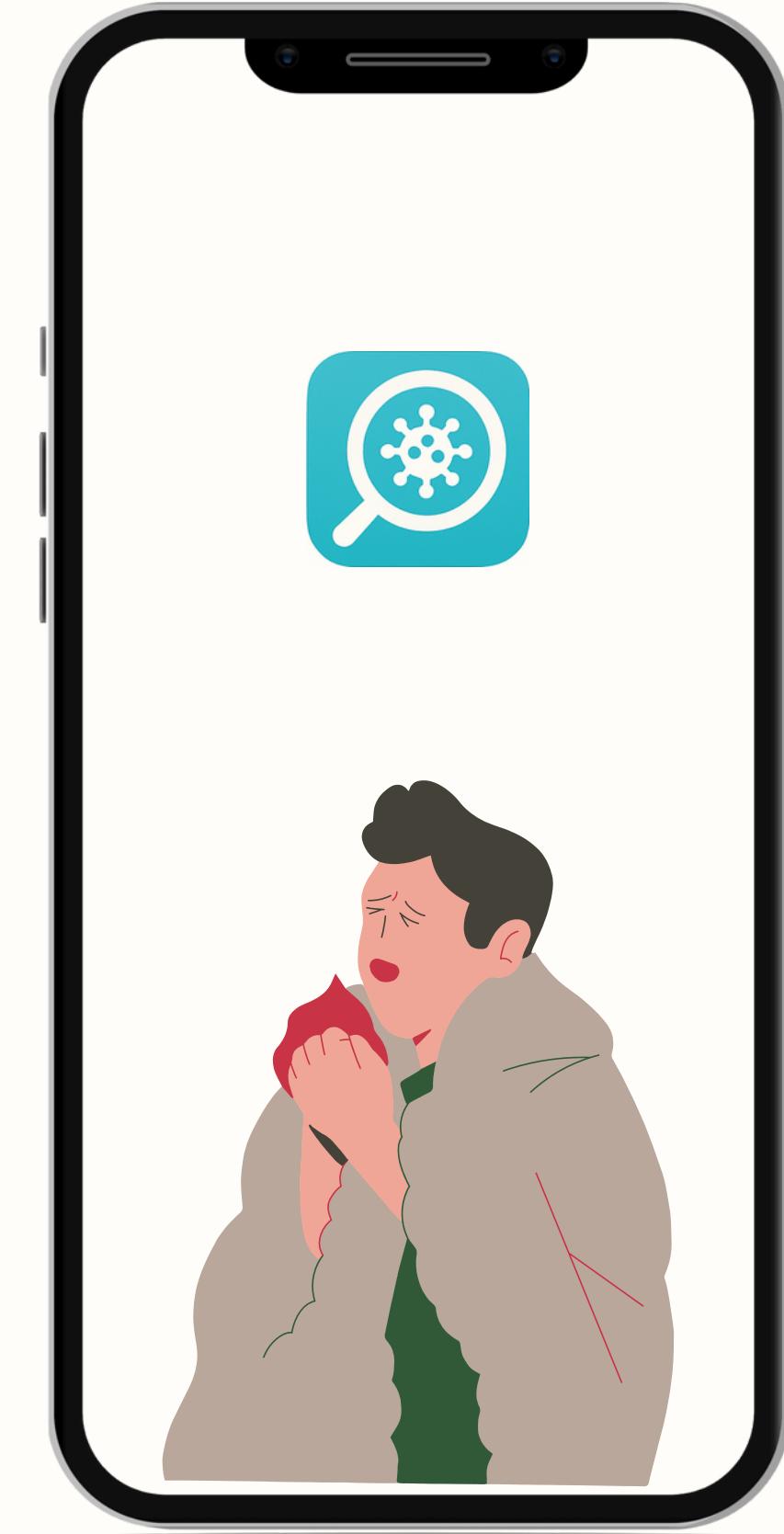


Allergytics

Turning Allergy Data into Daily Insight

Team 7: Arive Maynes, Ming-Lun Lee, Yuna Watanabe



Overview

- GitHub Repository Link
- Step-by-step App Walkthrough
 - Log In
 - Sign Up
 - Overview Screen
 - Map
 - Trends
 - History
 - Add Allergy Record Screen
 - Profile Screen



Purpose - What Is Our App?

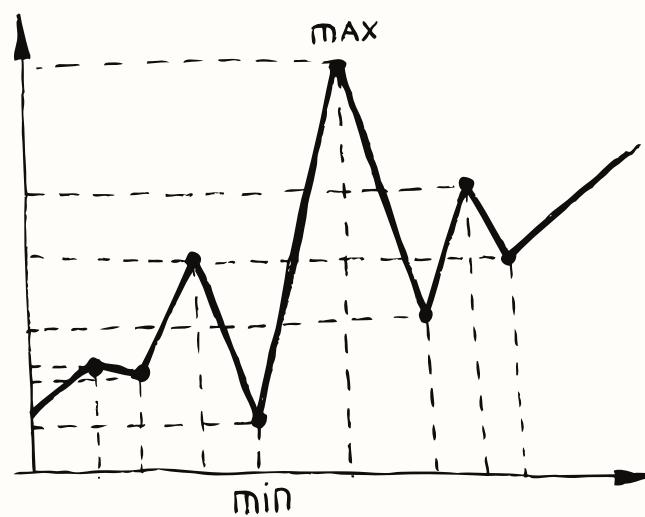


1

Track and record allergy symptoms and possible triggers

2

Document the specific location of symptoms for better tracking



3

Visualize allergy trends by triggers, severity, and frequency



GitHub Repository Link

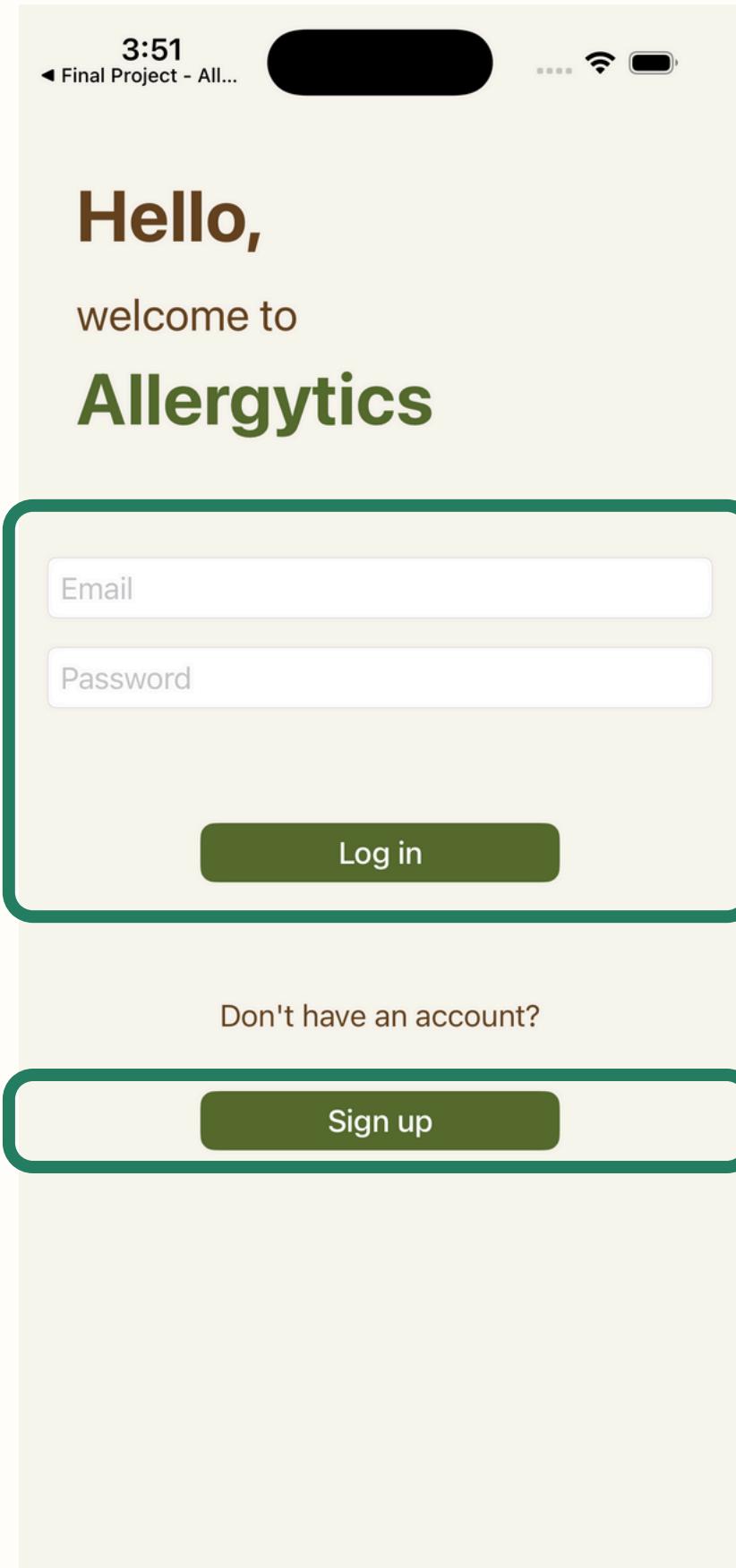
Link: <https://github.com/Ellen0120/Final-Project-Allergytics>

Important Note

Before running the app on a simulator, make sure to have the settings for location activated

Simulator → Features → Location → Custom Location
(coordinates can be random, as the code has test coordinates set)

Log in Screen



1

Enter credentials

When user clicks on the log in button, it checks the following and shows respective alerts:

- Empty fields
- Invalid email
- Invalid credential

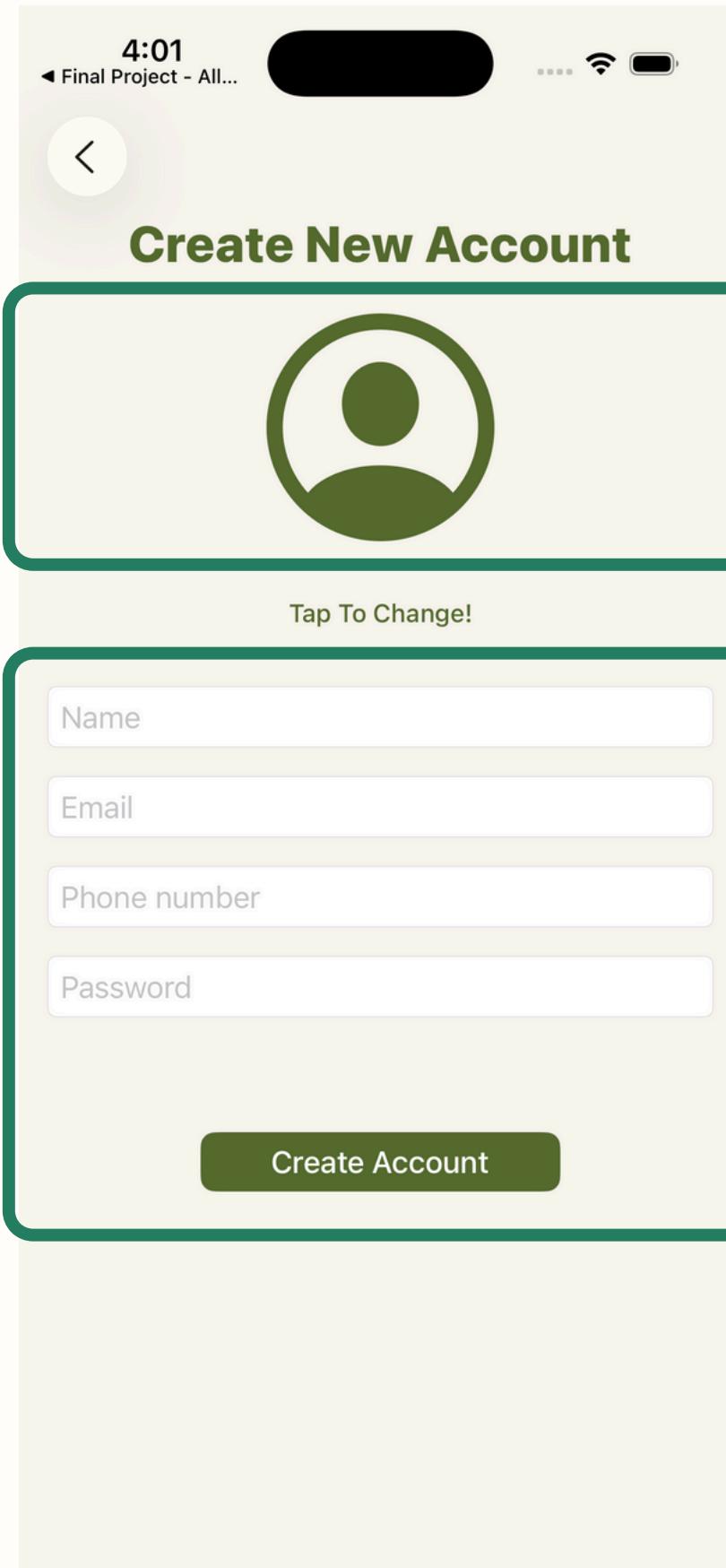
If it passes all checks, navigates to the overview (map) screen.

2

Sign Up Button

Navigates to the sign up screen.

Sign Up Screen



1 Photo picker

When user taps the default icon, it shows a menu, and users can select either camera or gallery. It then shows camera screen or photo gallery, and users can upload a photo. The photo is uploaded to Firebase storage when user clicks on the “create account” button.

2 Enter account info

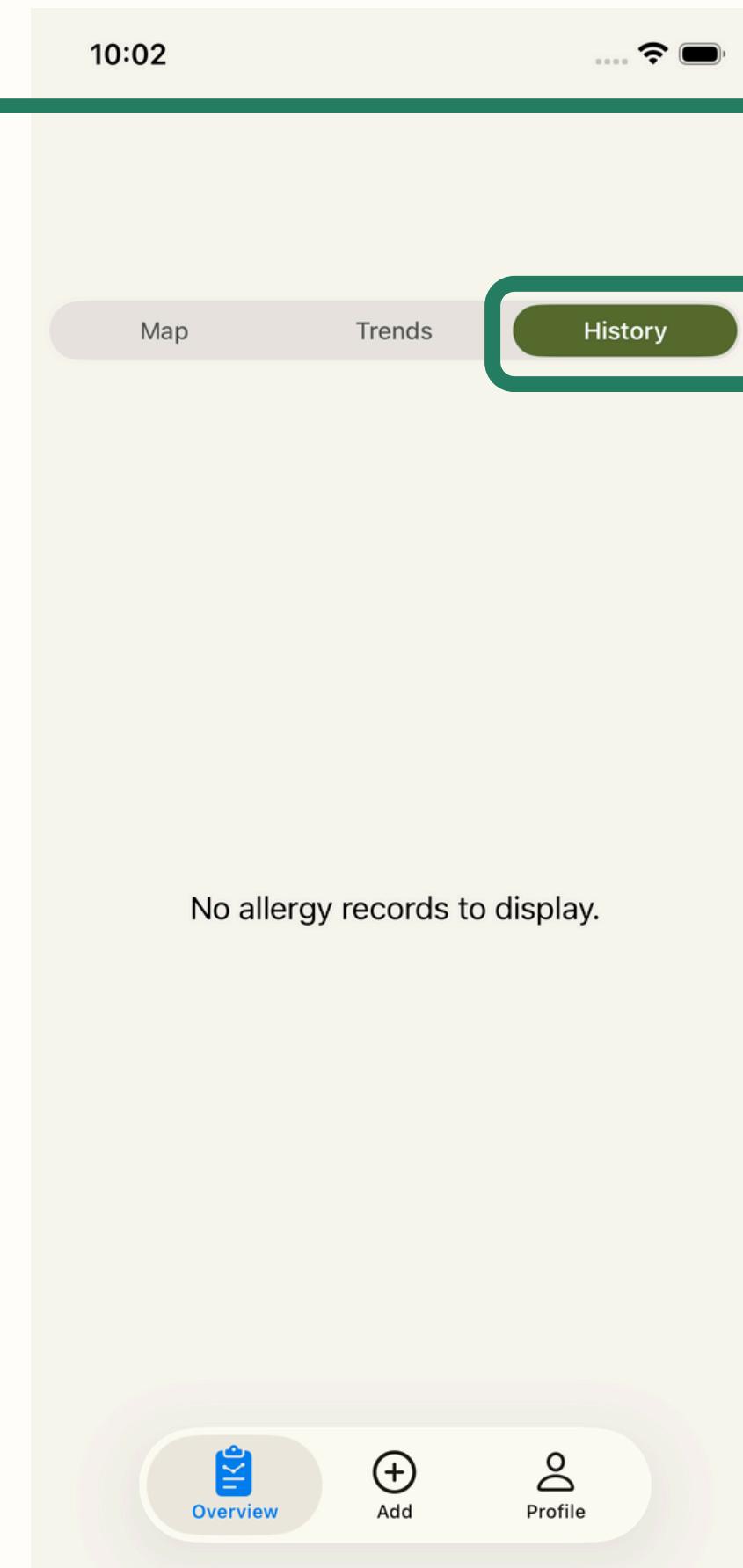
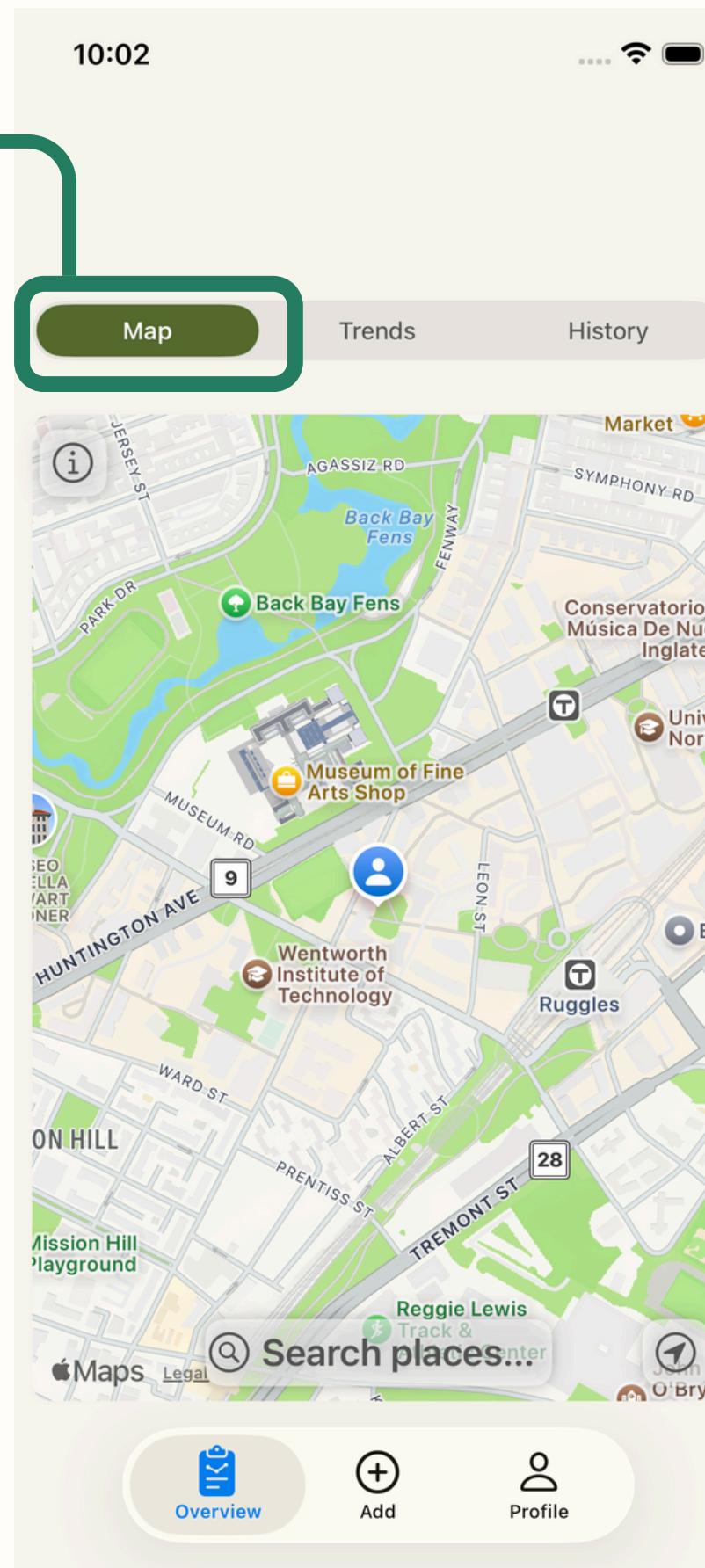
Once users click on the “create account” button, it checks the following and show respective alerts:

- Empty fields
- Invalid email
- Invalid phone number (must be 10 digits)

Once it passes all checks, it registers user’s email and passwords to Firebase Authentication and saves account information to Firestore.

Overview - Map, Trends, History

1
Map Tab



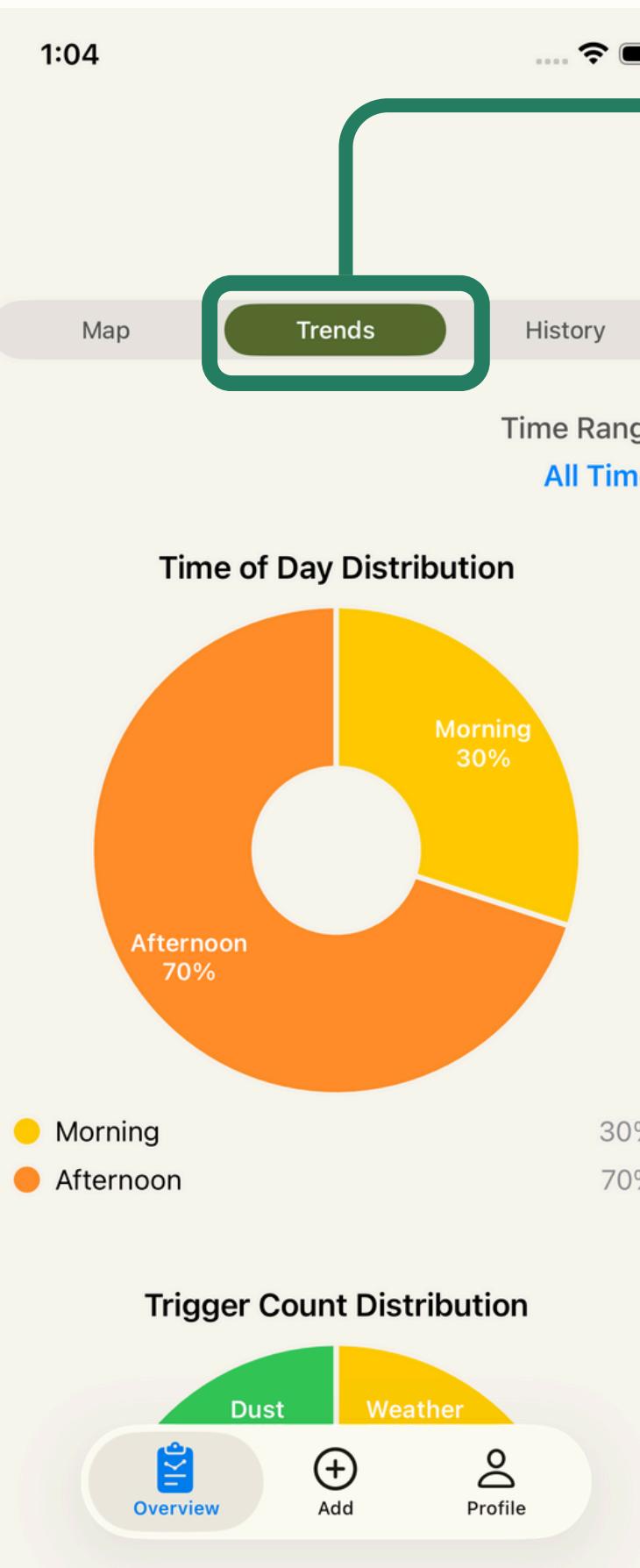
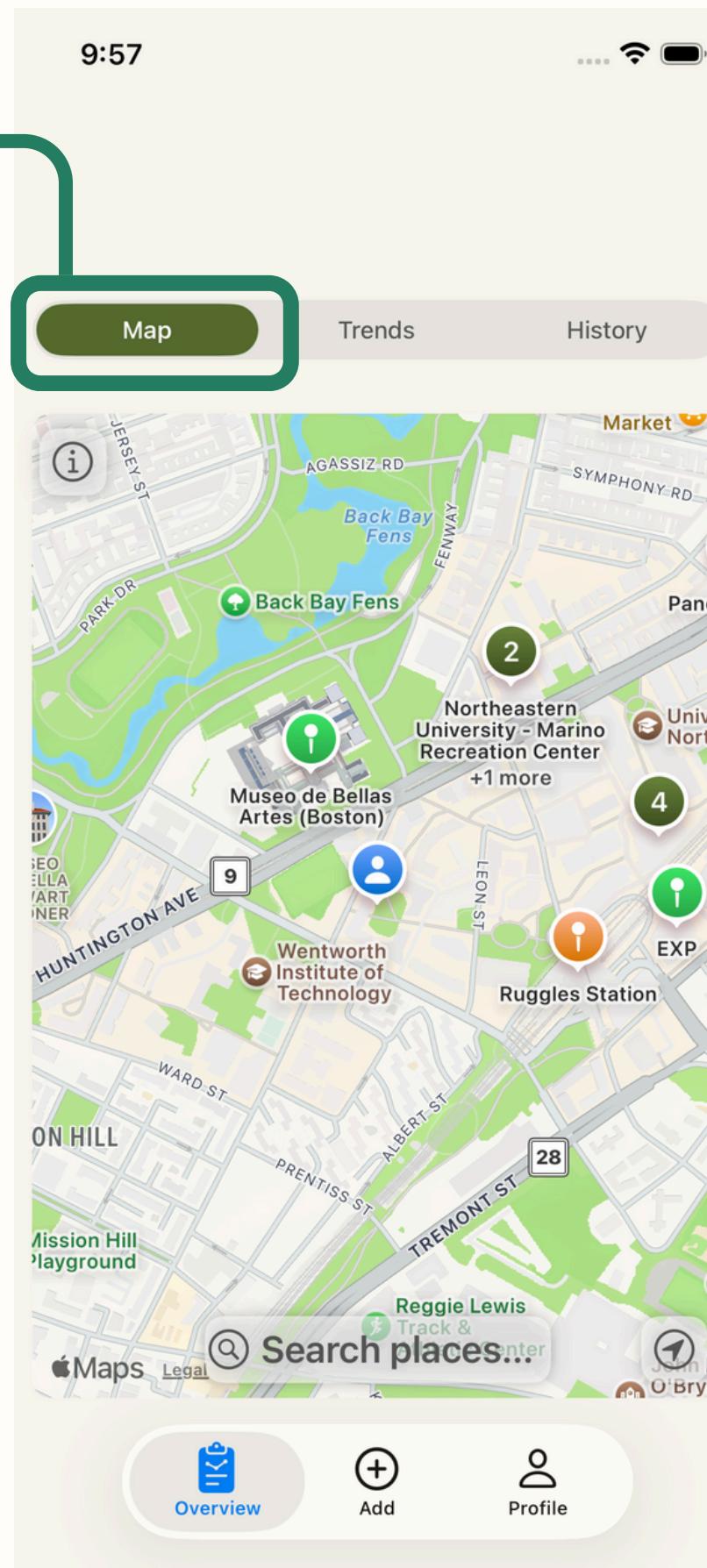
2
Trends Tab
3
History Tab

Initial Load for New User → No data to display

Overview - Map, Trends, History

1

Map Tab



2

Trends Tab

3

History Tab

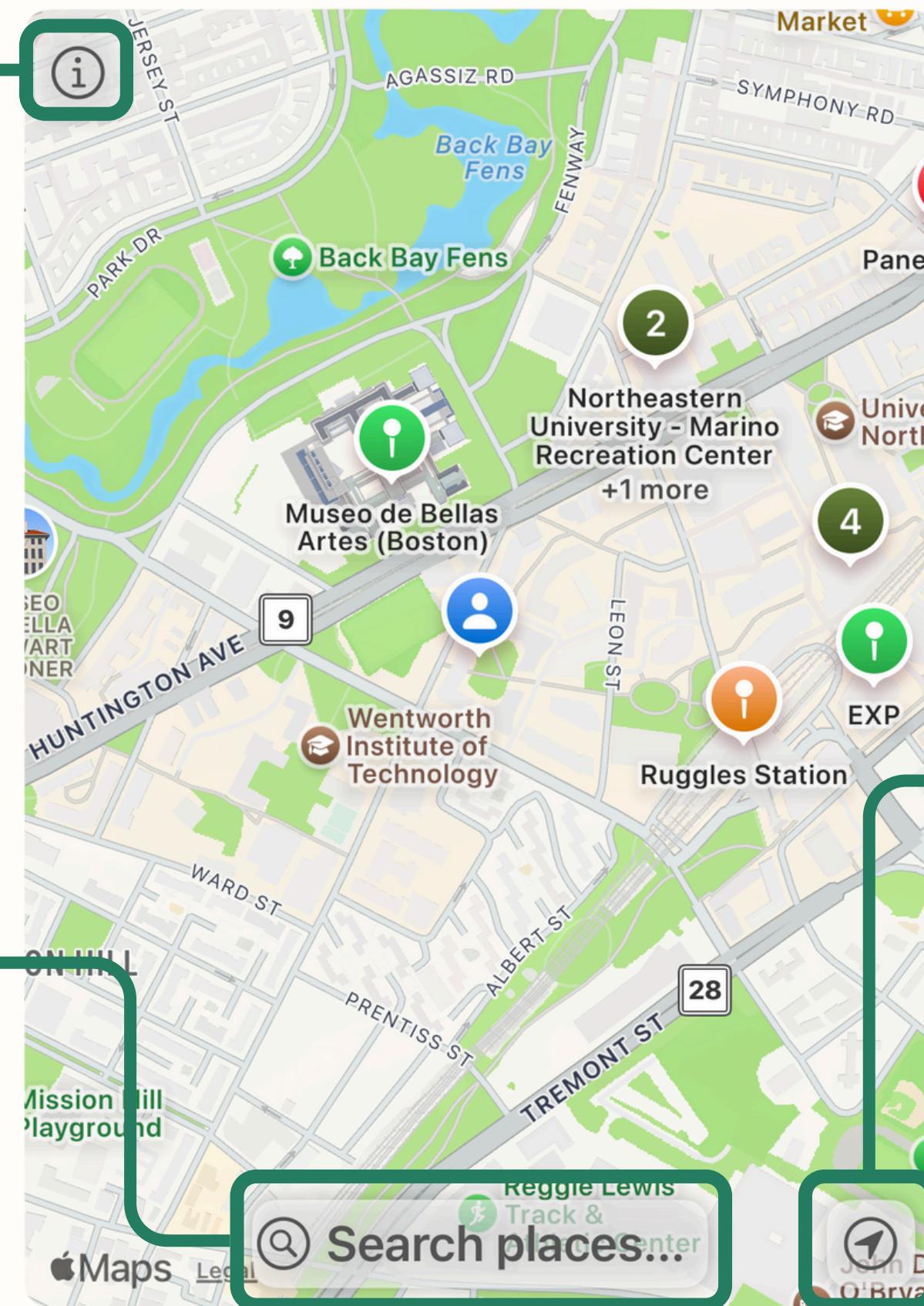
Load for User With Record History to Display

Overview - Map Screen

Legend Information

Shows the legend for the meaning of pin colors displayed on the map.

2



Search Nearby Places

Displays a bottom screen when tapped so the user can search for nearby places on the map.

3

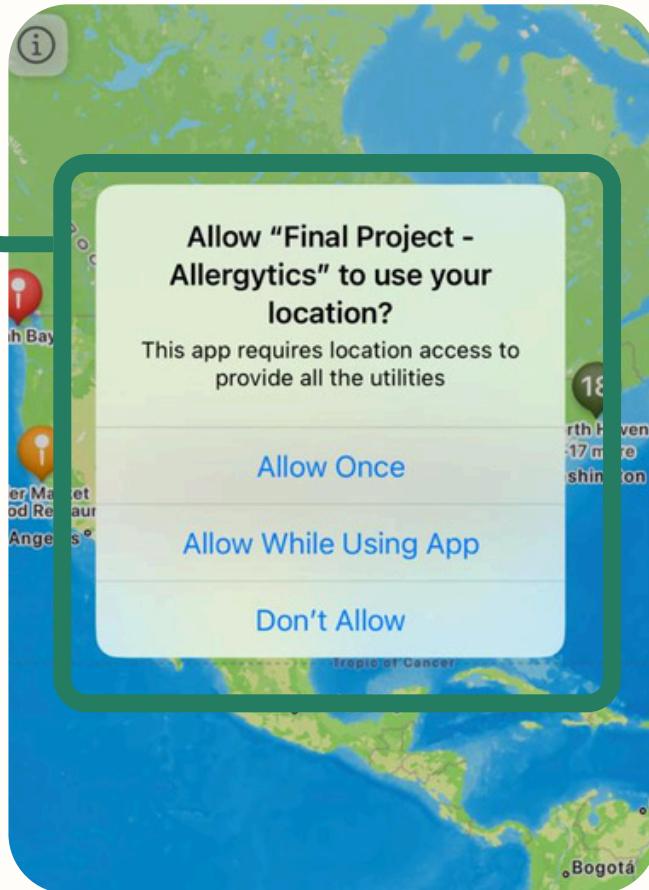


Center Location

Tap button to center the Map View on the user's location.

+

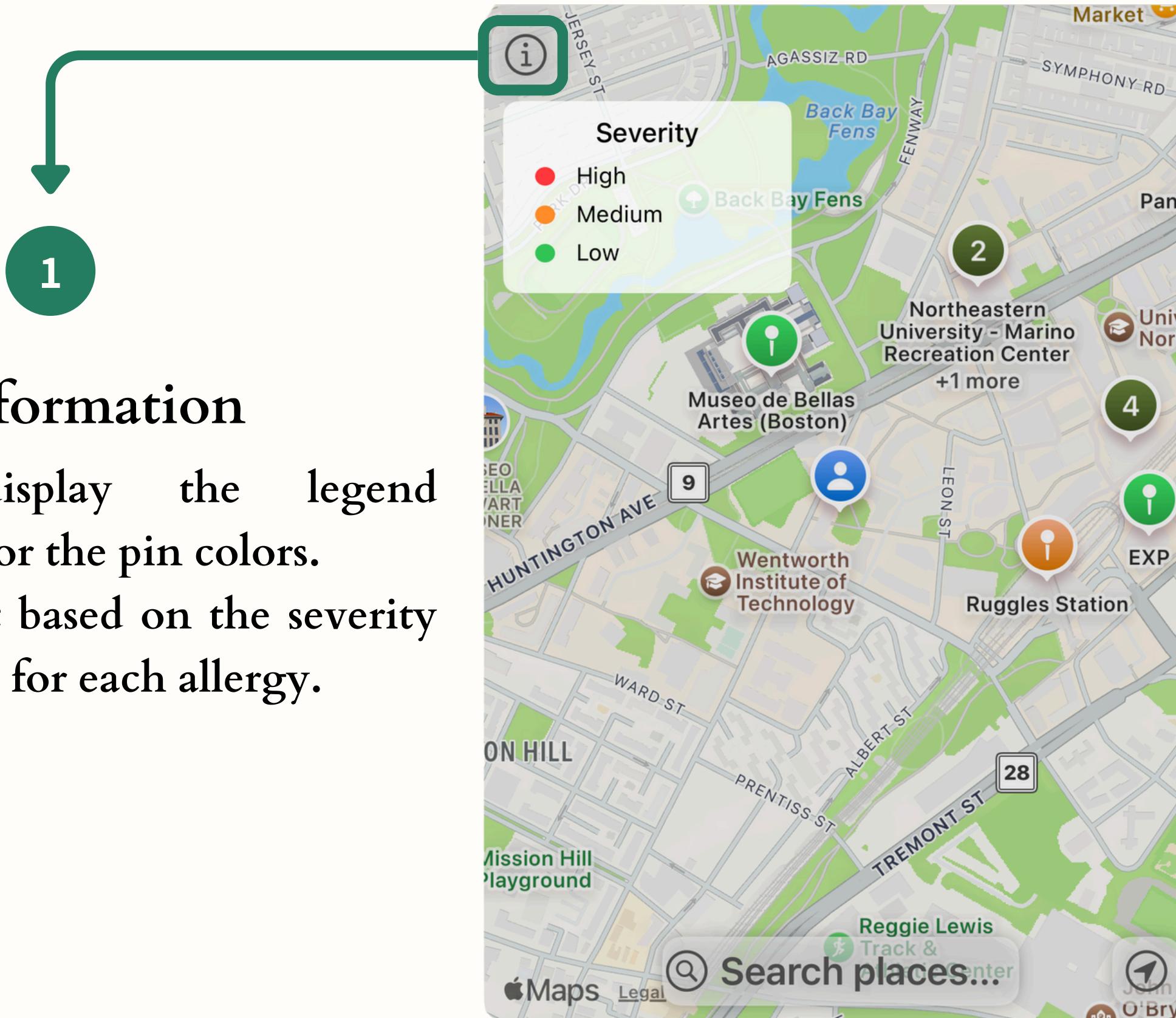
Prompt to allow location access will show up the first time the user runs the app.



Overview - Map Screen

Legend Information

Tap to display the legend information for the pin colors.
Colors are set based on the severity level recorded for each allergy.



Overview - Map Screen

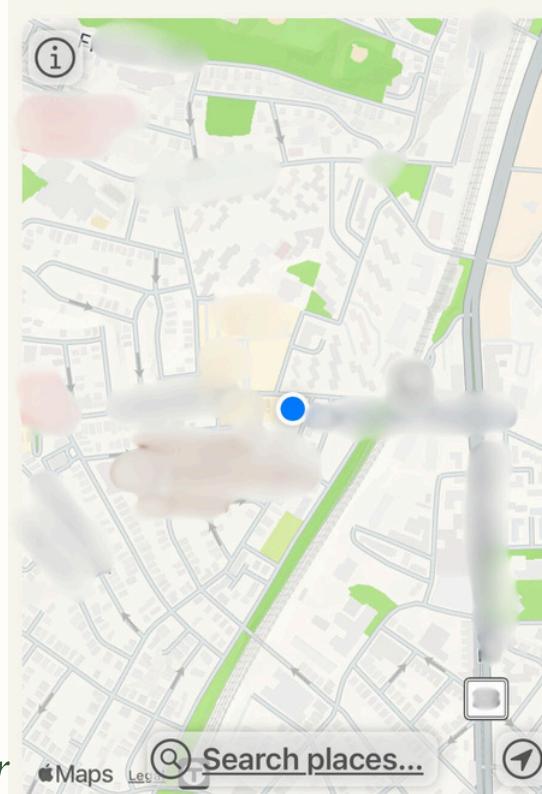
User Location

Simulated location beacon.

Shows the user's simulated location when the app is run on a simulator.

Shows the current location when the app is run on a real device.

Demo on Phone



Note: Image details have been blurred for the privacy of the user

1



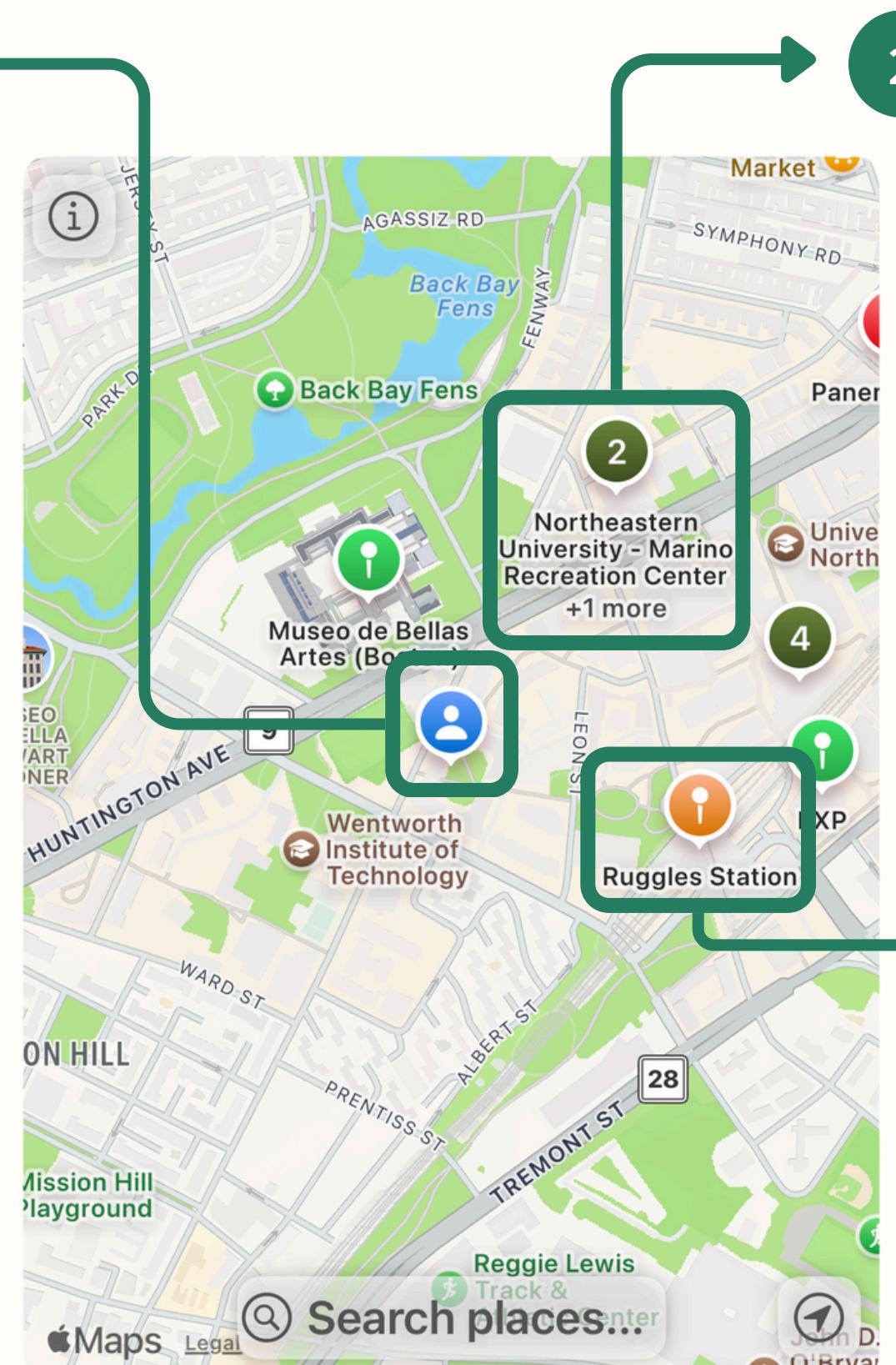
2

Cluster of Pins

Shows pins that are in the same or close location.

The number indicates the number of pins that have been grouped.

When clicked, it zooms in to show the pins in that location.



3

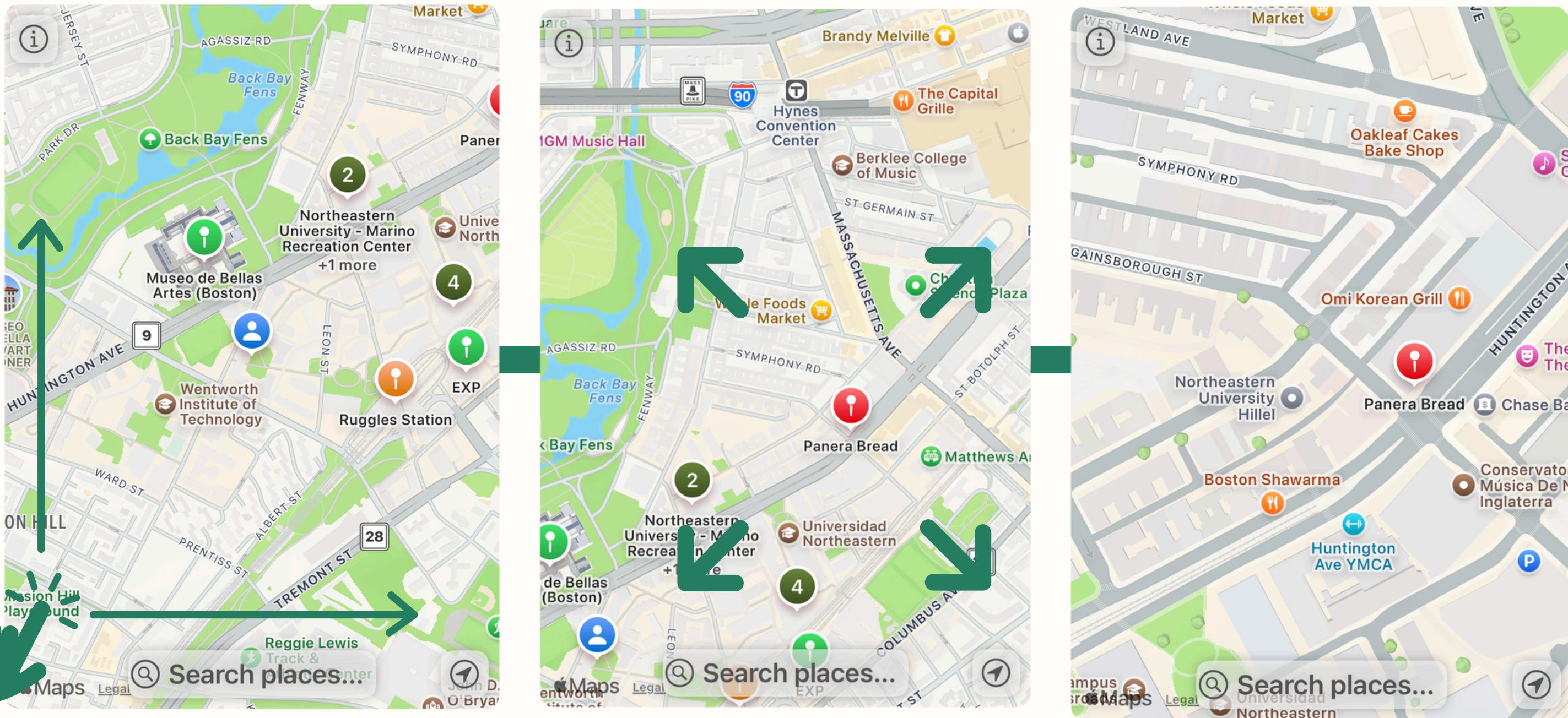
Single Pin

Shows the record saved in that location.

Color-coded by severity.

Tap to see details and edit information.

Overview – Map Screen



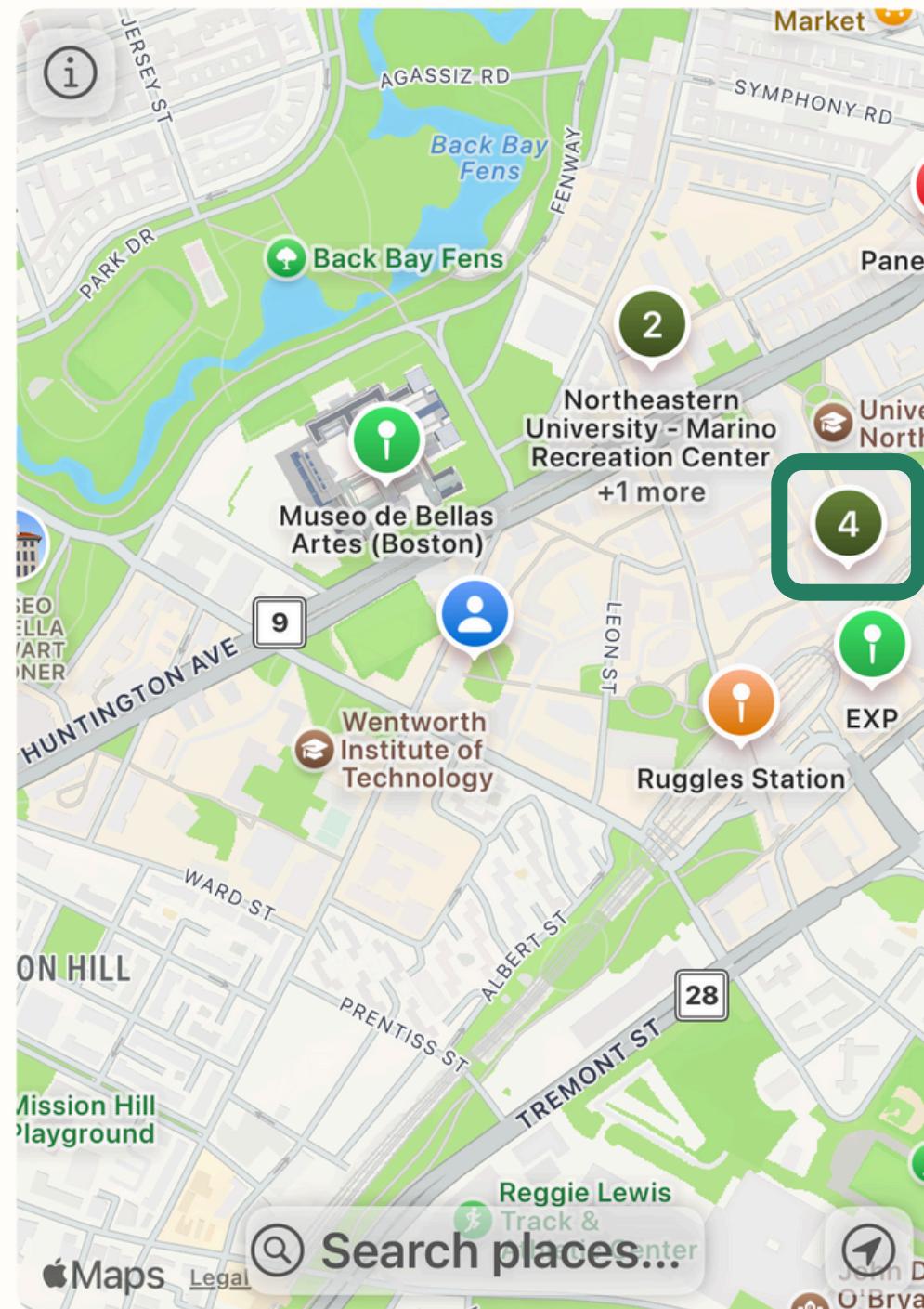
Move Visible Area

Move around the map to see the rest of the map and allergy records in other locations.

Zoom Option

Zoom in and out of the desired location inside the map.

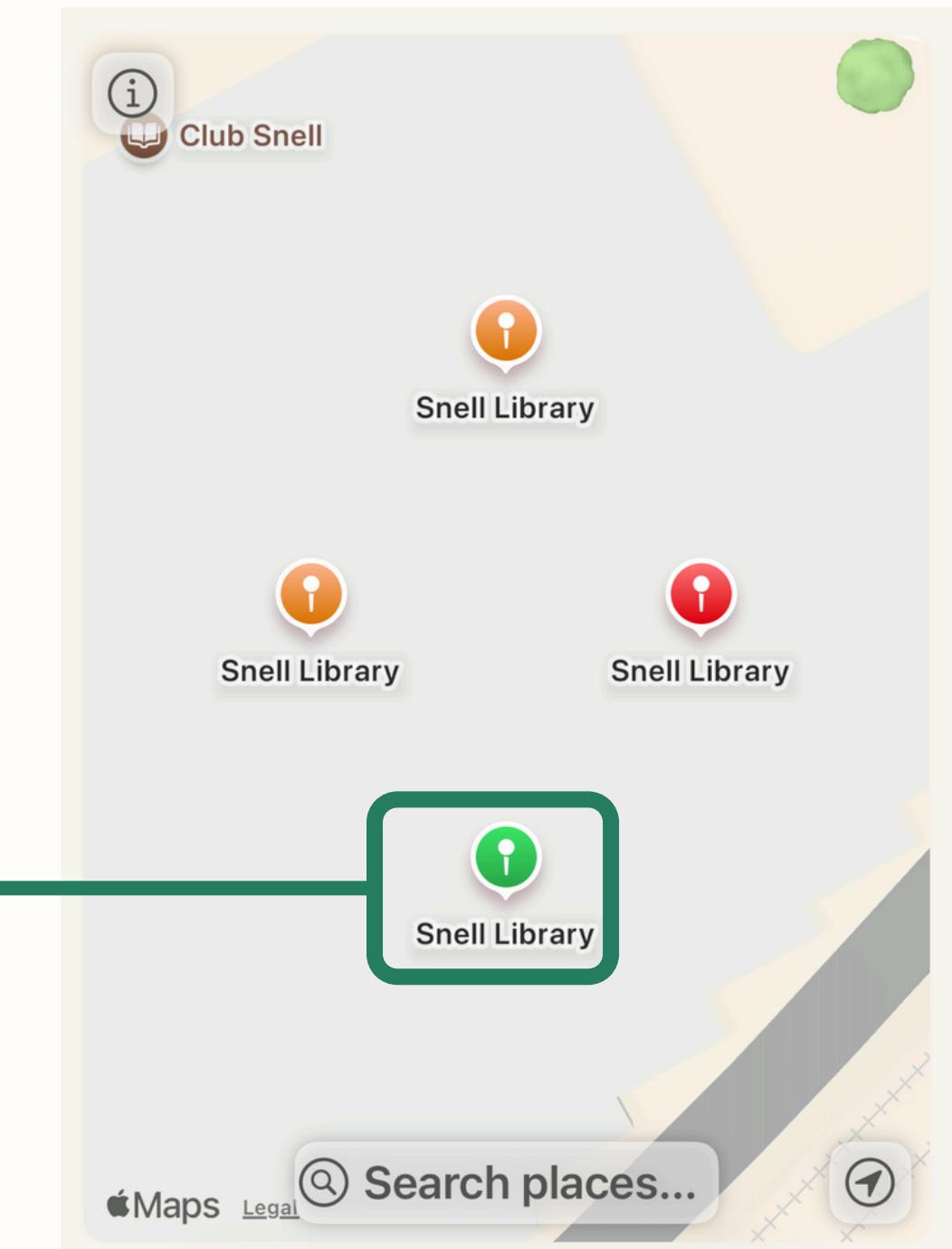
Overview – Map Screen



1

Cluster of Pins

Tap to zoom in and see the individual pins in that location.

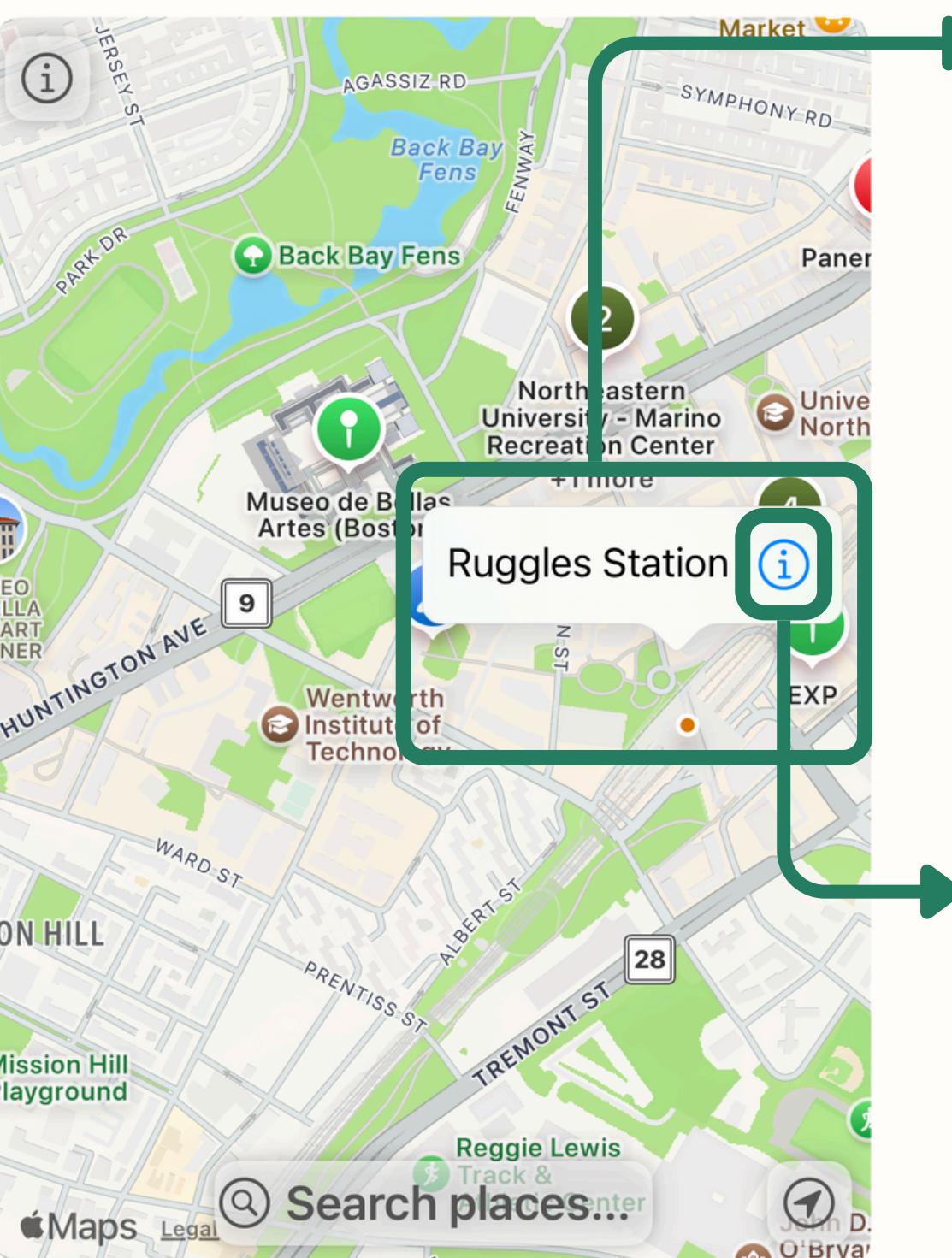
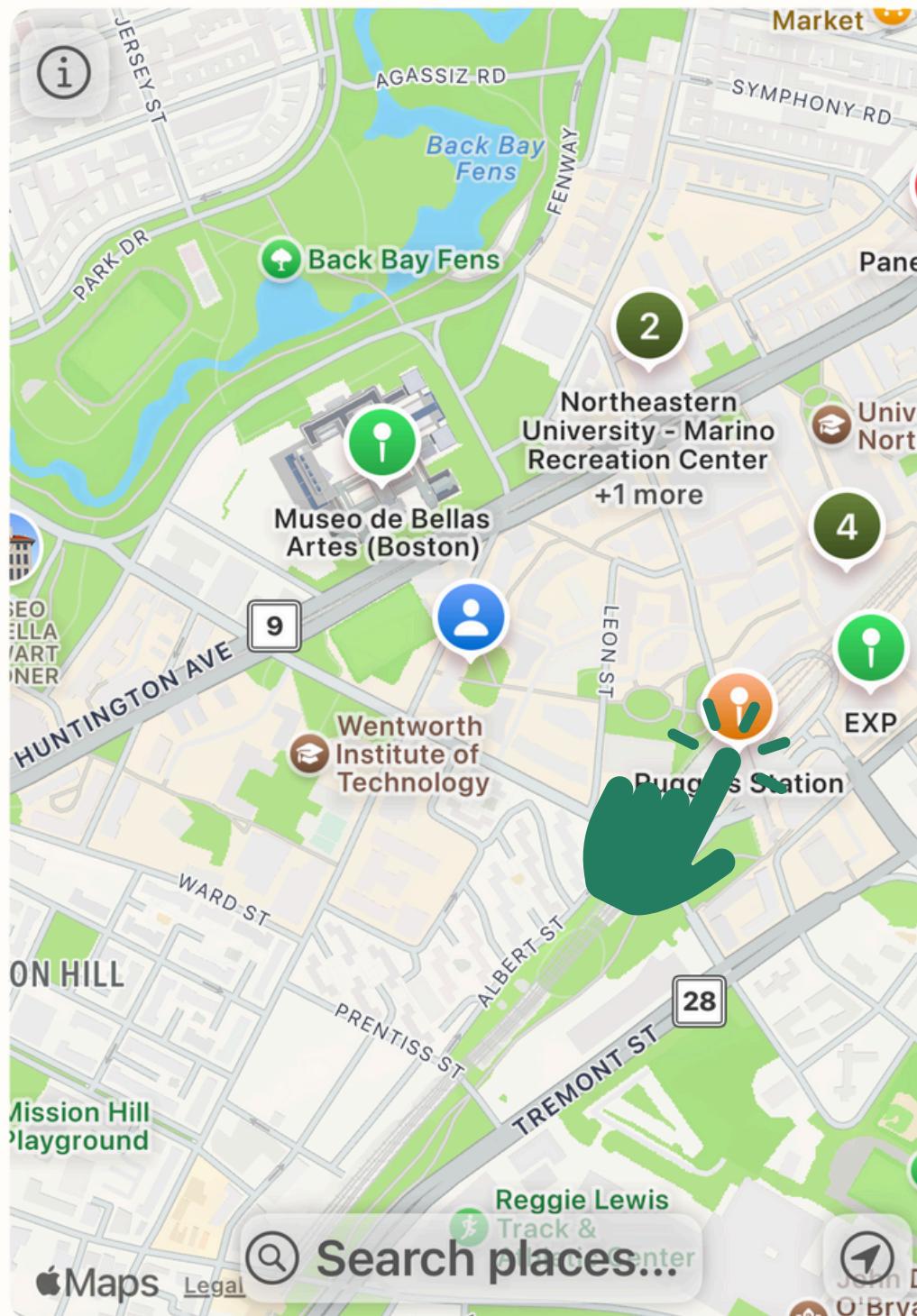


2

Single Pin

Tap to view and edit the record.

Overview – Map Screen



1 Single Pin Information

Shows the location where the record was saved.

2 Information Button

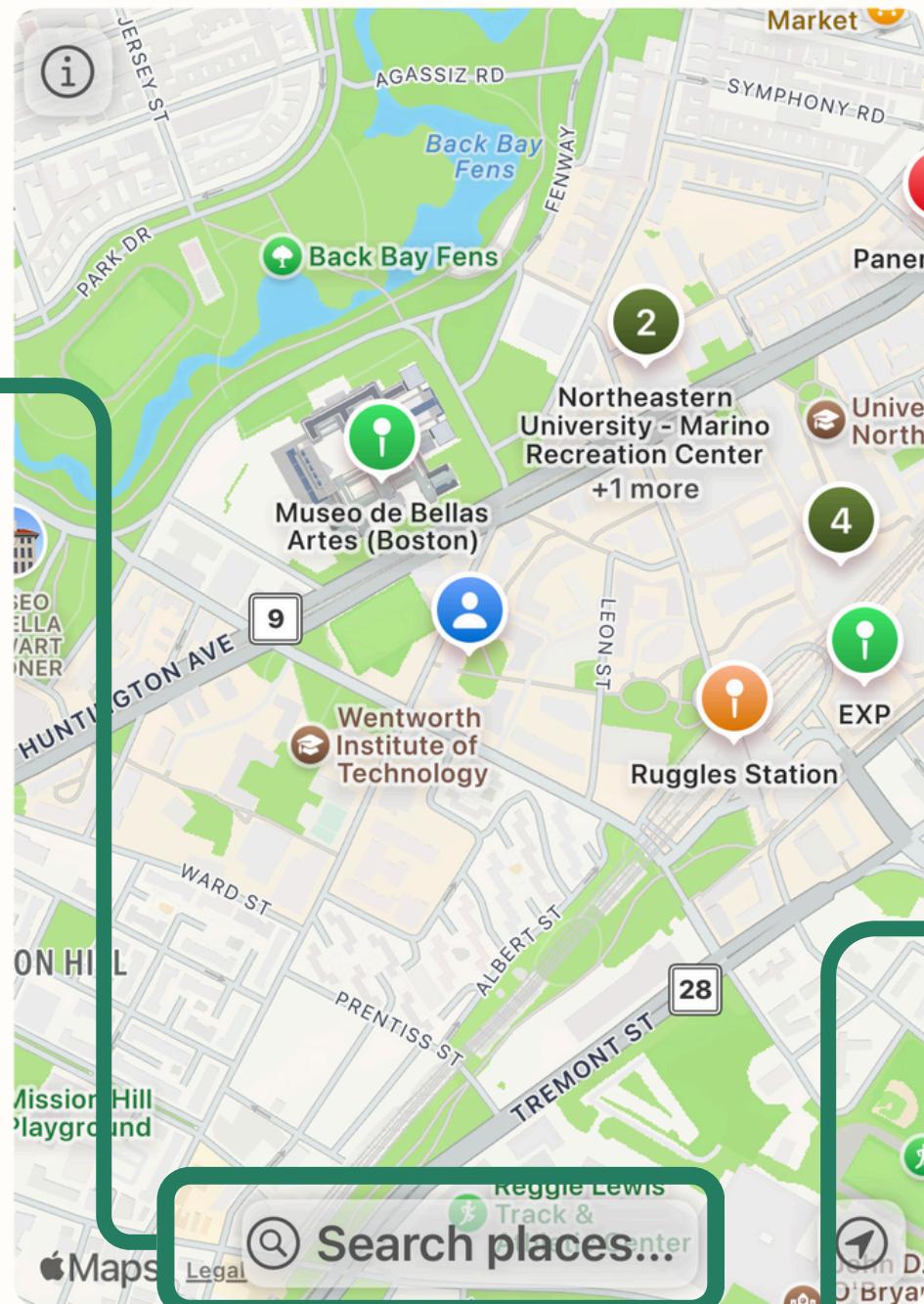
If 'i' button is tapped, it allows users to navigate to View & Edit Allergy Screen, which will be described in slides 22 & 23.

Overview – Map Screen

Search Nearby Places

Tap to see the bottom screen and be able to enter the desired location.

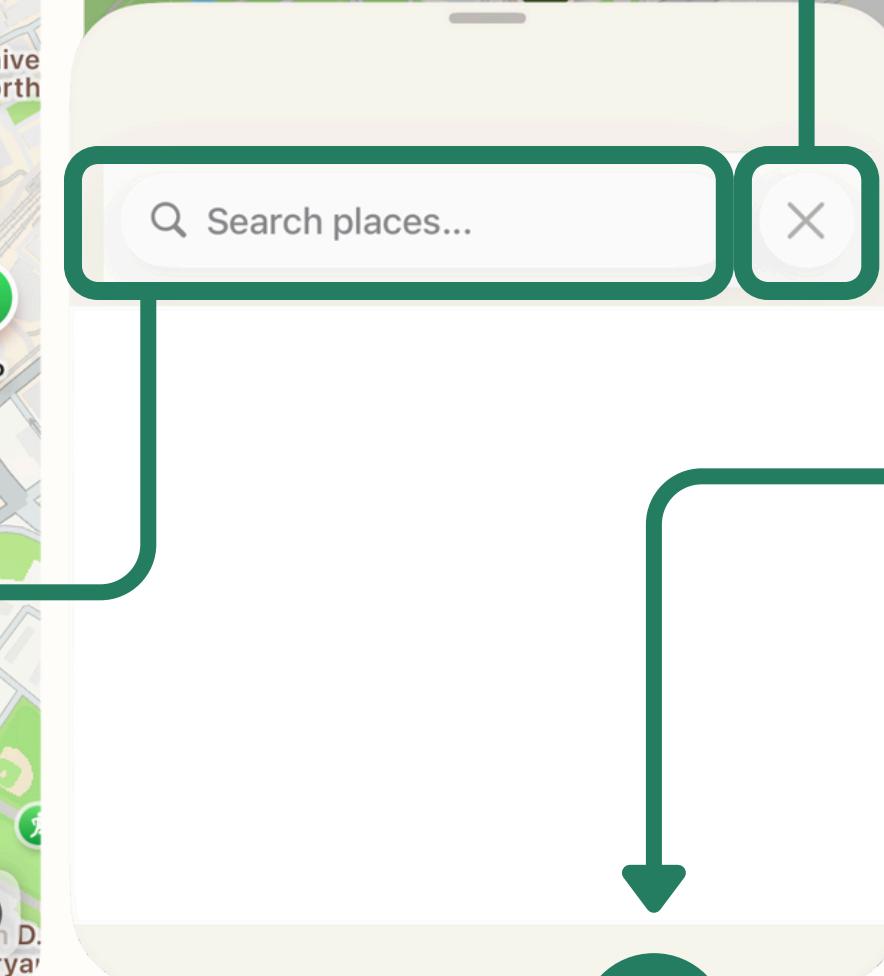
1



Search Text Field

Enter the name of the place.

2



3

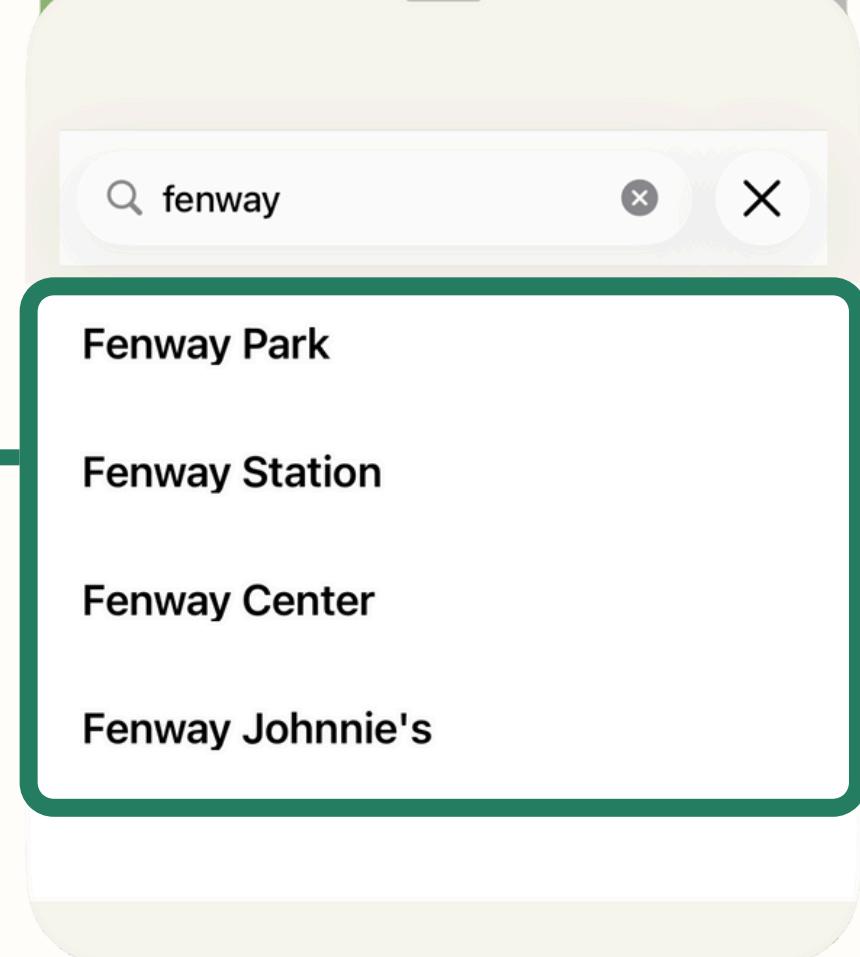
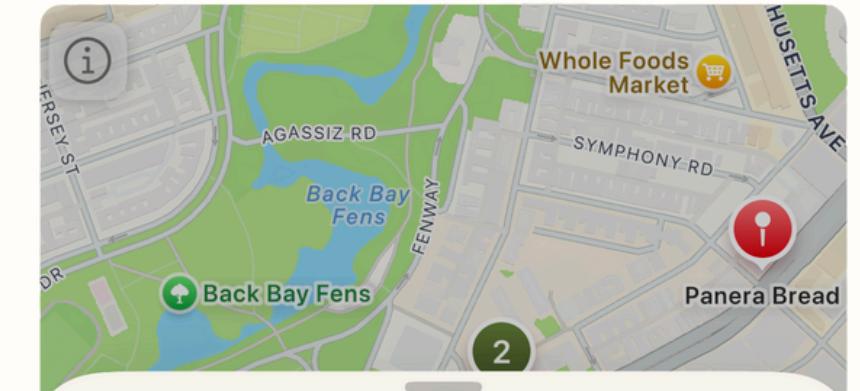
Search Results

As the user types, results related to the input in the text field will show up.

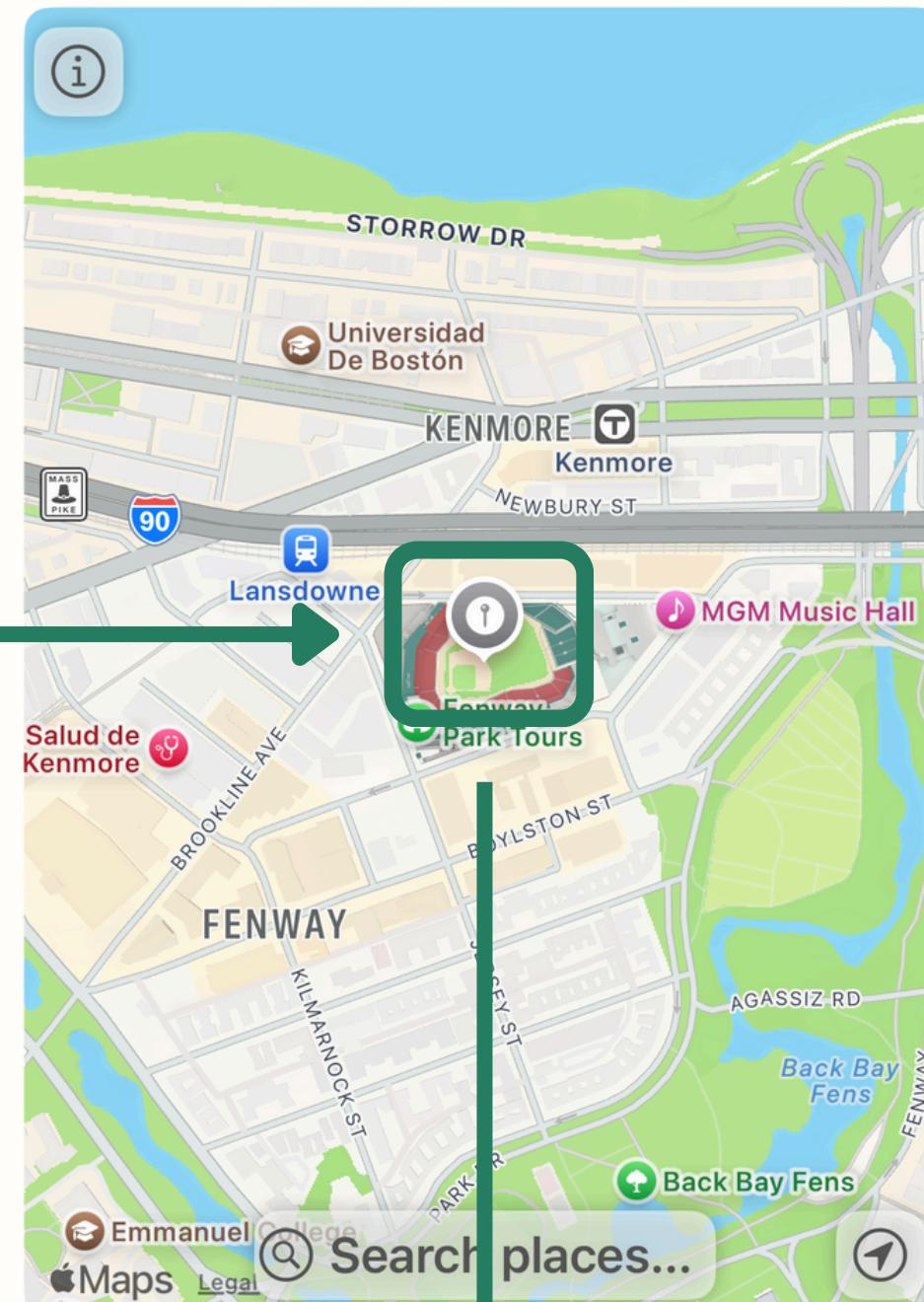
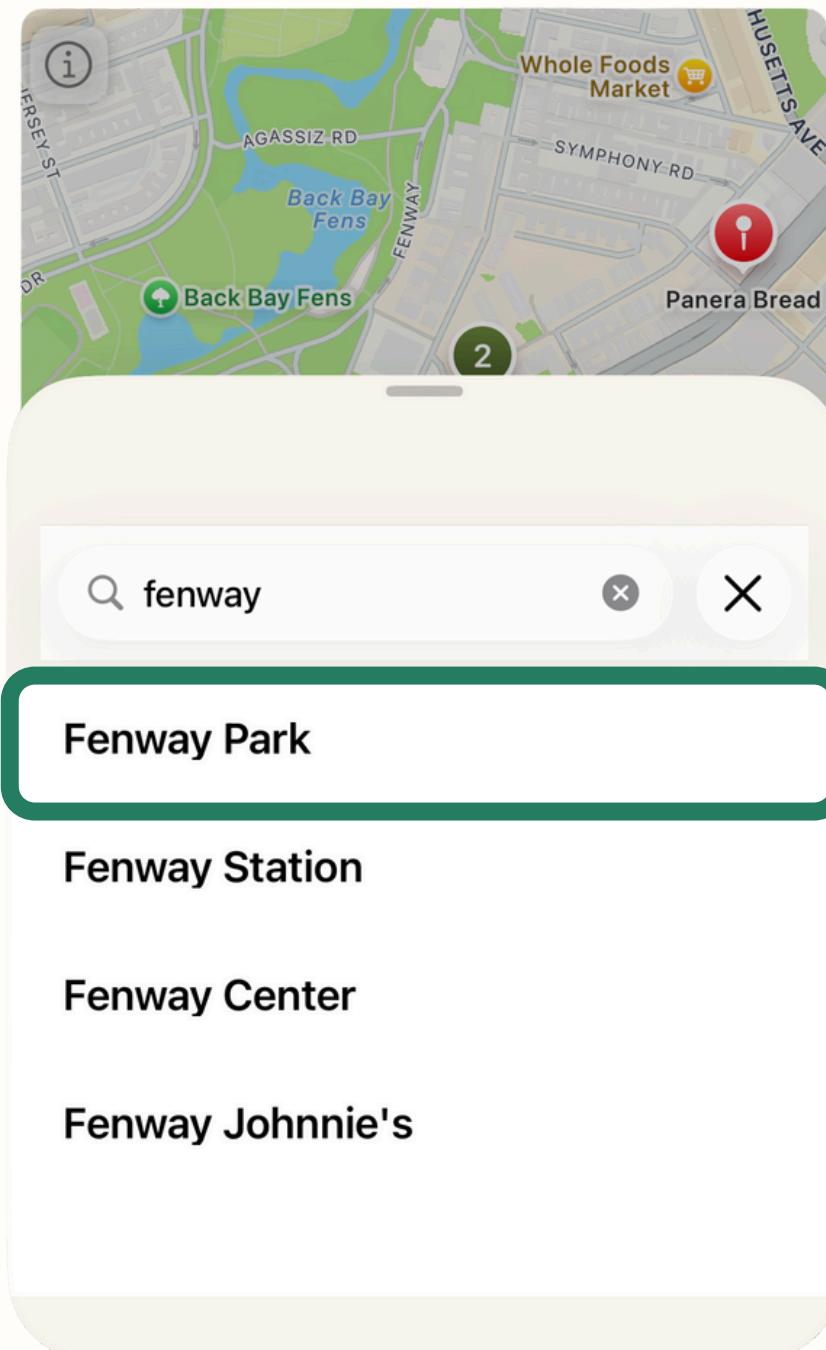
3

Cancel Search

Collapses search screen.



Overview - Map Screen

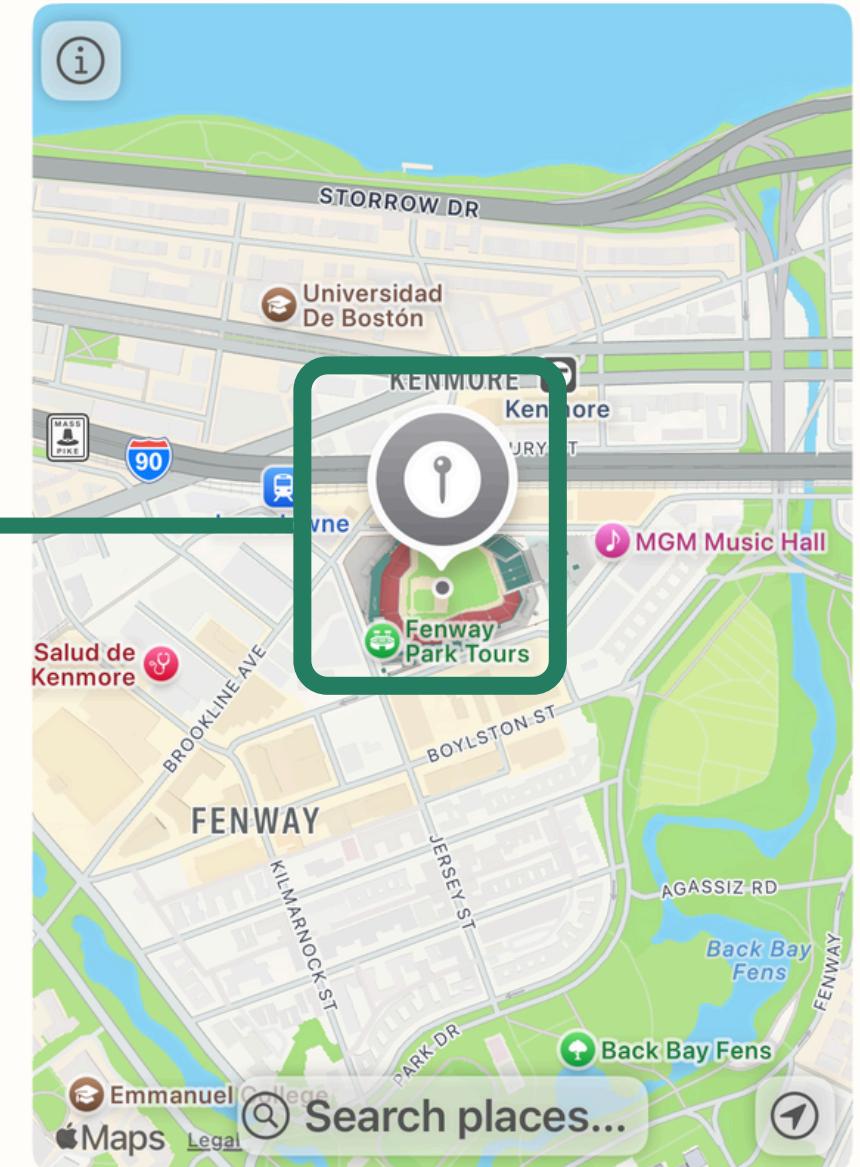


Search Result Pin

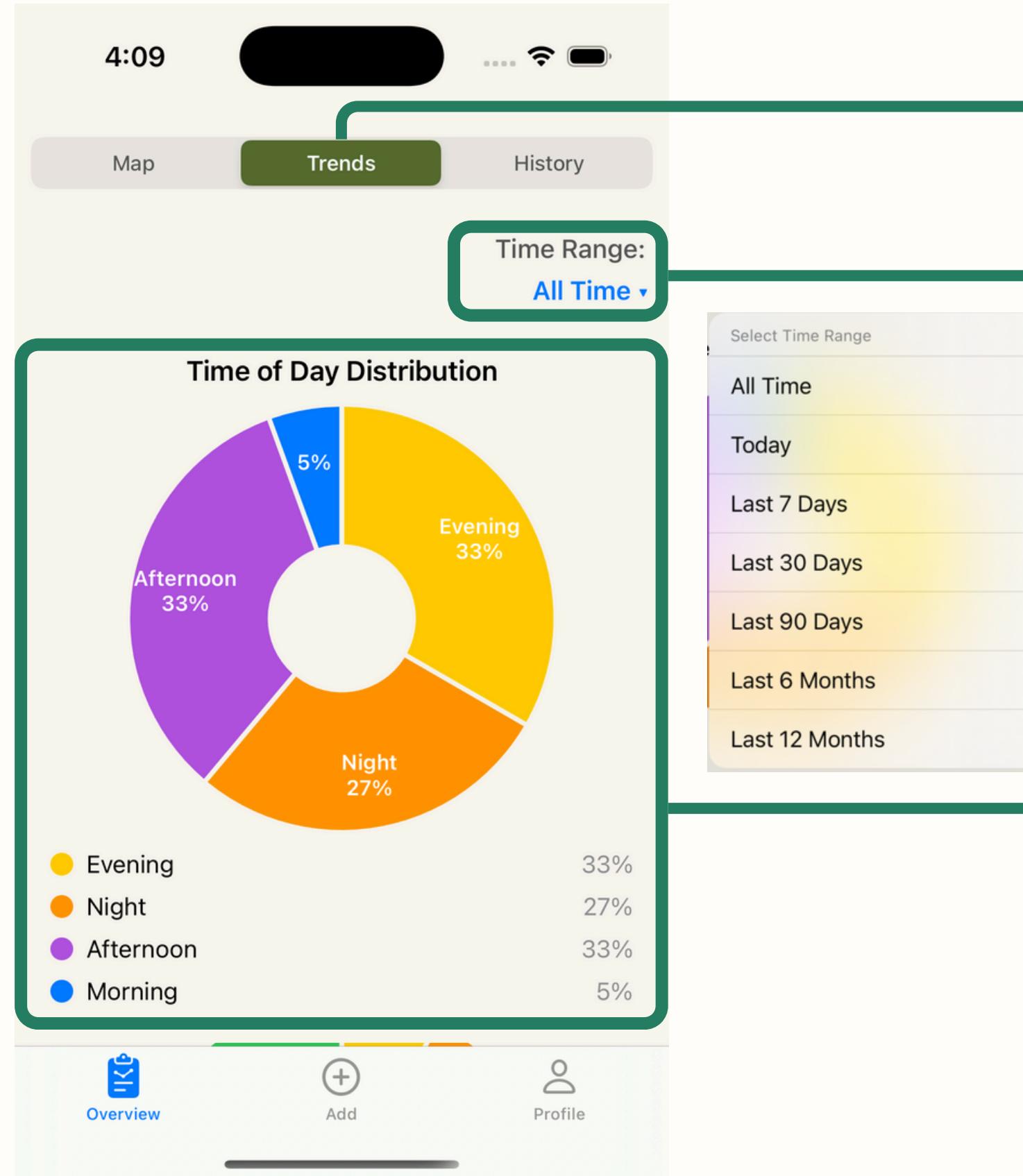
Shows a pin on the selected location from the search screen.



Searched pins are view-only without interaction.



Overview – Trends Screen



1 Trend Tab

2 Time Range Filter

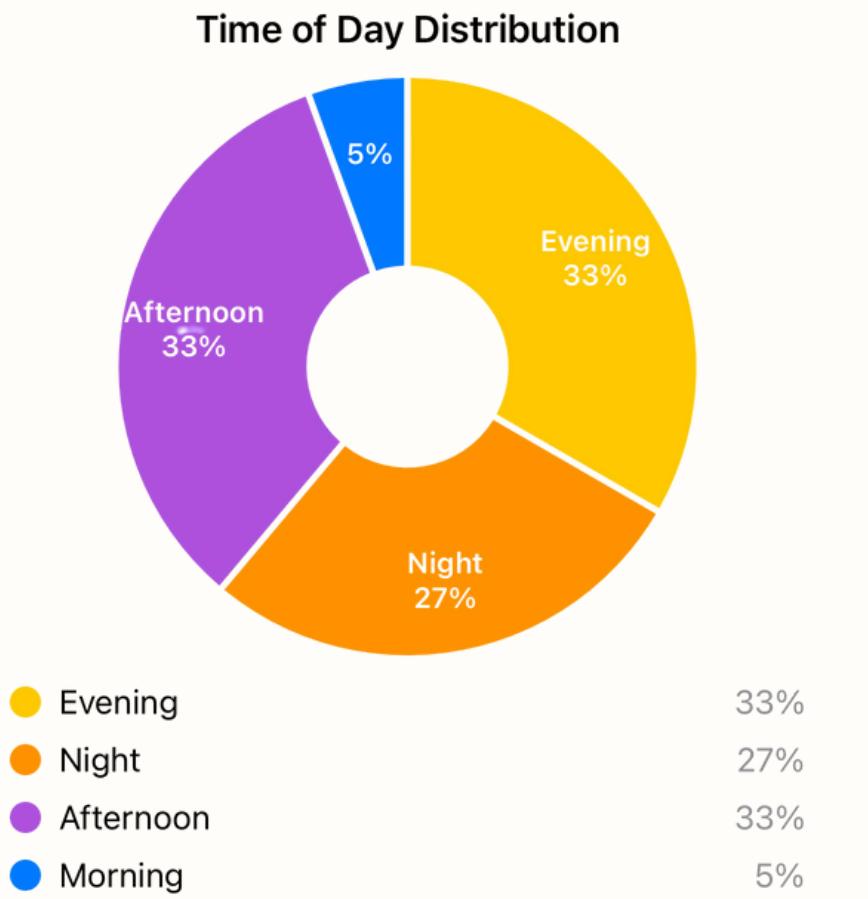
Tap the Time Range menu to choose how much history you want to see.

Your charts will update automatically based on the range you pick.

3 Trend Chart

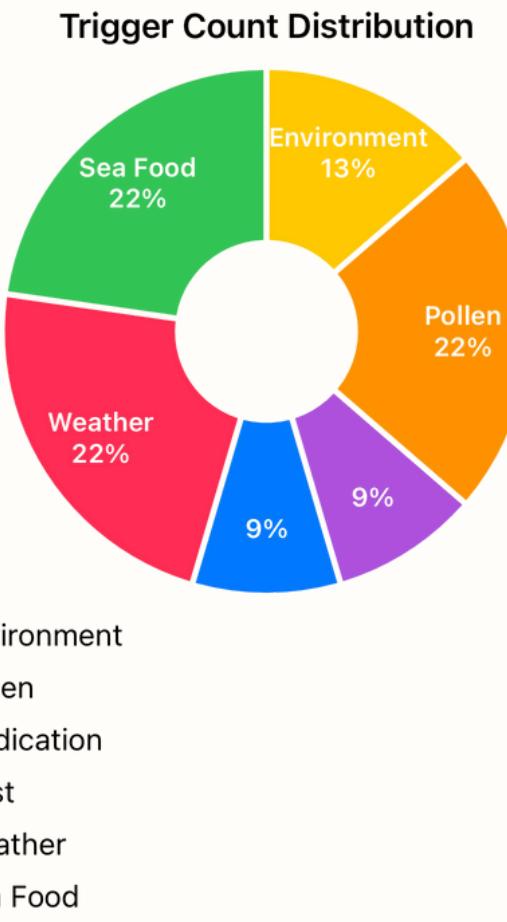
- Time of Day Distribution
- Trigger Count Distribution
- Symptom Count Distribution
- Severity Distribution

Overview – Trends Screen



Time of Day Distribution

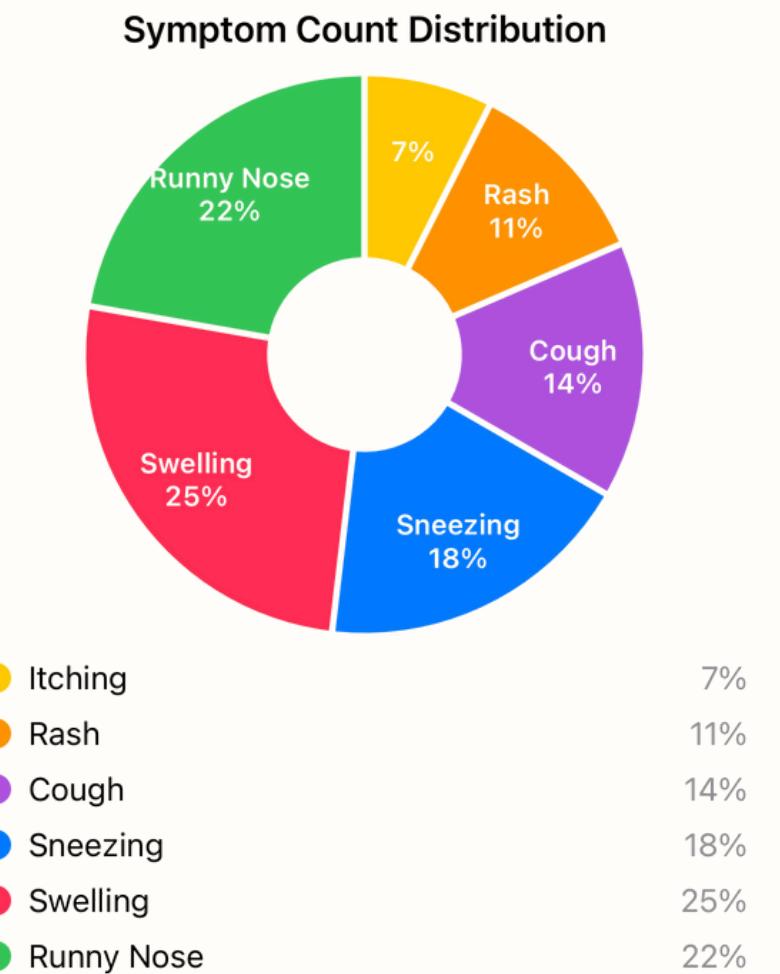
Shows when your allergy reactions occur most often. This helps you spot daily patterns and understand which times of day may require extra caution.



Trigger Distribution

Shows how often each trigger appears in your records. This helps you identify your most common allergens and what to avoid more carefully.

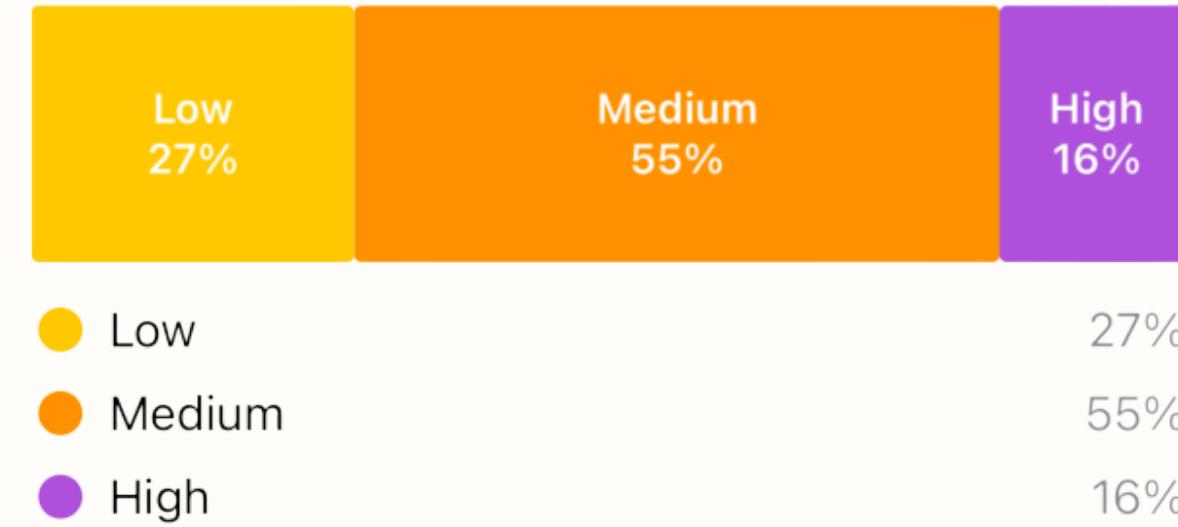
Overview – Trends Screen



Symptom Distribution

Shows how often each symptom appears in your records. This helps you recognize your most common reactions and monitor changes over time.

Severity Distribution



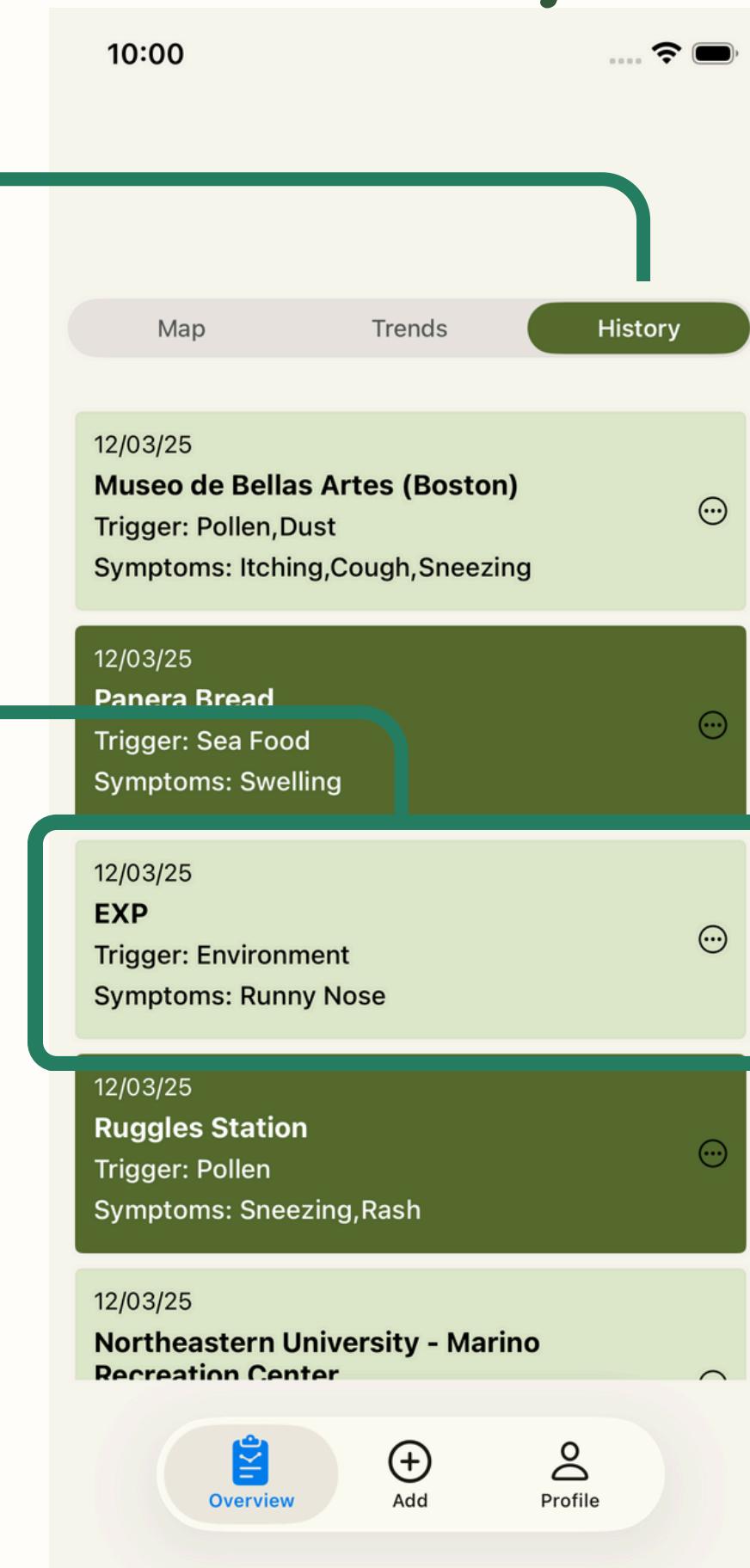
Severity Distribution

Shows how frequently reactions fall into Low, Medium, or High severity. This helps you track overall symptom intensity and notice if reactions are becoming more serious.

Overview - History Screen

History Tab

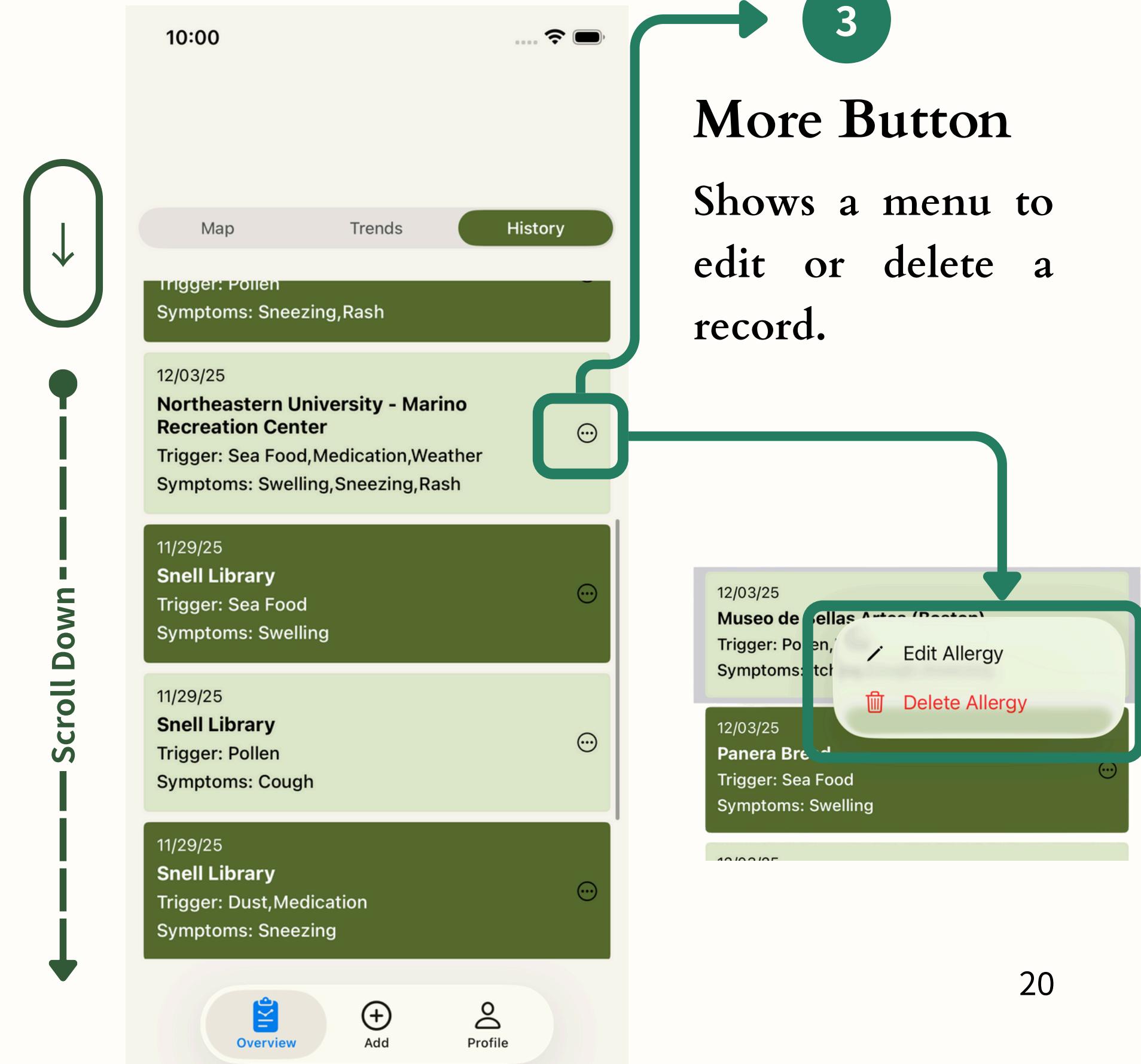
1



Record History

Shows the user's saved records in table format.

2



3

More Button

Shows a menu to edit or delete a record.

Overview – History Screen

Date

The date the record was saved on.

1

Location

Name of the location where the allergy was registered.

2

Trigger & Symptoms

List of all triggers/symptoms registered.

3

12/03/25
Panera Bread
Trigger: Sea Food
Symptoms: Swelling

12/03/25
EXP
Trigger: Environment
Symptoms: Runny Nose

12/03/25
Ruggles Station
Trigger: Pollen
Symptoms: Sneezing,Rash

4

More Button

Allows user to edit or delete the selected record.

5

Tap Cell

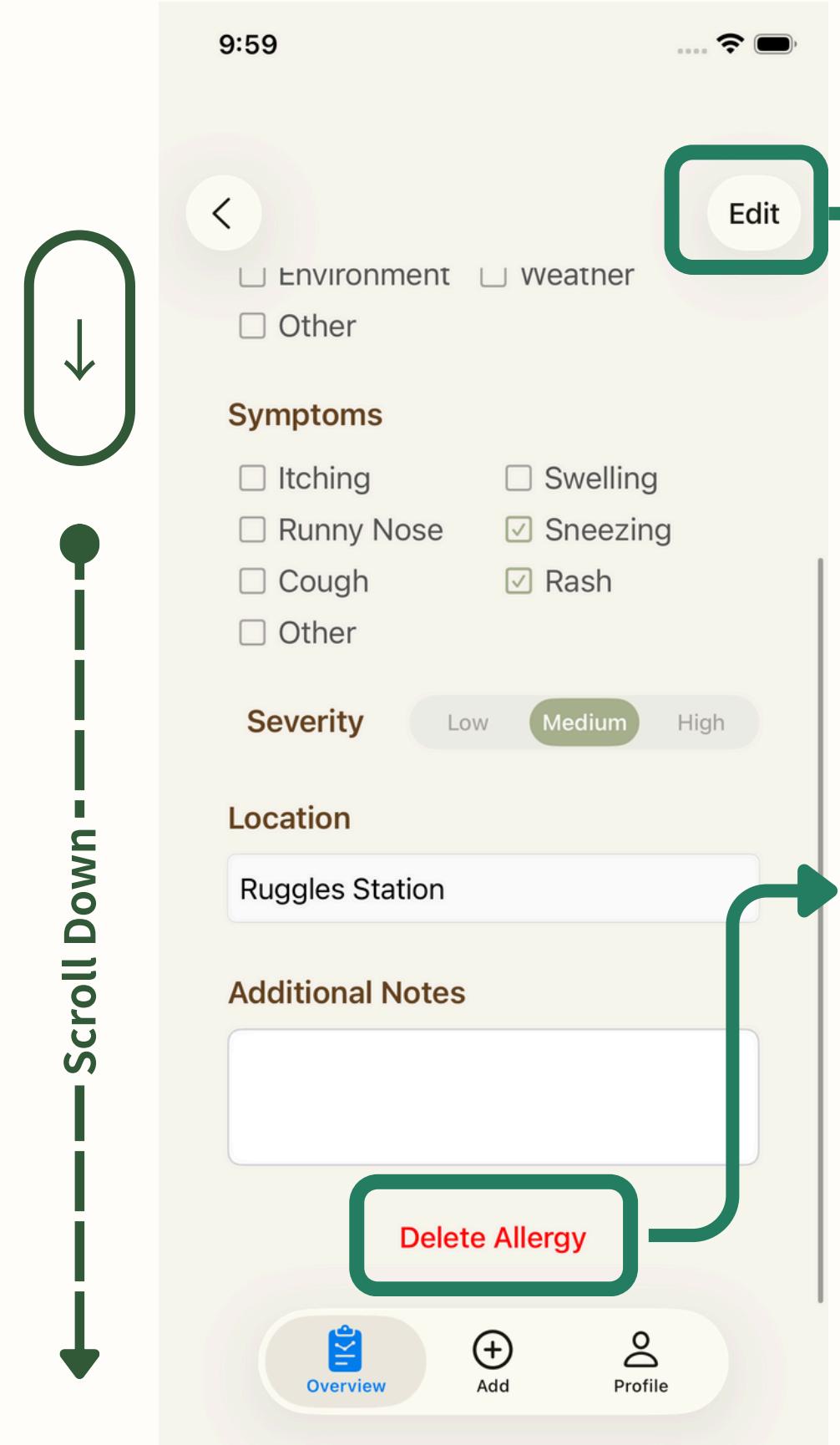
Cells are tappable and take users to View Allergy Details about the selected record.

Overview - View Allergy Screen

Navigates to the History Screen



View Allergy
Displays the saved information of the record selected.



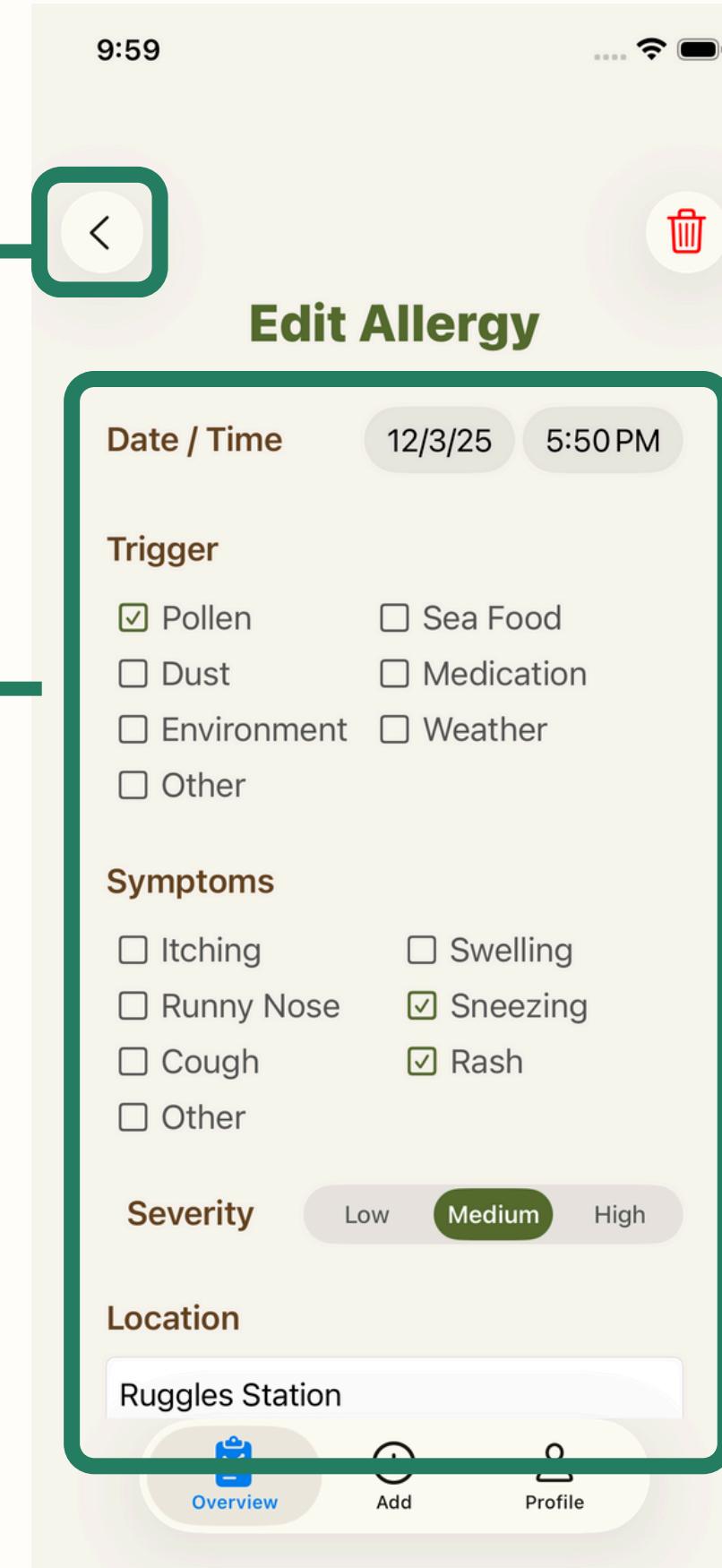
Navigates to the Edit Screen

Delete Allergy Record
A confirmation alert will show up, and if the user deletes the record, it will go back to an updated history screen.

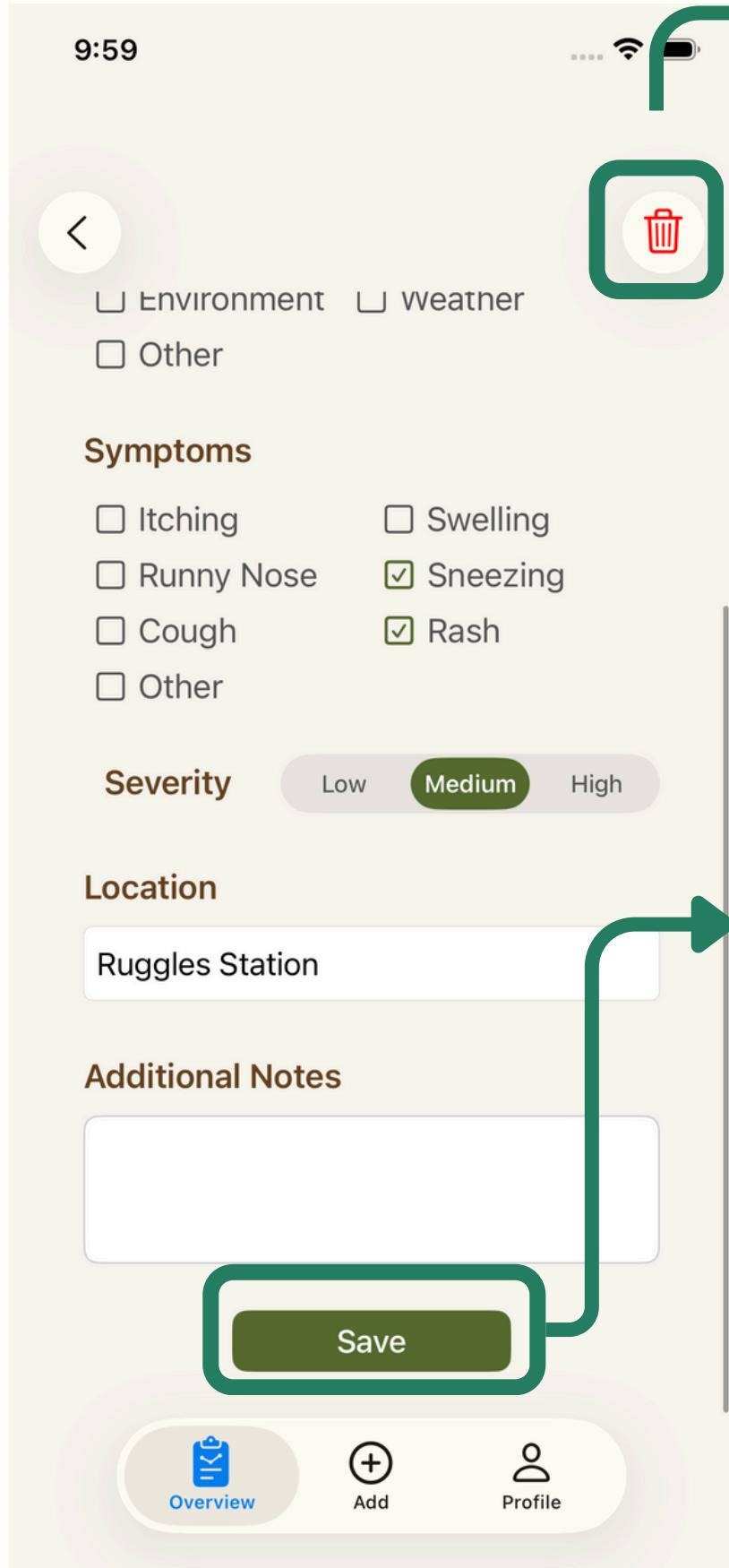
Overview - Edit Screen

Navigates to View Allergy Details Screen

1
Edit Allergy
The user can edit the saved information of the selected record.



Scroll Down



2 Delete Button
A confirmation alert will show up, and if the user deletes the record, it will go back to an updated history screen.

3 Save Allergy Record
The user can save the edited information, and the record will be updated.

Add Allergy Record Screen

The screenshot shows the 'Add Allergy' screen with the following fields:

- Date / Time:** Dec 7, 2025, 4:05 PM (highlighted by a green box)
- Trigger:** Pollen, Sea Food, Medication, Weather (checkboxes)
- Symptoms:** Itching, Swelling, Sneezing, Rash (checkboxes)
- Severity:** Low (selected), Medium, High

At the bottom are navigation icons: Overview, Add (highlighted by a green box), and Profile.

1 Date / Time Picker

Select when the allergy reaction occurred.

2 Trigger

Choose the factors that may have caused the reaction.

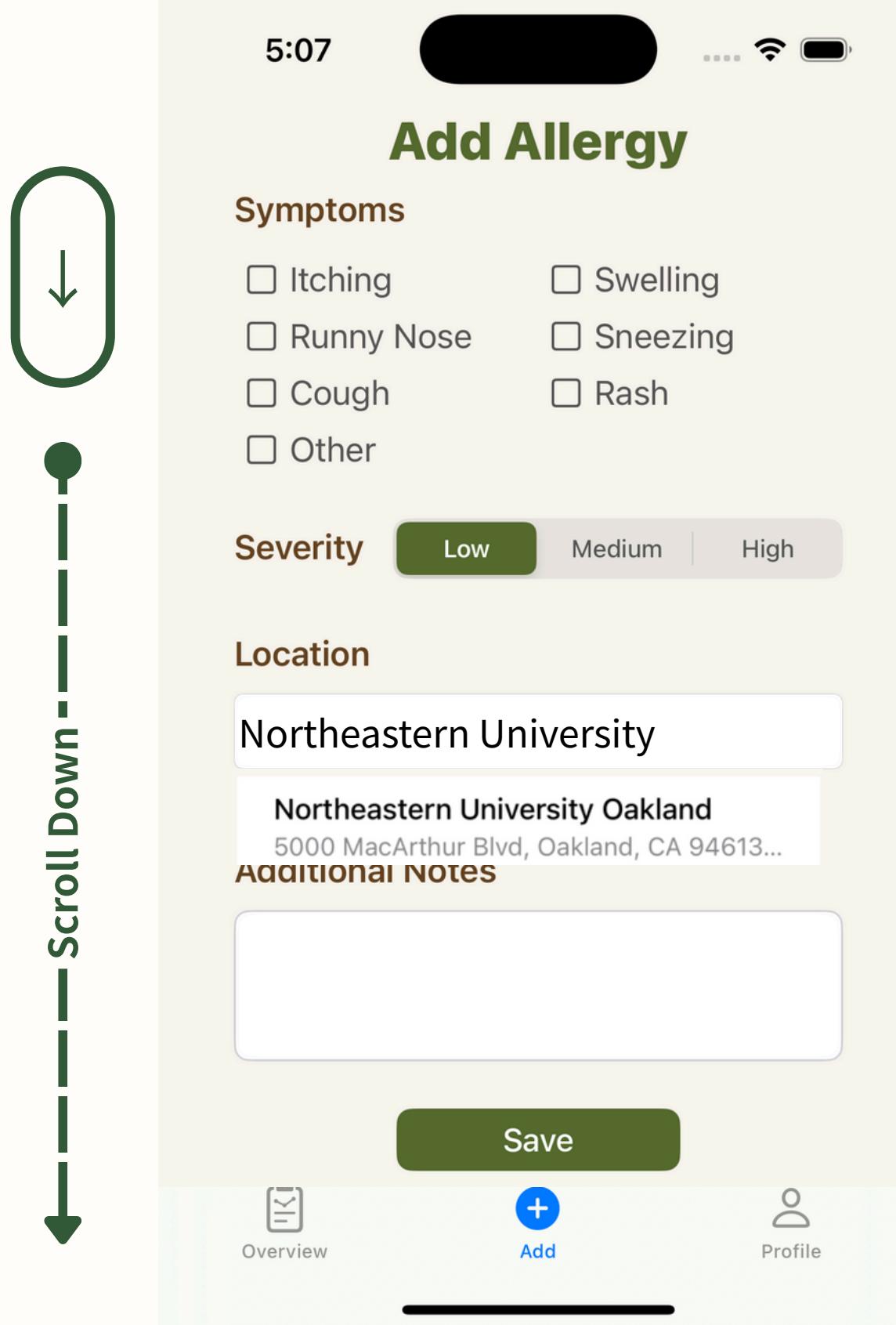
3 Symptoms

Select the symptoms you experienced.

4 Severity

Rate how strong the reaction was. (Low, Medium, High)

Add Allergy Record Screen



5

Location

Enter the place where your allergy occurred. A dropdown will appear as you type, so you can select the correct location.

Note: If you tap outside without choosing a location, the app will remind you to select one.

6

Additional Note

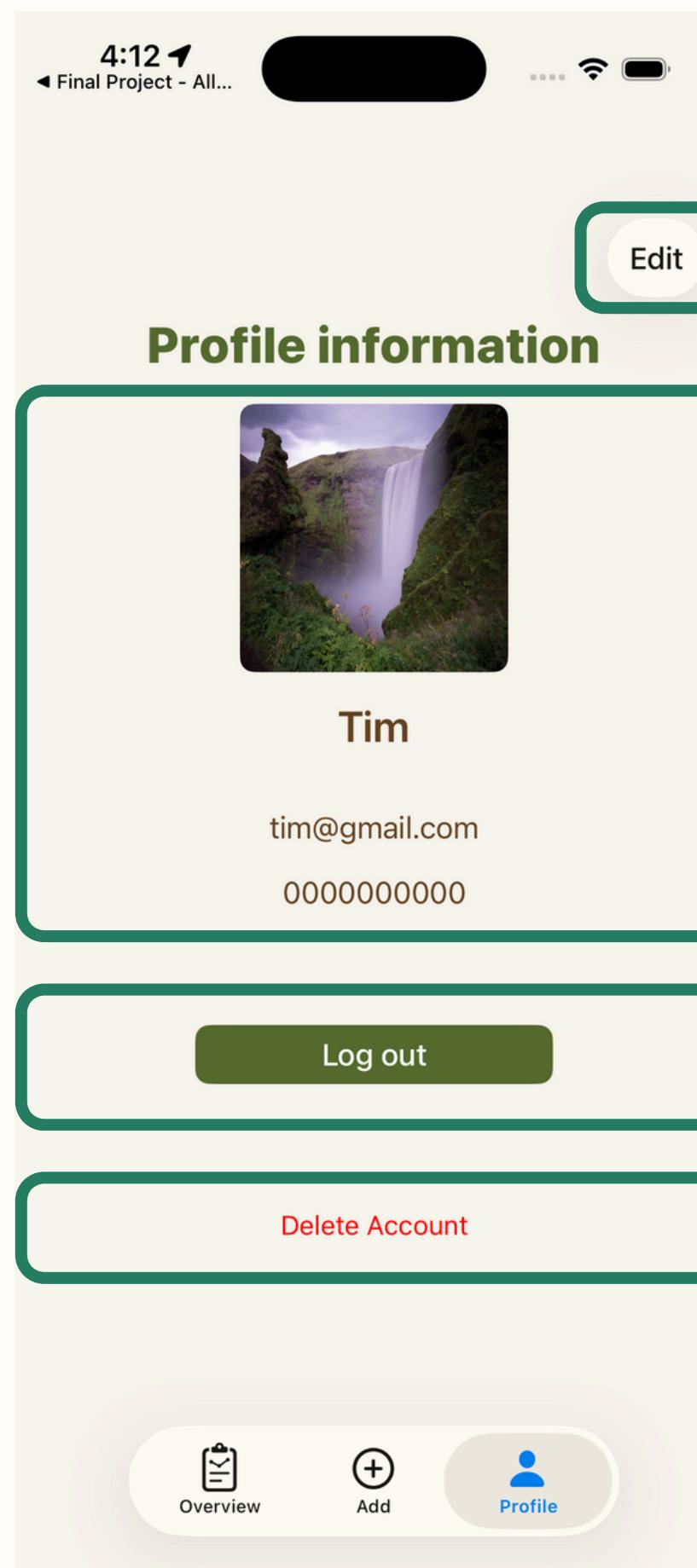
Add any extra details you want to remember about this allergy episode.

7

Save Button

Tap Save to record your allergy entry. Your information will be stored and shown in the Overview and History tabs. 25

Profile Screen



Edit

Profile information



Tim

tim@gmail.com

0000000000

Log out

Delete Account

Navigates to Profile Edit Screen

1

Account info

Fetches account information from Firestore and displays user's profile photo, name, email, and phone number.

2

Log out

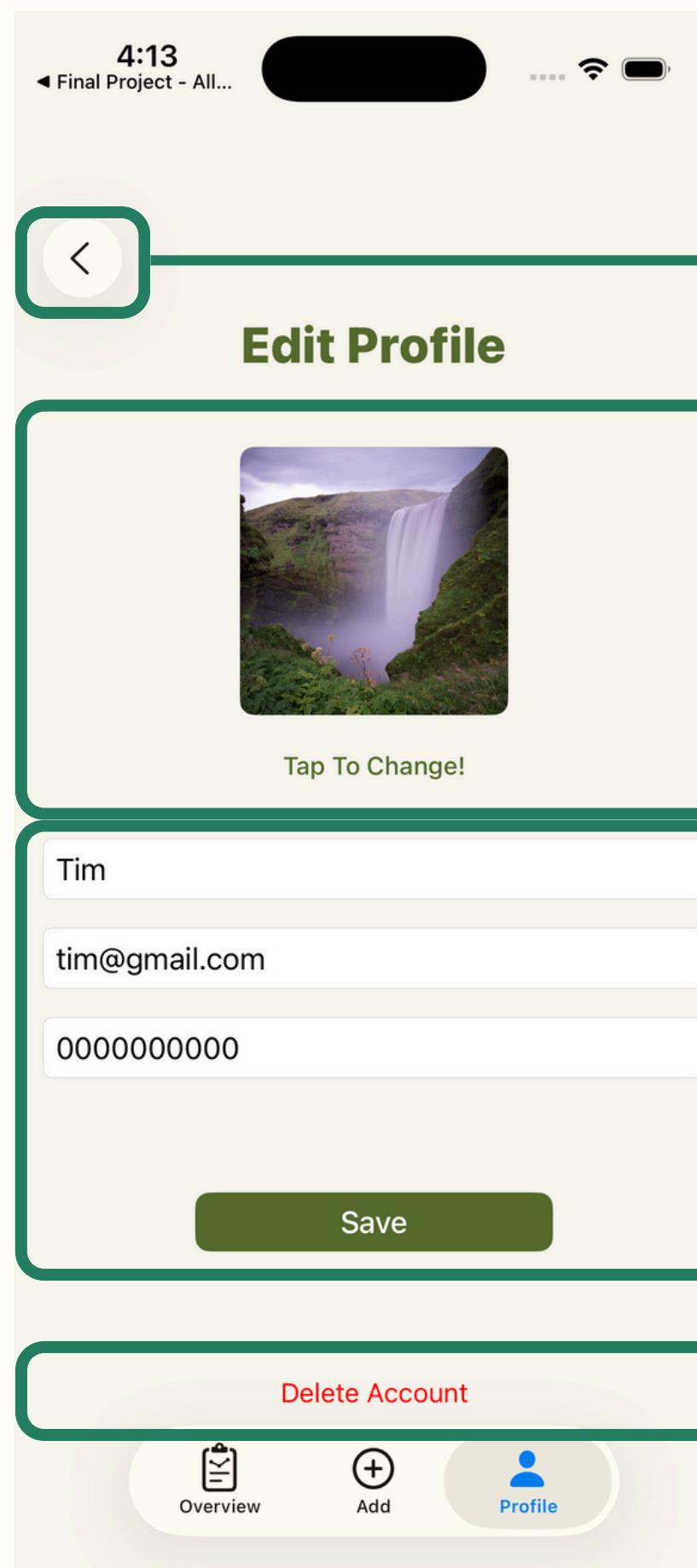
Shows an alert and log out if user confirms.

3

Delete

Shows an alert and delete the account from Fireauth and Firestore if user confirms.

Profile Edit Screen



Navigates to the Profile screen

1 Photo picker

Tapping the profile photo or default icon (if profile photo is not set) shows a menu and allows users to upload a photo from camera or gallery. When user changes the photo, it deletes the old photo from the Firebase storage and upload a new photo.

2 Edit account info

When user clicks on the save button, it checks the following and shows respective alerts:

- Empty fields
- Invalid email
- Invalid phone number (must be 10 digits)

Once it passes all checks, it updates account information on Firebase.

3 Delete

Shows an alert and deletes the account if user confirms.



Thank you!