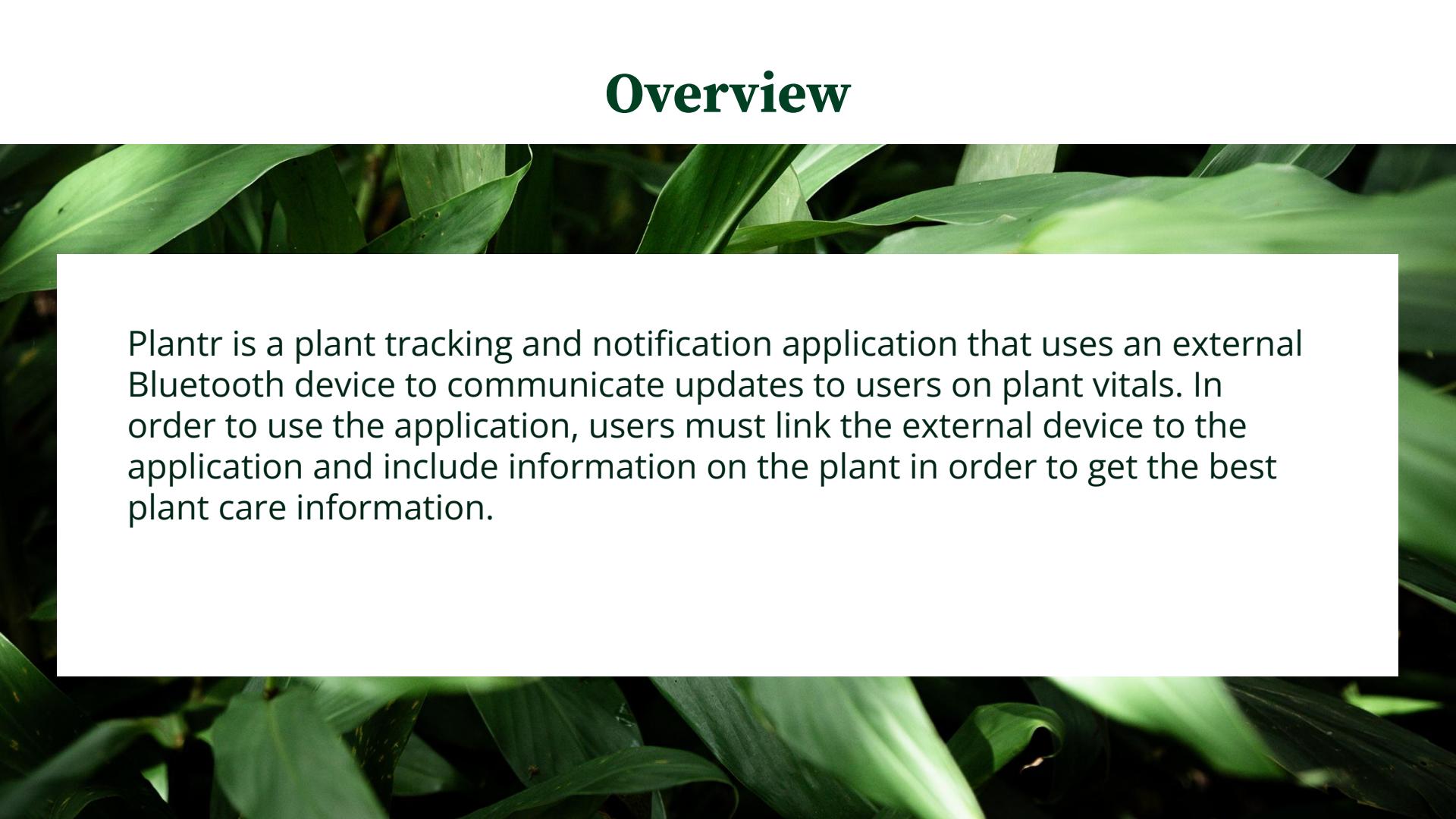


Plantr

B Lawler, Eric Vistnes, Jacob Yoshimura

Overview

A close-up photograph of several large, vibrant green leaves, likely from a tropical plant like a monstera or philodendron. The leaves are textured and overlap each other, creating a dense, organic background.

Plantr is a plant tracking and notification application that uses an external Bluetooth device to communicate updates to users on plant vitals. In order to use the application, users must link the external device to the application and include information on the plant in order to get the best plant care information.

Overview



- Provide instructional care and health notifications for novice to advanced plant owners.
- Keep up to date on all your plant vitals, including water, sunlight, and soil quality via physical device
- Utilize virtual avatars to personify plants and encourage care

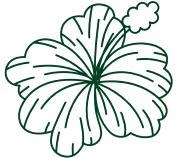


Features

- Add/Remove Plants - Curate your virtual garden and create group
- Notifications - Keep up to date on your plants' health
- Instructions - Plant care instructions and prescriptive aid
- Personification - Dress your plants and see their moods!
- History - View historical stats to better care for your plants
- Social Feed - Keep up to date with your friends!

Goals

- Monitoring - Monitor your plants' health and get vital notification!
- Care - Encourage and support healthy care of plants.
- Knowledge - Promote knowledge about each plant and how to care for them.
- Engage - Create fun and engaging content. Allow friends to connect.



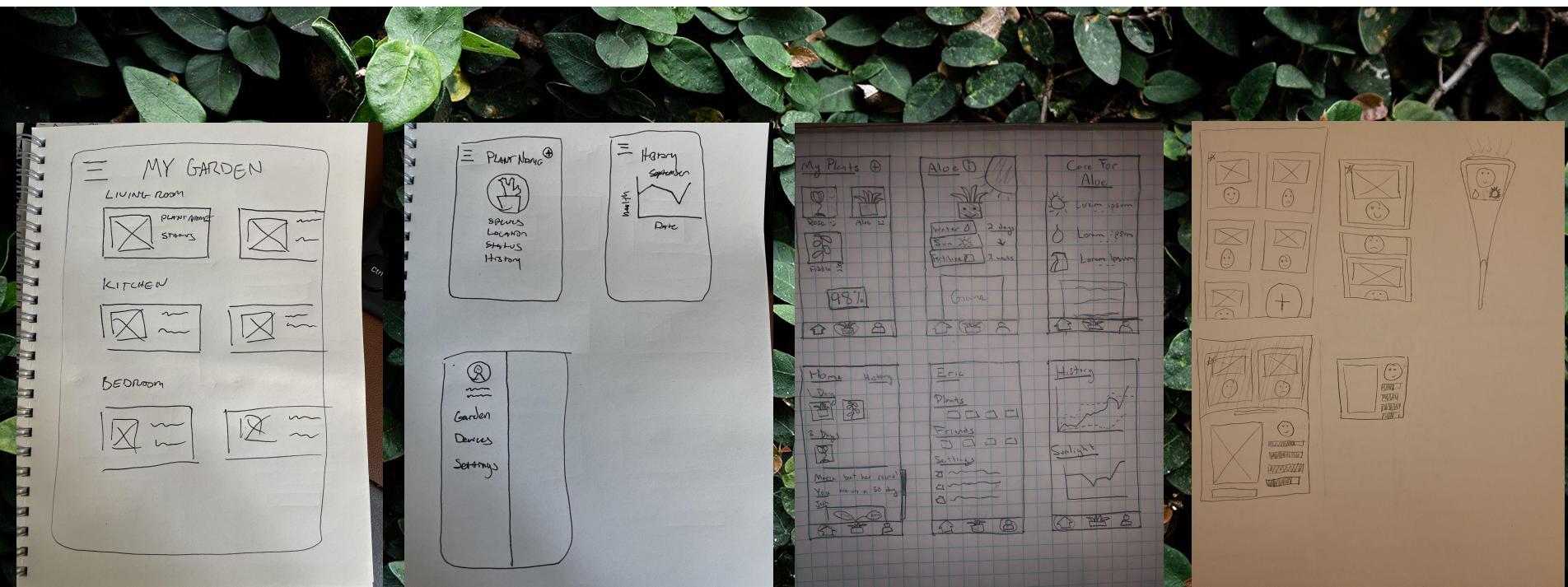
Ideation

To collaboratively come up with our application we:

1. Brainstormed ideas for application
2. Converged onto one idea
3. Developed personas and a scenario
4. Created a mood board
5. Drew sketches individually
6. Collaborated on final sketch
7. Used final sketch to develop mid and lo fi prototypes



Sketches

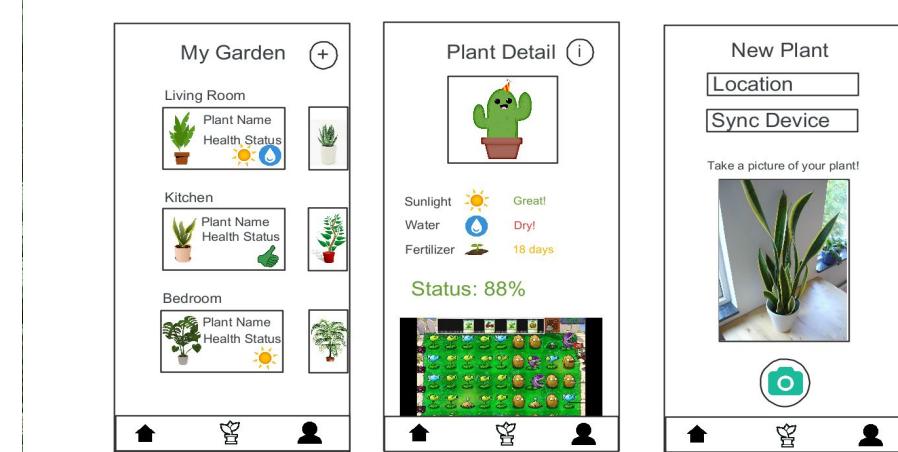


Our mood board displays some inspiration for our prototype, possible color scheme, and ways that information can be visualized.



Our final sketch displays:

- A virtual garden where users can view their plants, show snapshots of their health, and see where they are located
- Additional details of the plant and possible gamification section
- How users would add additional plants into their virtual garden



Personas

We developed three personas based off the vision of our application's ideal userbase.



CHASE

Chase is a young man who just moved to college and he wants to buy plants for the new dorm room. He has never taken care of plants before, but his family had many at home. He has difficulty with understanding when to water certain plants and seeing how much sunlight they are getting. He also has a busy schedule as school is starting, and anticipates that he will forget to water his plants as frequently as needed. He has been doing research on how to best care for each of the plants he bought, but it's hard to know what wet vs. moist soil means, or what indirect sunlight looks like.

Gender: Male

Age: 18

Occupation: College Student

Location: University of Chicago



SAMUEL

Sam works as an executive assistant for a major tech company. He often has to travel internationally for business dealings. He has always wanted a pet, but cannot get one due to his job. Therefore, he decided to get a few plants instead. However, he would still like to know how his plants are doing while on business trips, especially since his cousin once overwatered a favorite plant of his.

Gender: Male

Age: 35

Occupation: Executive Assistant

Location: Chicago



EILEEN

Eileen is a nurse at Central DuPage Hospital who enjoys reading, cooking and watching tv in her free time. Since her schedule constantly changes it is more difficult for her to have a routine, which causes her to often forget to water her plants. Since she also has multiple plants in different areas of her four bedroom home it gets hard to keep track of which have been watered and if they are healthy or not. Eileen enjoys the aesthetic that the plants bring into her home and likes to see their growth.

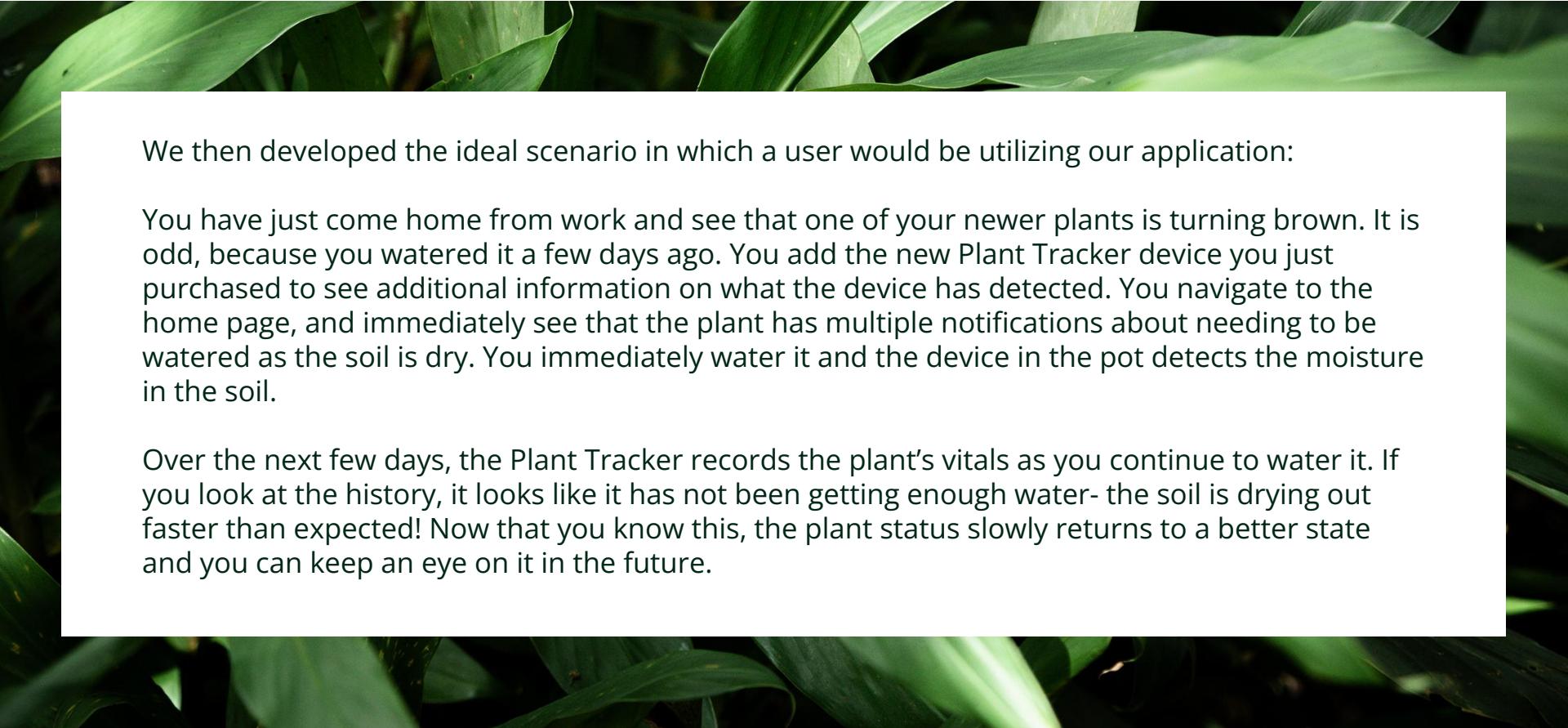
Gender: Female

Age: 60

Occupation: Nurse

Location: Suburban Chicago

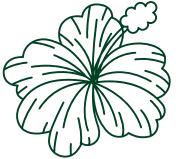
Scenario



We then developed the ideal scenario in which a user would be utilizing our application:

You have just come home from work and see that one of your newer plants is turning brown. It is odd, because you watered it a few days ago. You add the new Plant Tracker device you just purchased to see additional information on what the device has detected. You navigate to the home page, and immediately see that the plant has multiple notifications about needing to be watered as the soil is dry. You immediately water it and the device in the pot detects the moisture in the soil.

Over the next few days, the Plant Tracker records the plant's vitals as you continue to water it. If you look at the history, it looks like it has not been getting enough water- the soil is drying out faster than expected! Now that you know this, the plant status slowly returns to a better state and you can keep an eye on it in the future.



User Testing

We decided to hold user testing sessions to gather feedback on our prototype.

- Wanted to gather feedback on mid fi prototype
- Created user tasks for users to test prototype
- Tested prototype with 6 users
- Used feedback to inform hi fi prototype



User Tasks

Task 1: The user adds a plant to the garden (mobile)

You are a new plant owner and have recently purchased a Plantr device. Please go into the app and connect with the device. While connecting the device, you can put information about what type of plant it is monitoring. Once it's added, go ahead and find the plant for us in the app.

Task 2: The user finds past statistics to see improvement/decline over time (mobile)

You see that one of your plants' leaves are starting to turn brown. You have been somewhat lax lately about following the Plantr notifications. Find the plant history to see if there has been a decline in care for the plant, or if there are other recommendations.

User Tasks

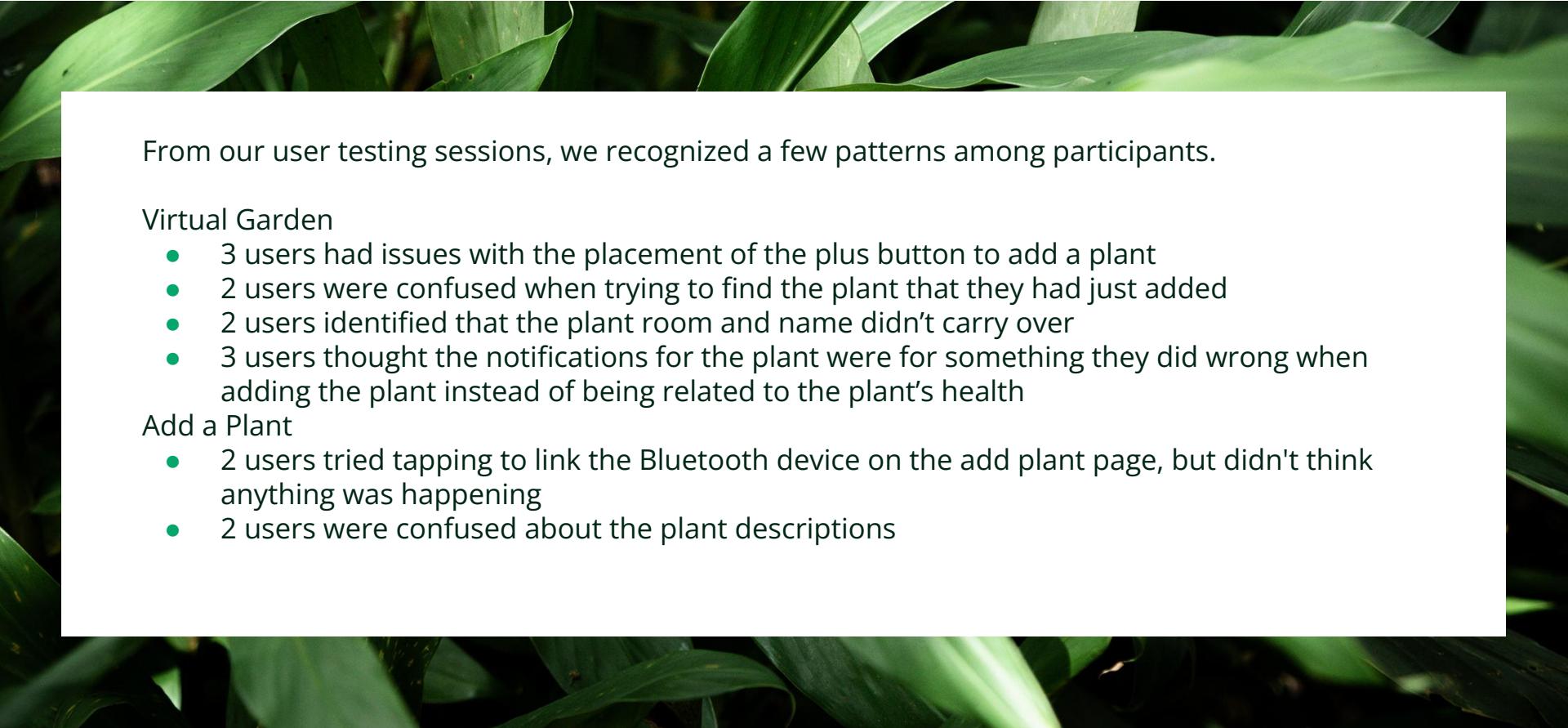
Task 3: The user finds all plants that have notifications and marks them complete (desktop)

You are taking care of a friend's plants for the week and they have given you access to their Plantr profile so you can see what plants need what. As you open it, find all the current notifications for us. Click refresh on the plant page once you've watered the plant so the app will quickly reflect your changes.

Task 4: The user adds an outfit to a plant (desktop)

Your best friend just joined Plantr. They have been active on the social feed and now you want to share how your plant is doing! Give your plant a hat and copy the avatar so you can share with your friend later!

Findings

A close-up photograph of several large, vibrant green leaves with prominent veins, serving as a background for the slide.

From our user testing sessions, we recognized a few patterns among participants.

Virtual Garden

- 3 users had issues with the placement of the plus button to add a plant
- 2 users were confused when trying to find the plant that they had just added
- 2 users identified that the plant room and name didn't carry over
- 3 users thought the notifications for the plant were for something they did wrong when adding the plant instead of being related to the plant's health

Add a Plant

- 2 users tried tapping to link the Bluetooth device on the add plant page, but didn't think anything was happening
- 2 users were confused about the plant descriptions

Findings

Plant Details

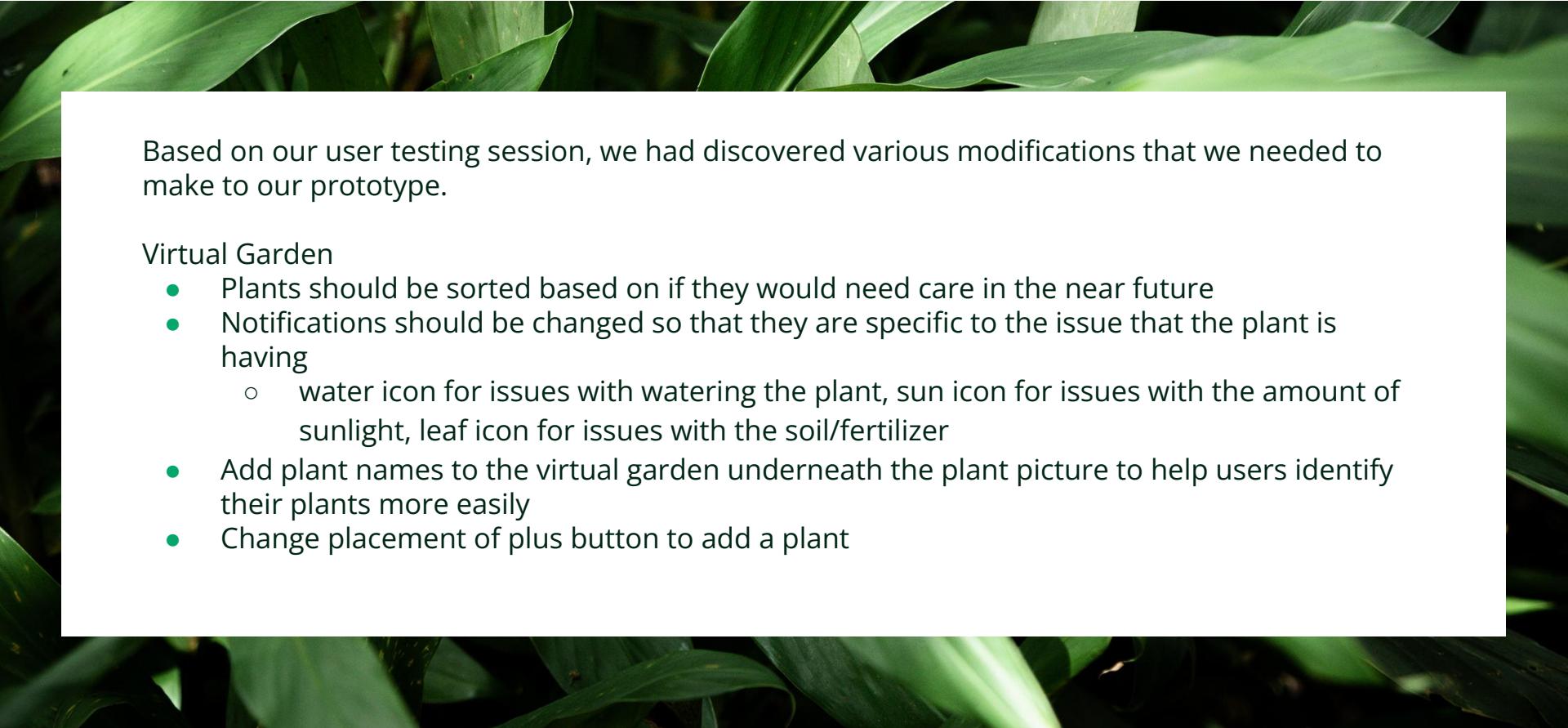
- 4 users did not know what the different levels on the history graphs meant

Plant Avatar

- 2 users wanted to be able to put the accessories on the plant image instead of the avatar
- 1 user preferred the idea of sharing the avatar instead of copying it to a clipboard
- 3 users realized that changes to the plant avatar did not really save
- 2 users commented on how they were unable to access the social feed

We also received positive feedback on the overall look of the mobile application, with some noting that the navigation bar was simple and effective.

Revisions



Based on our user testing session, we had discovered various modifications that we needed to make to our prototype.

Virtual Garden

- Plants should be sorted based on if they would need care in the near future
- Notifications should be changed so that they are specific to the issue that the plant is having
 - water icon for issues with watering the plant, sun icon for issues with the amount of sunlight, leaf icon for issues with the soil/fertilizer
- Add plant names to the virtual garden underneath the plant picture to help users identify their plants more easily
- Change placement of plus button to add a plant

Revisions

Add a Plant

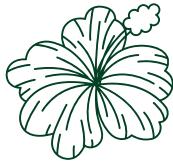
- Give feedback to users when linking Bluetooth device

Plant Details

- Make history graph information clearer
 - Add axes and labels to graph

Plant Avatar

- Add a share button to social feed
- Make changes to avatar persist across pages
 - includes the name of the plant, the health condition, and the avatar's accessories



HiFi Prototype

plantr

Email

Password

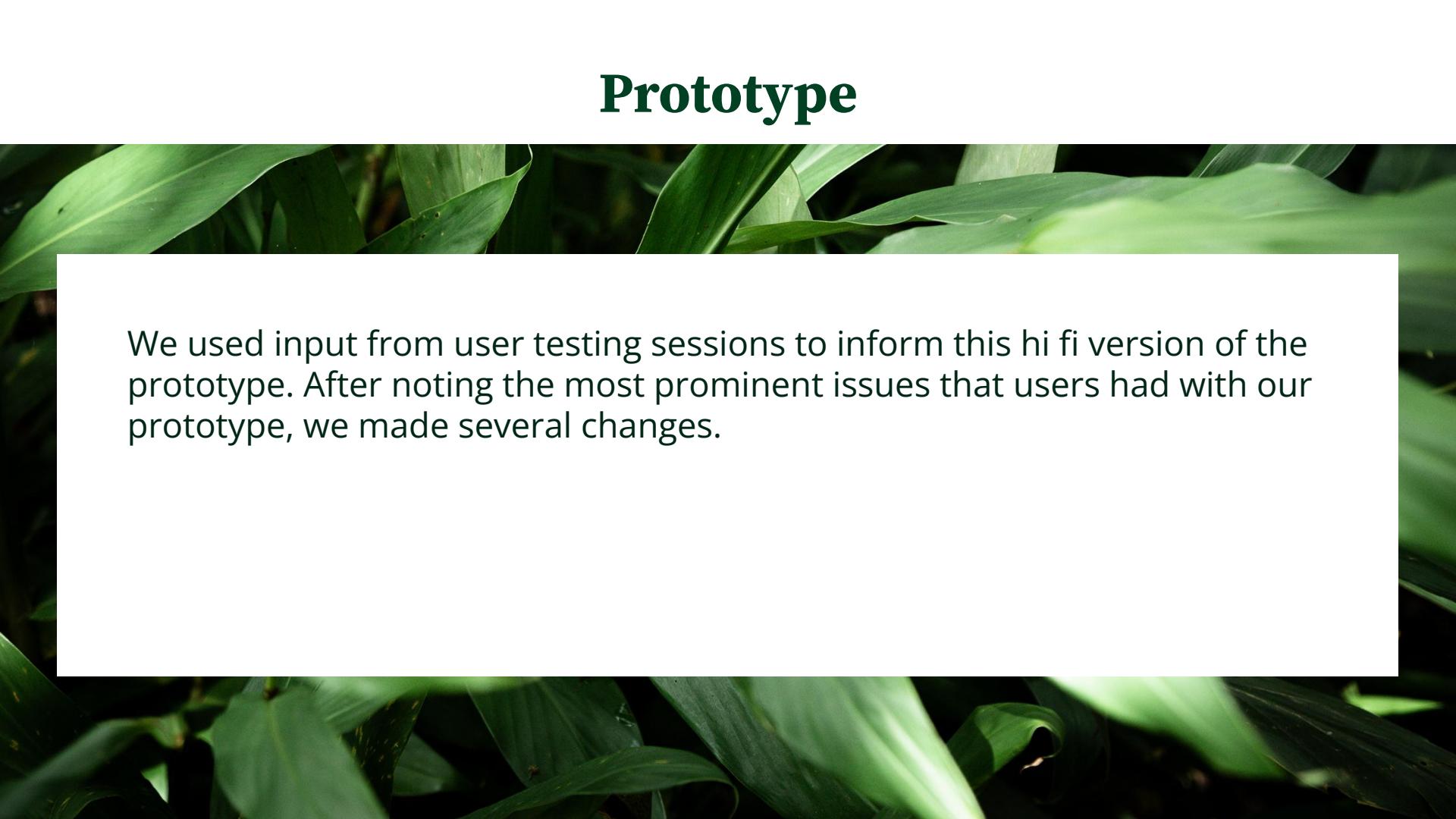
Login



Don't Have An Account?

Sign Up

Prototype



We used input from user testing sessions to inform this hi fi version of the prototype. After noting the most prominent issues that users had with our prototype, we made several changes.

Virtual Garden

Plantr [Homepage](#) [Education](#) [Social Feed](#) [Profile](#) [Logout](#)

Virtual Garden

Water with ice cubes!
Ice cubes. Scatter a few ice cubes over the soil surface, taking care to keep them away from the foliage. The ice melts slowly, allowing the soil to absorb water over time.

Bedroom

Living Room

Kitchen

Virtual Garden

John Doe
Chicago, IL

Plant Tips:
Scatter a few ice cubes over the soil surface, taking care to keep them away from the foliage. The ice melts slowly, allowing the soil to absorb water over time.

Bedroom

Living Room

Kitchen

Virtual Garden

- The plants that need attention now pop up first on the rows
 - Users noted that it was difficult to find the plants that needed care
- The plant notification icons were changed to display water, sun, or fertilizer icons, depending on the plant's issue
 - Users noted that a black exclamation mark did not tell them useful information about the type notification
- The plus button to add plants was moved to the location rows and was made more obvious that it was a button
 - Users noted that the plus was difficult to find, and some did not realize it was a button
- Added plant names
 - Users were able to add names for their plants, but they were not originally displayed on the virtual garden. This made it difficult for users to find their plants
- Added plant tips at the top

Add a Plant

Plantr

Homepage Education Social Feed Profile Logout

Add a Plant

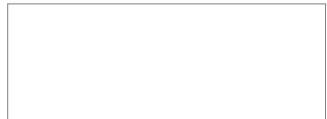
Let's Get Some Details!



Name Your Plant

Location

Link Device



Done

← Add A Plant



Lets Get Some Details!

Name Your Plant

Location

Link Device



Device XYZ
Device ABC

Link Successful!

Done



Add a Plant

- Added feedback to Bluetooth device linking
 - Users did not know if they had linked the Bluetooth device because there was nothing telling them that they did

Plant Detail

Plantr

Homepage Education Social Feed Profile Logout

Plant Detail ⓘ

Gary

History

Water: Under watered
Sunlight: Healthy
Soil: Healthy

Refresh Edit Avatar

← Plant Detail ⓘ

Gary

History

Water Amount

Moisture

Days

Status

Water: Over Watered
Sunlight: Healthy
Soil: Healthy

Edit Avatar

Refresh

Profile

Logout

Plant Detail

- Modified plant history so the graphs are more meaningful
 - Users did not know what information the graphs were trying to tell them
- Refreshing the page changes the sad plant into a happy plant
 - Users were confused when their plant's avatar was still sad despite watering it
- Placed information button next to plant name for more information about the plant

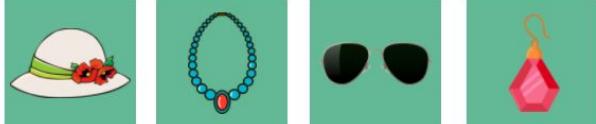
Plant Avatar

Plantr Homepage Education Social Feed Profile Logout

◀ Plant Avatar

Saved!

Accessories



Lorem Ipsum



Save Share Copy

The avatar has been shared to your social feed!

← Plant Avatar ↗



Accessories



Plant Avatar

- We added a share button to share the avatar to the social feed
 - Users were confused about the copy button, and wanted a share button instead