1 Installing Flutter (only for developers)
   2.2 Adding a SHA certificate fingerprint for Firebase (only for developers)
   2.3 Installing the App via APK (Only Android)
   2.4 Installing NodeJS and Running the server locally (only for developers)

3. **Structure of Source Code**

   3.1 Front-End
   3.2 Back-End

4. **Screens**

   4.1 Login Screen
   4.2 Set Up User
   4.3 Home Screen
   4.4 Support Screen
   4.5 Profile Page
   4.6 Edit User Details
   4.7 Add Dog Screen
   4.8 Matchmaking Screen
   4.9 Users Liked Screen
   4.10 Chat Screen
   4.11 Map Screen
   4.12 Search Screen

1. Application Overview

The "Friend5" project team oversees creating the "PawGo" hybrid application for both Android and iOS platforms for matching dog owners and lovers. This goal is achieved by offering users with an interactive system that promotes dog owners to meet and match with other dog owners based on dog breed, interests, and other preferences. This will allow users to meet up at a pet-friendly restaurant or in the open air to get to know one another.

2. Guidelines for software installation and operation

This section illustrates how to install the needed software. Note that for non-developers, it is only required to install the release APK, since no actions are required to configure the server. For the sake of completeness, also steps to install and configure the development tools are provided. Furthermore, no release package has been provided for iOS, due to the inability to test it.

2.1 Installing Flutter (only for developers)

First install an IDE that supports development with Flutter. For the development of our project we chose Android Studio as it was the most extensive IDE with Flutter support. A more lightweight alternative to Android Studio would be Visual Studio Code.

After installing Android Studio, install the Flutter plugin for Android Studio when you first open the IDE.

After the plugin setup, depending on the target OS (i.e., Linux, Windows or macOS) install the SDK from the Flutter website:
https://docs.flutter.dev/get-started/install

Inside the Android Studio application, navigate to *Settings -> Languages & Frameworks -> Flutter*.
Write the path to the downloaded Flutter SDK in the Flutter SDK path.
Navigate to Dart that exists in *Languages & Frameworks* and enter the Dart SDK path. The Dart SDK is included in the Flutter folder downloaded before, under `/bin` or `/bin/cache` folder.

Now Android Studio should be ready for Flutter development.

2.2 Adding a SHA certificate fingerprint for Firebase (only for developers)

During development of the app it is needed to add the computer's SHA fingerprint in the Firebase console for security purposes, otherwise the application will crash when trying to establish a connection to Firebase.

For this step a *Java Development Kit (JDK)* must be installed on the machine. JDK can be install from the following website:
https://www.oracle.com/java/technologies/downloads/

In a terminal, navigate to the `android` folder in the root of the project. Then, write the following command to retrieve the fingerprint.

```
./gradlew signingReport
```

Or for Windows users:

```
.\gradlew signingReport
```

The command will most likely return several different SHA keys. The needed key is the one with variant name debug and config name debug.
Provide the retrieved fingerprint to the PawGo admins, who will add the fingerprint to the Firebase Console.
The connection is made with the file found in:
Project root -> android -> app -> google-services.json.

To run the app, select the desired target device in Android Studio and select the `main.dart` file in the run configuration.

2.3 Installing the app via APK (only Android)

The following guide refers to the Android app. No steps required to configure and run the server, as it is hosted on Heroku and publicly available.
The target smartphone must have the "Install unknown apps" option enabled. Since the procedure to enable that option is strictly phone-dependent, it is not provided in this section.

Once a user has enabled the "Install unknown apps" option and has downloaded the APK file on his mobile phone, he has to open it with a file manager in order to start the installation procedure. At this point the user has to give the necessary permissions to install the app and, after a while, the application will be ready to be opened.

2.4 Installing NodeJS and running the server locally (only for developers)

To run the server locally, it requires NodeJS installed on the target machine. According to the platform, follow the guide at https://nodejs.org/it/download/package-manager/ to install NodeJS and npm.

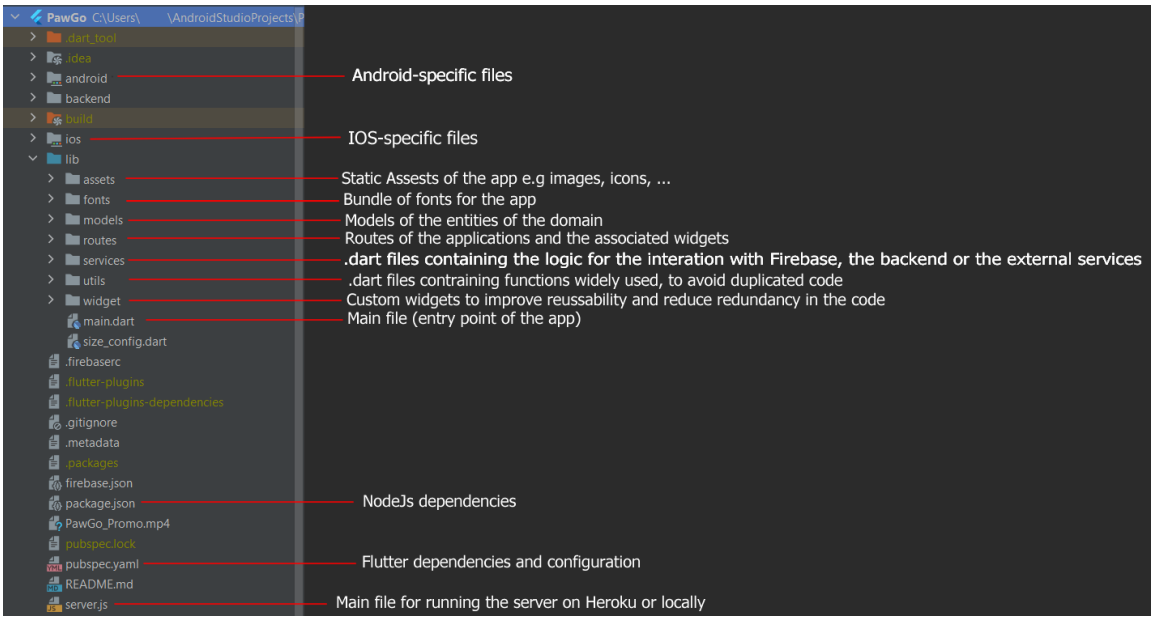
Then, be sure to have all dependencies resolved by running
`npm install`
in the project root folder (i.e., where the *server.js* file is contained).

Finally run
`npm start`
in the project root folder.

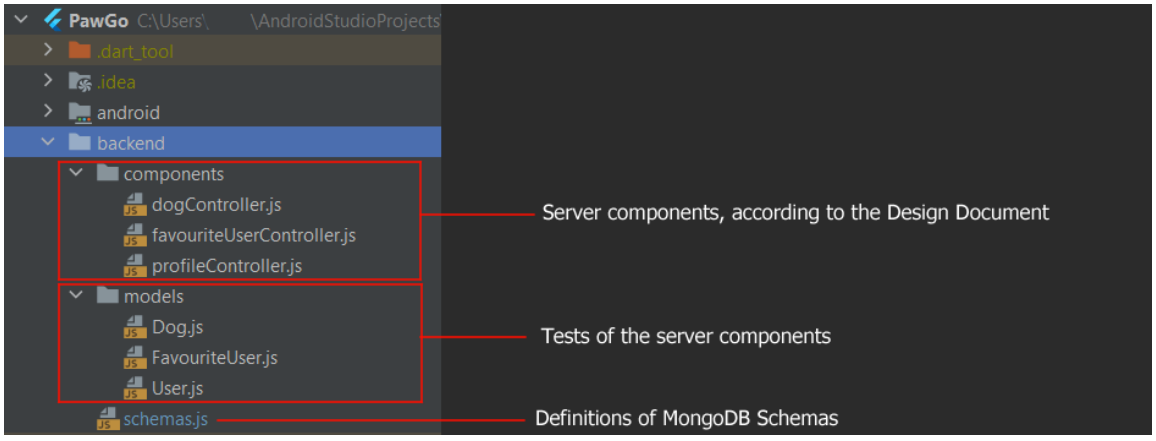
Note that this step requires the `.env` file containing the secrets for establishing the connection with the database. Anyway, for security reasons, that file is not published on GitHub and should be provided by PawGo admins on explicit request.

3. Structure of the source code

3.1 Front-end



3.2 Back-end



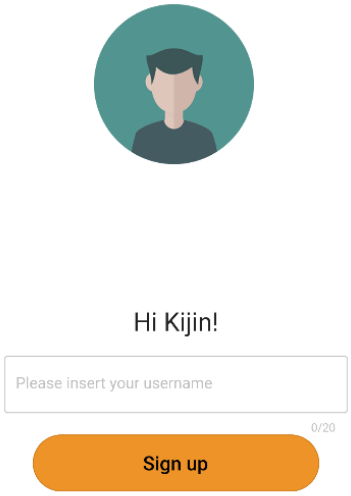
4. Screens

4.1 Login Screen

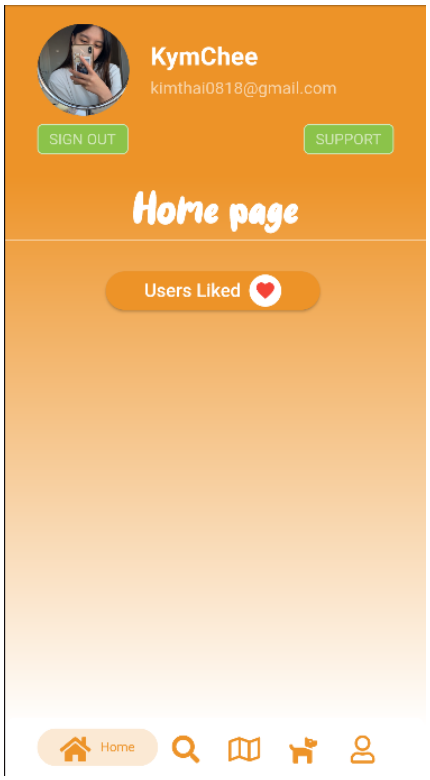
The application has an authentication allowing users to login. We have chosen the Google Authentication sign in progress. The user must **sign in or make an account** with their Google Accounts. The user should be able to track and share their progress

4.2 Set Up User

When the user has first created an account using their Google, they will be asked to **create a username** for their account to sign up.



4.3 Home Screen

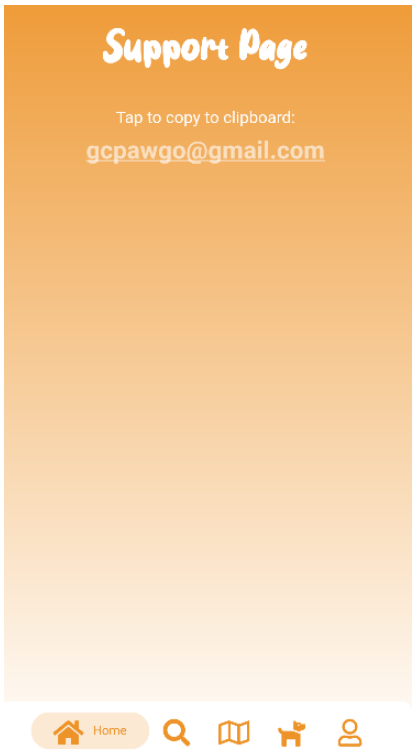


This is the home page of the application. There is a **sign out** button for the user to log out and a **support button** at the top, which will be shown below.

There is also a **User Liked** Button where the user can view the people that they have liked in the matchmaking screen.

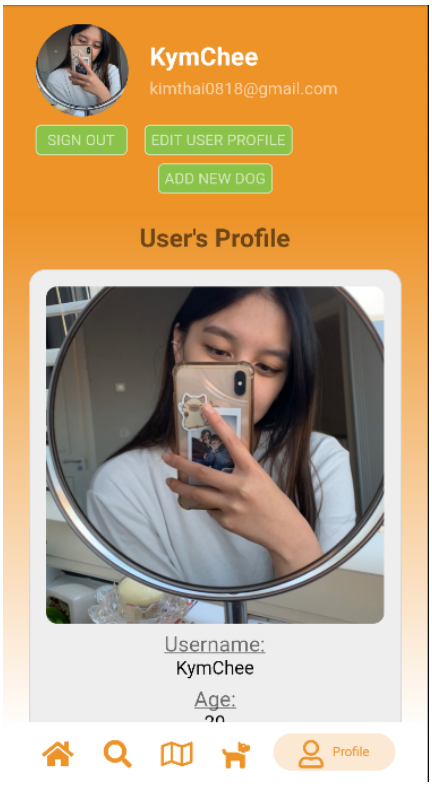
Below are the **navigations** to the different features and screen. The **house icon** is the home screen, the **search icon** is to search for dog breeds, the **map icon** is to find other dog owners that are close by and display it on the map, the **dog icon** is the matchmaking for the user to find other users and chat with them with a like and dislike feature and finally the **avatar icon** is the user's and dog's profile.

4.4 Support Screen



The support screen includes our **email address** where users can **contact** our team to seek help.

4.5 Profile Page

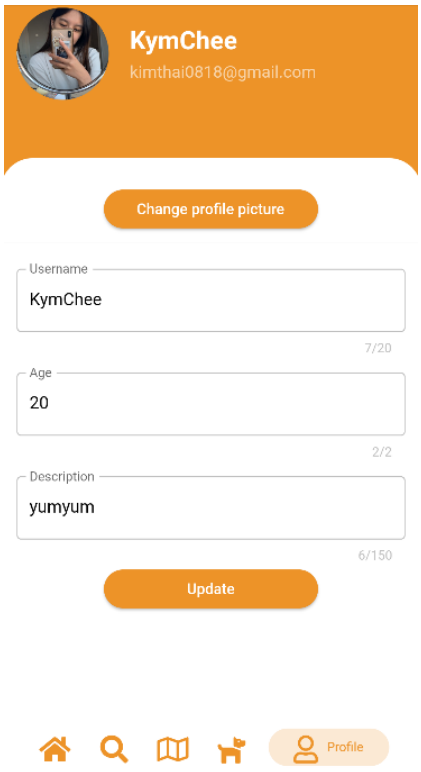


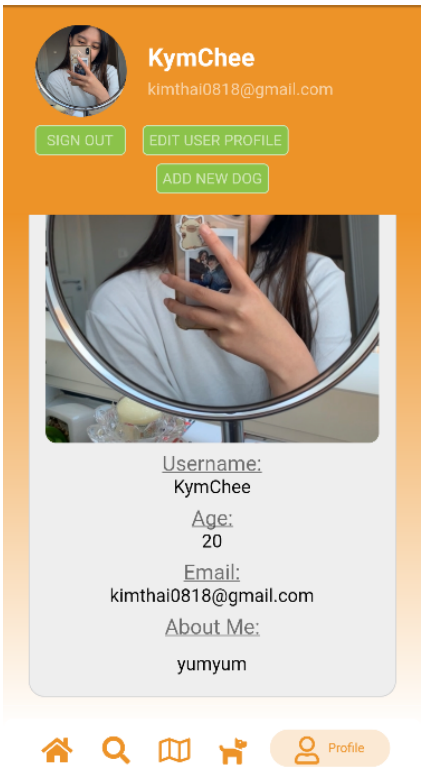
This is the profile screen. This is where the user can **Edit Their Profile** and **Add New Dogs**.

This section will display the user profile card and their dog(s) as well which will be also shown below next.

This profile includes their name, age, description, and photos of themselves. This system also includes the dog profile system, which includes the dog's name, breed, age, personality and photos of the dog.

4.6 Edit User Details

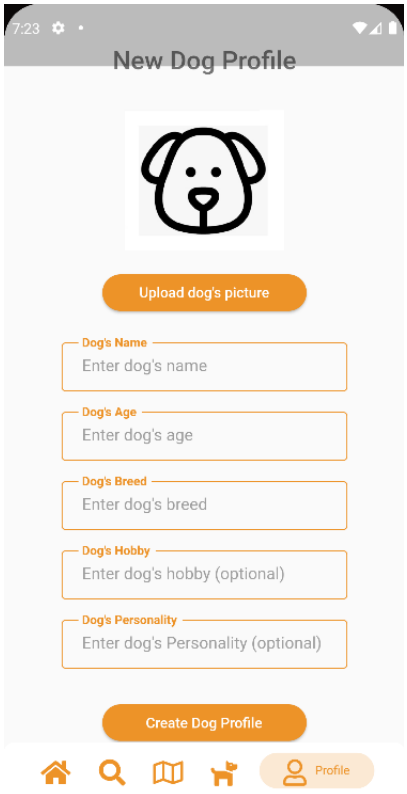


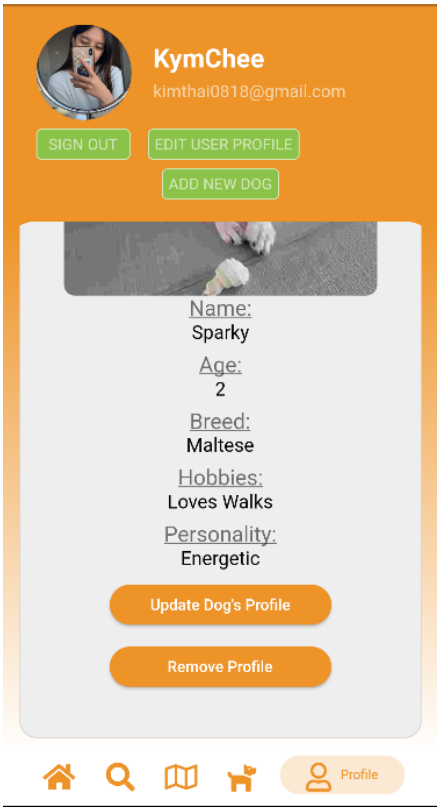


When the user clicks on **Edit User Profile,** they will be led to a screen where they will be able to update their details and profile picture.

The new updates will be displayed on the profile screen.

4.7 Add Dog Screen

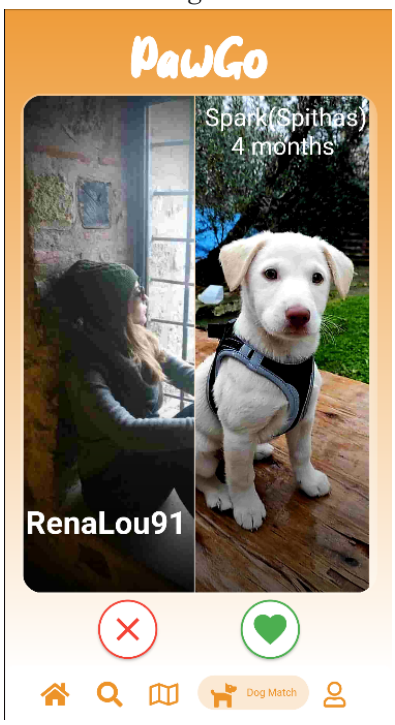




When the user clicks on the **Add New Dog** button. A new screen will appear for the user to **add** in their dog's details and upload a picture for the dogs to create a profile for them

Like the user profile, this is the same for the dog profile. Two buttons will appear on the card which are to **update the dog's profile** or to **remove it from their profile.**

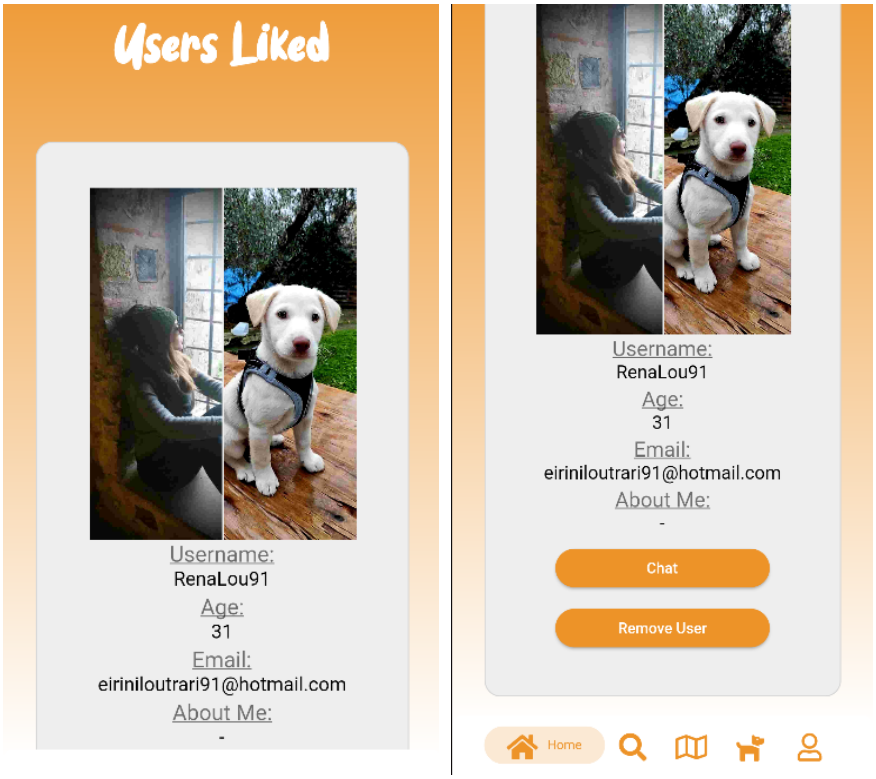
4.8 Matchmaking Screen



The matchmaking system will pair users with similar interests such as similar age group, proximity in location or common interest.

For this they either can **swipe right to like the user** or to **swipe left to reject them.** Another way can be clicking the **"X"** button below the card or the **"Heart"** Button. If the user like a profile this will be added to the **Users Liked**.

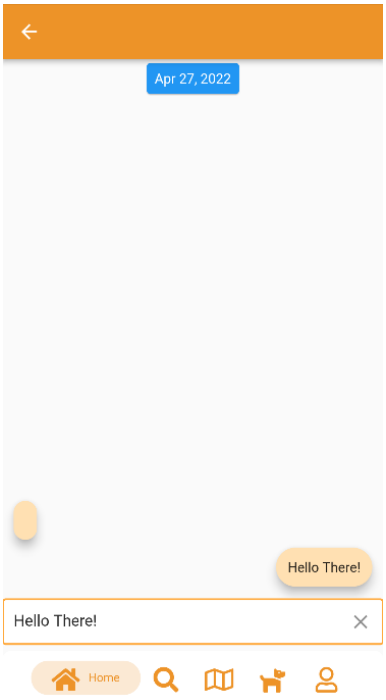
4.9 Users Liked Screen



From above, the **User Liked** will be on the home screen.

This is where the user can **chat** to the person that they are interested in. But in this screen, they can also **remove** the user from their list.

4.10 Chat Screen



Here is the **chat screen**. This is where the user can **send** messages and **receive** messages.

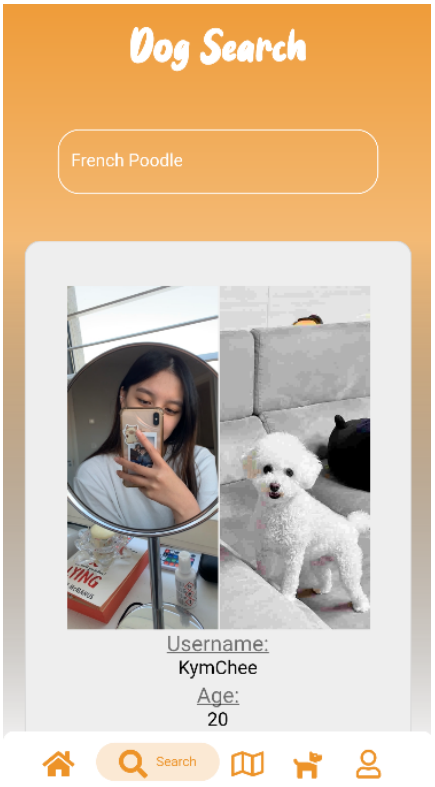
The user will write a message and hit **"enter"** on the keyboard to send. The **"X"** icon will help the user to **clear** the sentence in the text field in one go.

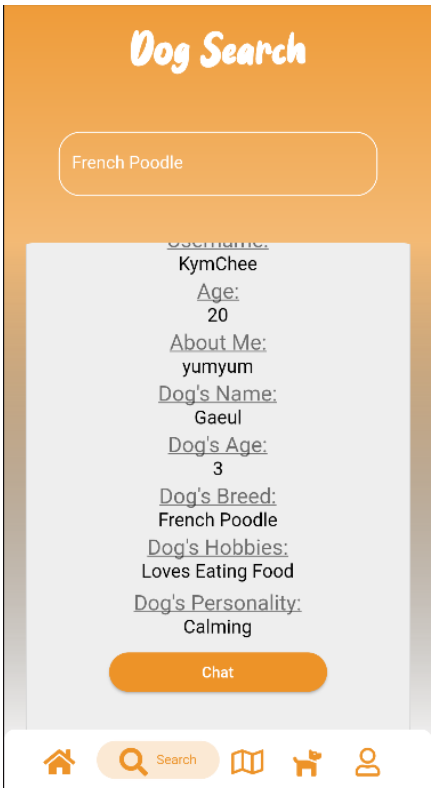
4.11 Map Screen

The map screen will display **any other users** with a **dog icon** that are based on the location range of the user's **location.**

Location tracking will show the user on the app's map. They can be seen by other users with a dog icon on their current location. Clicking on the icon will show that user's profile.

4.12 Search Screen





The search screen allows users to **search up** any **dog breeds** that they are interested in, to get to know more about them. This will show up as a list **of other users with the dog breed** and the user has an option to **chat** to that person.