

# Design Document

- Design Document for: GROUP 5
- Authors: JOSEPH, ADRIAN, LUKE, ATUL
- Date: 02-17-22
- Status: IN PROGRESS

## Concept Summary

This app's core function is to help keep track of a dog owner's pet health by allowing said owner to track information about their pet's daily walking routine. This app will allow a user to track the distance of individual walks by starting and stopping a "tracking" function that will enable the app to keep record of the distance walked during a walking session with their dog. After enabling said tracking function the app will catalog information gathered while on the walk(s) to compile a page of data for statistical analysis that will give the user useful information on their dog walking routine.

This app will allow a user to set personal walking goals for their animal that will be kept track of by the app and allow the user to see statistics on all goals, previous and current. In this regard the user will be able to monitor their dog's health more easily by setting goals that help to keep their animal in good health.

The statistical analysis that the app will provide will allow the user to keep a historical record of all previous walks that have been tracked while using the app, which will allow the user to readily understand the history of their walks and give the user a better understanding of their and their animal's walking habits. In this way the app will provide useful statistical information that the user can refer to when necessary.

## Audience/Customer:

As a dog walking tracker app our main demographic of a(n) audience/customer would be dog owners. As a dog owner you may want to keep track of the number, distance, length, and many more statistics about your walks with your pet. The app's services and features would be perfect for any pet owner who wants an easy way to keep track of their pets statistics.

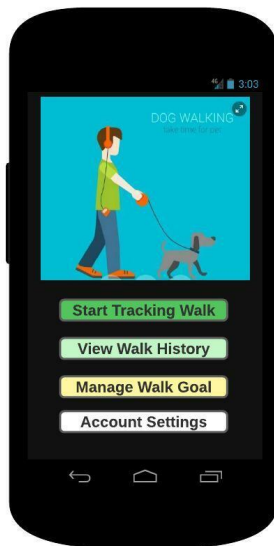
## **Background**

The U.S Department of Health and Human services recommends 150 minutes a week of moderate-intensity exercise. To keep a healthy regime for your pet our app can be used to help keep track of your pets statistics. Using hardware in your Android phone our app will be able to keep track of these statistics for you.

## **Application Cost and Projected success (optional)**

Giving the user the option to pay a small fee to have access to premium options within the app such as having access to more pet slots. Advertising within the app will be an option for monetization also, and having a premium account would remove the in app advertisements.

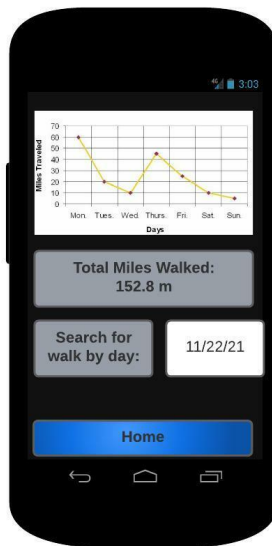
## Interface Mockups



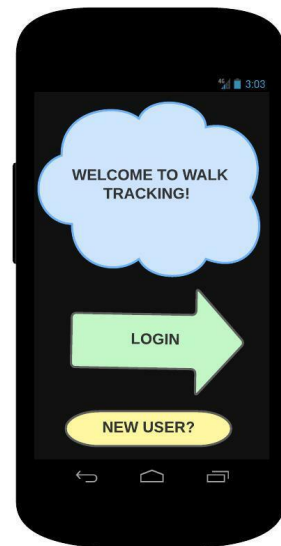
Home Screen



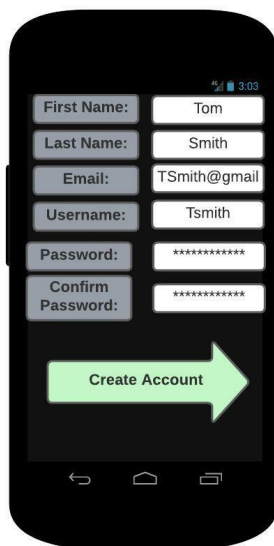
Tracking Miles



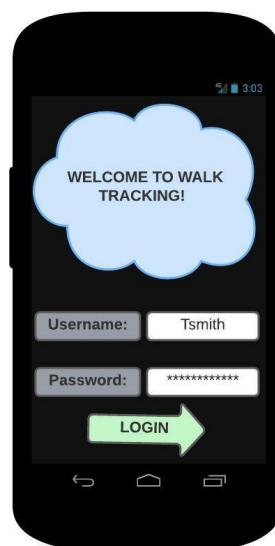
Mileage History



Main Menu



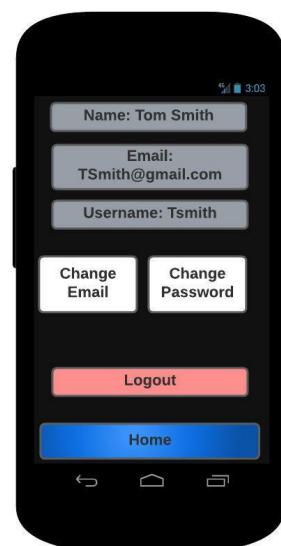
Account Creation



Login Page

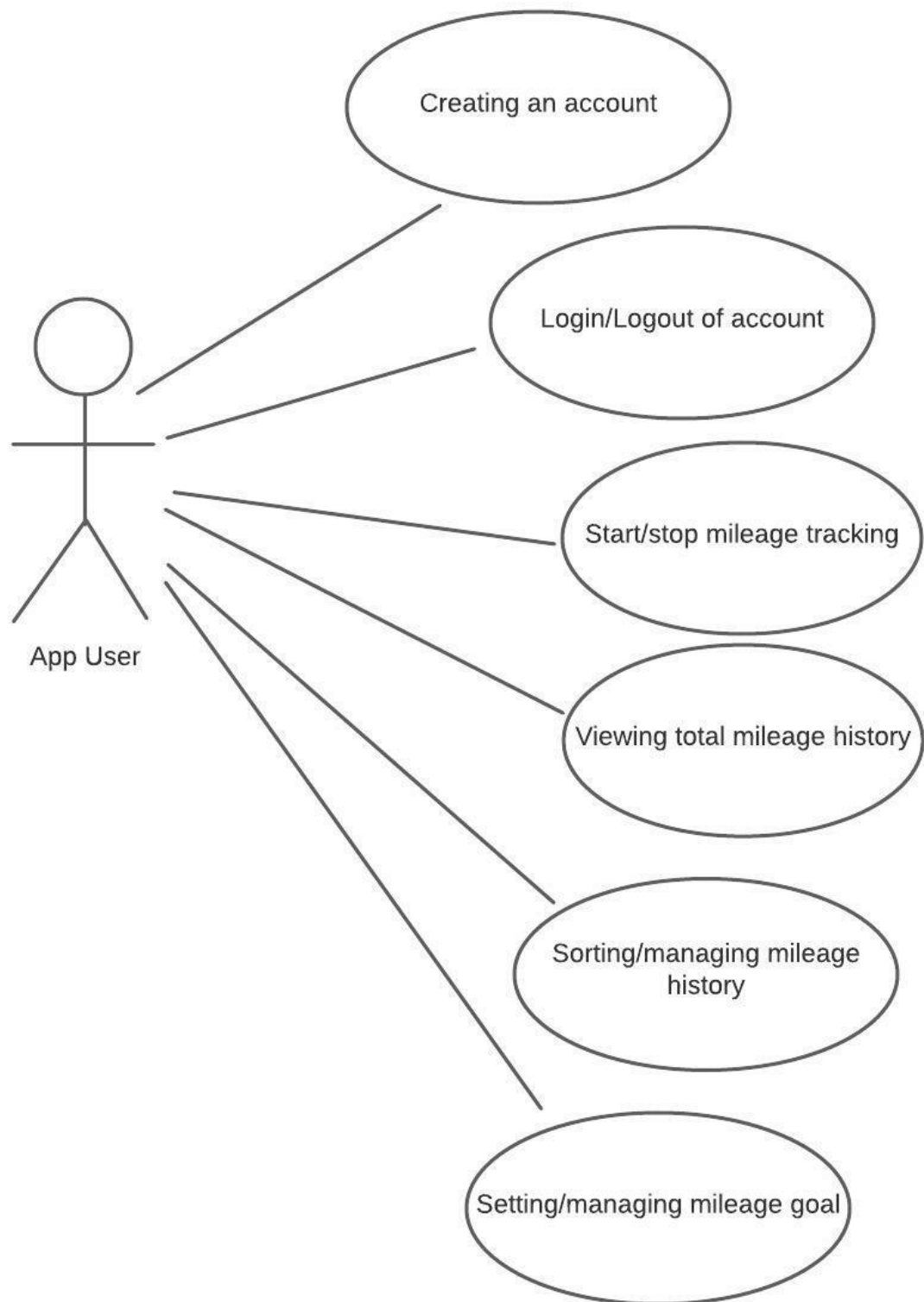


Goals

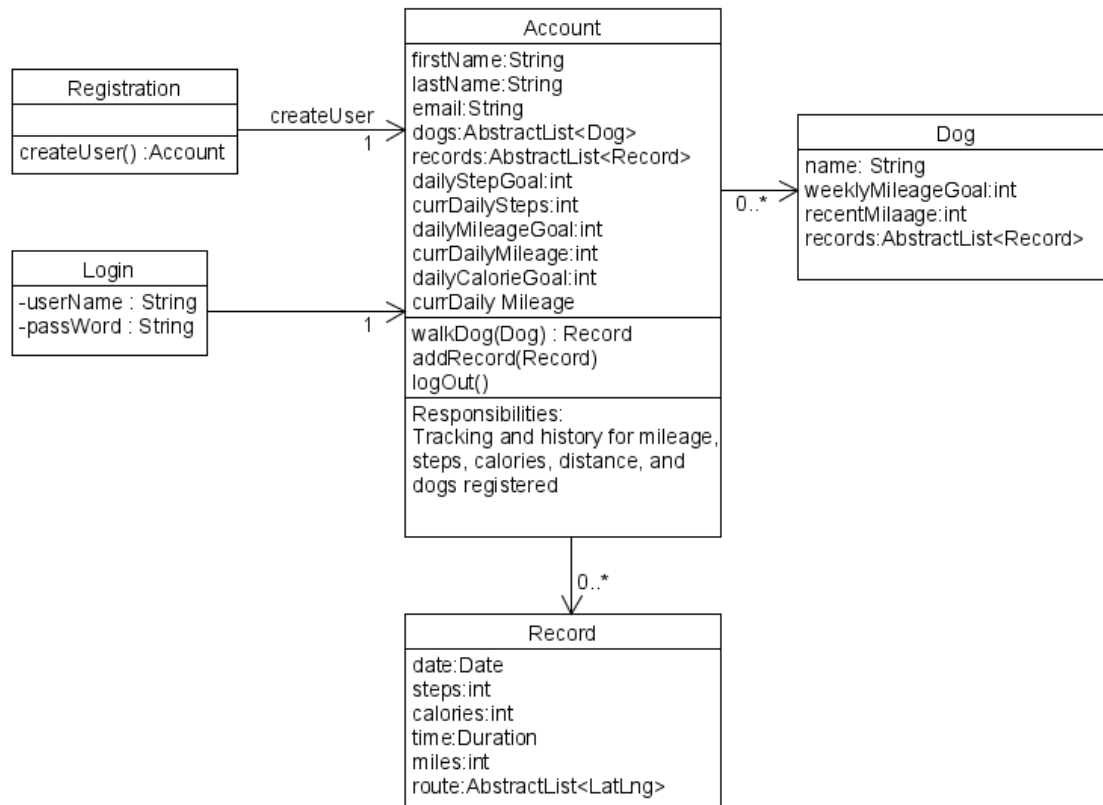


Account Settings

## Design - Use Case Diagram(s)



## Design - Detailed Design



The user, on startup, should be able to login or register an account. Through this account, they should be able to set goals and track statistics for steps, mileage, calories, distance, and dogs registered. They should also be able to do this for each individual dog they have. Through their account, they can begin tracking by starting a walk for a dog. Upon the end of this walk, they should make an instance of Record, a record of the walk which will be kept in the account as well. The user can also log out.

## Related Work

Similar apps include Wag and Rover, dog walking apps that allows users to request other users to walk their dogs for them. They also include additional functionality like dog-sitting and boarding.

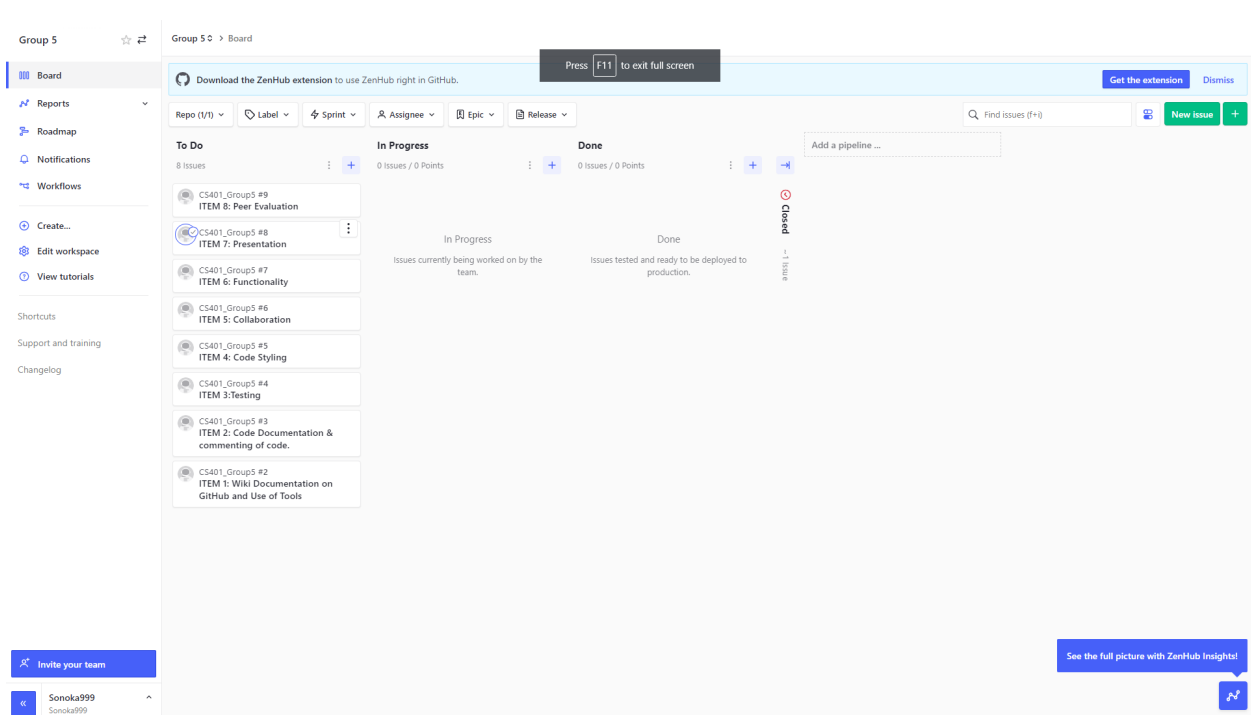
## Frameworks/Services/Cloud/Backends

We will definitely need some sort of GPS functionality. The android library should have GPS functionality for what we need. Other than that, we might want to store our database on something like AWS or Firebase.

## Testing

We will experiment by setting a specific number of steps to walk as a goal. For instance, Jonas wants to set a goal to walk at least one hundred steps from house one to house two. Once he stops in the middle of his tracks, the app stops counting. At the end of the day, the results of the total amount of steps show up in the "stats" section of the app.

## Schedule



So far, we have just decided on the tasks to be allocated, and created the task board. We will soon allocate tasks.

## Dependencies

Various android libraries including GPS, etc. Firebase