



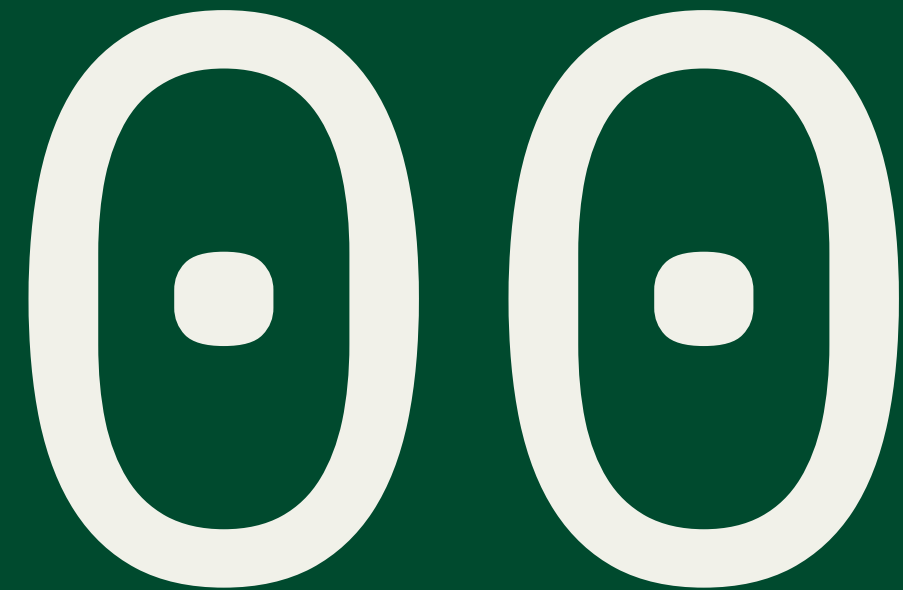
By Amrit Kaur Klair, Francesca Ferrario, Karen Yao and Patrick Duran Yutiga  
Group 3

 Visit Team Journey presentation at [tinyurl.com/gardenhive-ppt](https://tinyurl.com/gardenhive-ppt)



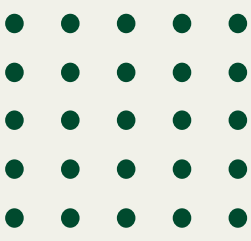
# Contents

00	Research
01	Data Analysis
02	Findings
03	Next Steps
04	Appendix



# Research

- Testing Overview
- Research Objectives & Questions
- Stimuli
- Methodology: Overview
- Methodology: Equipment
- Methodology: Evaluation



# Testing Overview

1

## Participant Profile

The screening survey helped us select **5 users** with the following key characteristics:

- Ages 18-65+
- Interested in community gardening
- Access to an indoor or outdoor garden
- Have a phone with WiFi/data, and use it several times a week

2

## Stimuli

Users were tested while interacting with a **mid-fidelity Figma prototype** on 3 different tasks.

3

## Methodology

- We conducted one round of **online moderated usability testing**.
- **Three core tasks:** planning a garden, visiting a plant's profile, and posting a question in the community hub.
- Participants were instructed to **think aloud** throughout the session, and their **interactions and feedback** were **recorded** by the moderator.
- **Data analysis** of observations.

# Research Objectives & Questions

We aimed to evaluate the usability and intuitiveness of the app's core features. Specifically, we had 3 objectives:

**Objective 1 (RO1): Assess the experience of creating a new garden plan.**

**Research Questions:**

- How easily can users create a new garden plan?
- How intuitive is the garden planning process for new gardeners?

**Objective 2 (RO2): Asses the experience of finding and understanding plant information.**

**Research Questions:**

- How easily can users find and understand plant information?
- How effective is the tool in helping users track plant health and progress?

**Objective 3 (RO3): Assess the experience of posting questions & engaging with the community.**

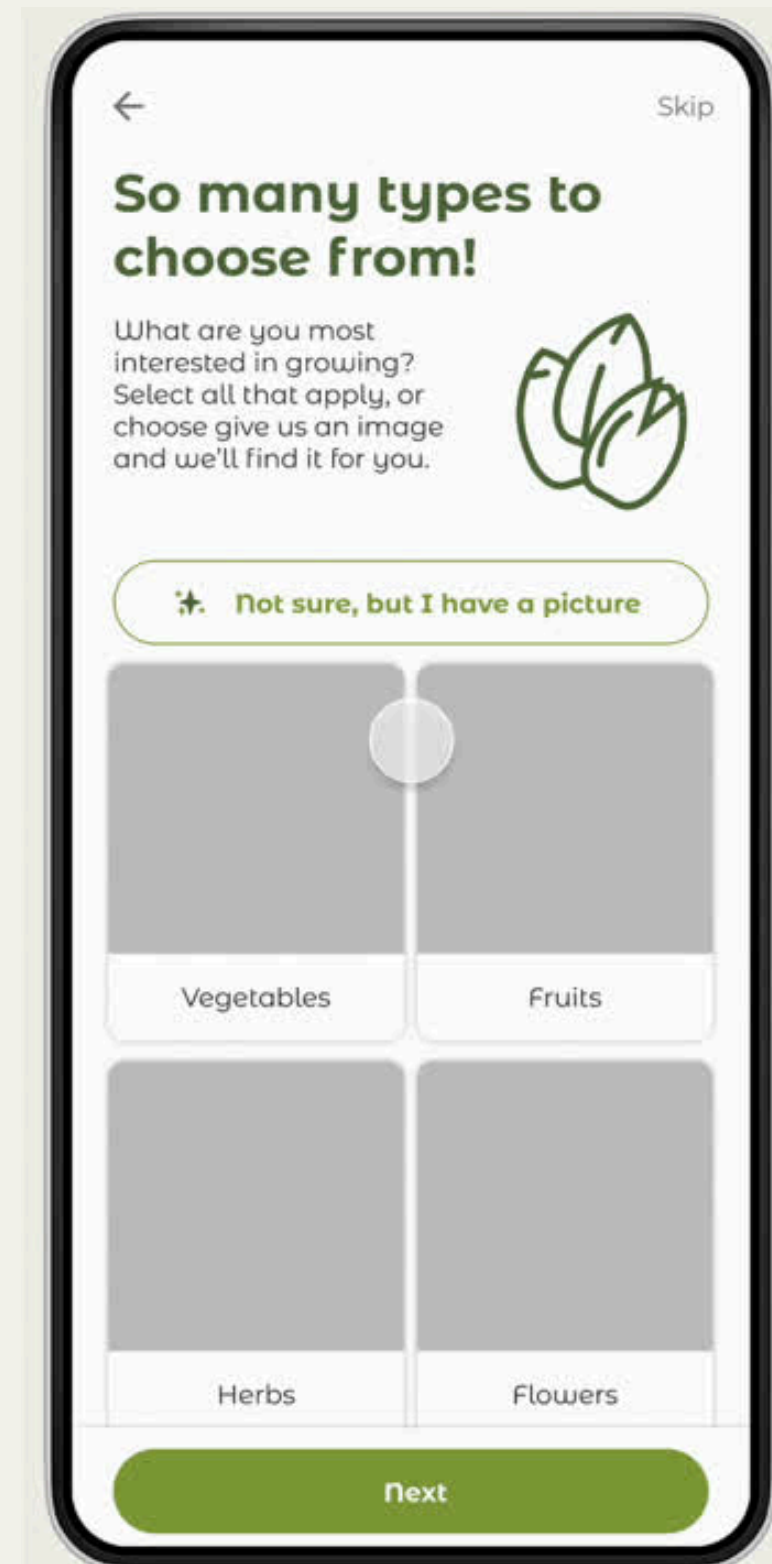
**Research Questions:**

- How easily can users post questions and engage with the community?
- Does the community feature foster a sense of connection and shared learning?

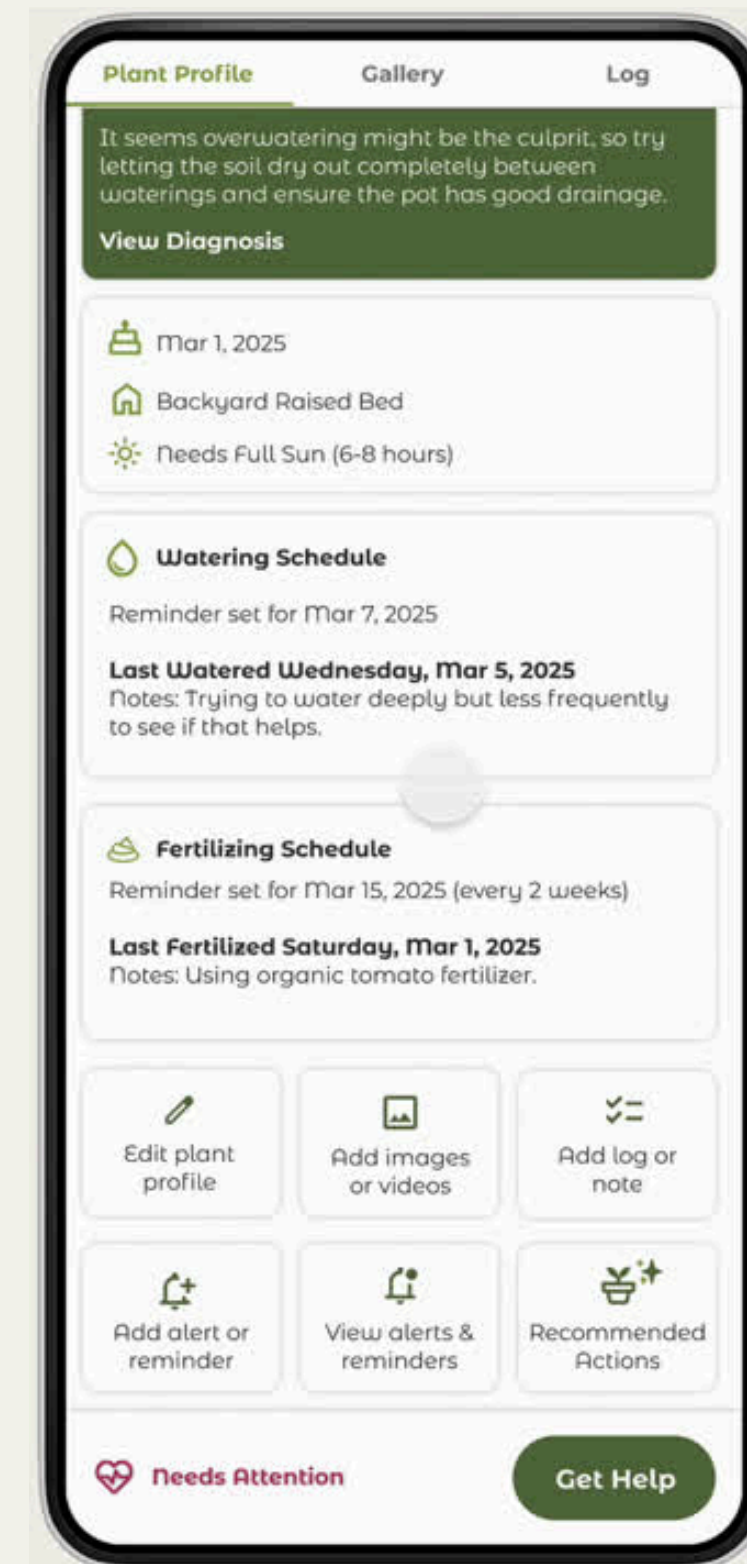
# Stimuli

We used a **mid-fidelity Figma prototype** encompassing all planned tasks related to garden planning, plant maintenance, and community interaction. The prototype was designed to simulate the core functionalities of the GardenHive app.

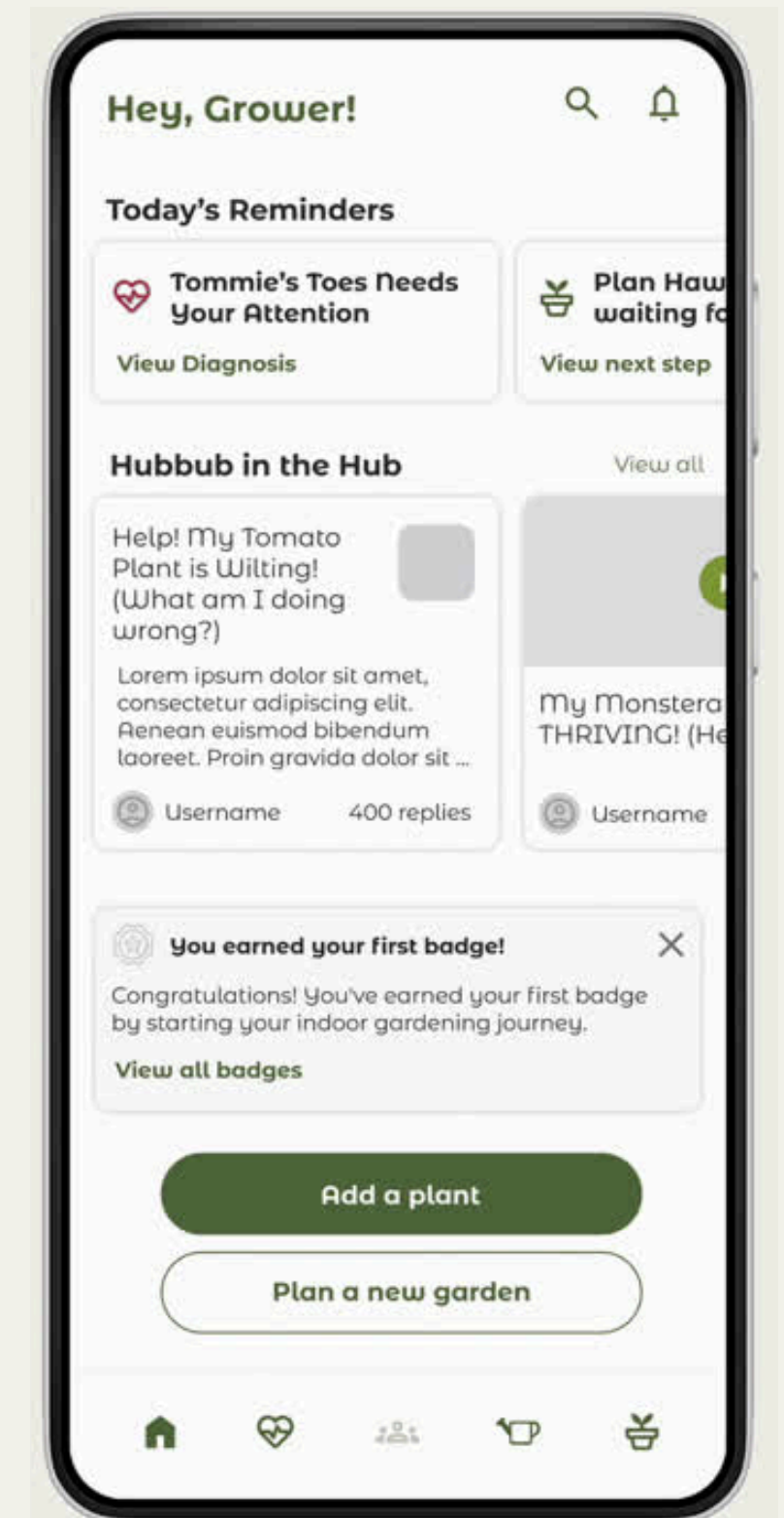
See the mid-fidelity prototype on [Figma](#).



**Task 1:** Create a new garden plan



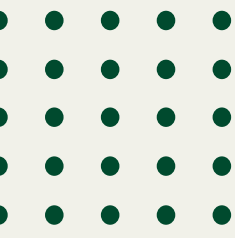
**Task 2:** Visit a plant's profile and see what it needs



**Task 3:** Post a question to the community hub



# Methodology: Overview

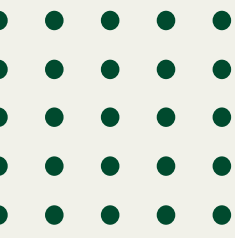


We conducted **5 one-on-one, virtual, moderated interviews** with five participants from GardenHive's primary target audience. The interviews were conducted over Zoom, and some were recorded with user consent to allow the moderator to revisit interactions and extract additional insights.

Each session lasted **~20 minutes**, and was focused on how well users understood the elements of the interface, their expectations for structure and functionality, and how they performed on key tasks. We conducted one interview a day, from 17 Mar 2025 to 23 Mar 2025.

During and after each interview, the moderator **documented key observations** on a Miro board. After all interviews were completed, the notes and video recordings were analyzed further to identify user pain points and preferences.

# Methodology: Equipment



To conduct our usability studies, we used the following platforms:



**Figma:** used to create the different prototypes and test the users.



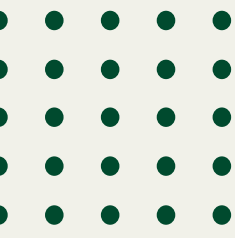
**Zoom:** used to conduct the online moderate usability studies.



**Miro:** used to gather our notes and collect observations about the user interactions.



# Methodology: Evaluation



We conducted moderated online usability testing with 5 participants, evaluating their performance on the 3 core tasks:

## Planning Task 🌱

*How well did users create a new plan for a new garden?*

- **Completion Rate:** % of users who successfully created a new garden plan.
- **Time on Task:** Time spent to create a new garden plan.
- **Error Rate:** Number of mistakes when creating a new garden plan.
- **Satisfaction Score:** User feedback on ease of the planning task (i.e. 1-5 Likert scale).

## Maintaining Task 🌿

*How well did users visit their plant profiles and see what they need?*

- **Completion Rate:** % of users who successfully checked the garden health.
- **Time on Task:** Time spent to visit plant profiles + check their health.
- **Error Rate:** Number of mistakes in checking the garden health.
- **Satisfaction Score:** User feedback on ease of the maintaining task (i.e. 1-5 Likert scale).

## Sharing Task 🌐

*How well did users post a question on the community hub?*

- **Completion Rate:** % of users who successfully posted a question on the community hub.
- **Time on Task:** Time spent to post a question on the community hub.
- **Error Rate:** Number of mistakes when posting a question.
- **Satisfaction Score:** User feedback on ease of the sharing task (i.e. 1-5 Likert scale).

# 01

- Data Collection Sample
- Overview: Quantitative Analysis
- Overview: Qualitative Analysis

## Data Analysis

# Data Collection Sample

We created a custom template to visualize each user’s scores, quotes, and behaviour/interaction highlights. Then, we conducted a mixed-method analysis to gather relevant insights.

See all participants’ data and observation notes in our [Miro Board](#).

Participant 3				
<div><div><div><div><div>TIME ON TASK</div><div><div>Note: Participant added lots of comments while exploring the app so that made the tasks a bit longer.</div><div><div>Task 1</div><div>6 mins 57 s</div></div><div><div>Task 2</div><div>5 min 09 s</div></div><div><div>Task 3</div><div>1 min 03 seconds</div></div><div>Note: Shortest.</div></div></div></div><div><div>SUS SCORE</div><div><div><div>I think that I would use the tool frequently.</div><div><div>4</div></div></div><div><div>I found the tool unnecessarily complex.</div><div><div>1</div></div></div><div><div>I thought the tool was easy to use.</div><div><div>4</div></div></div><div><div>I imagine most people would learn to use the tool very quickly.</div><div><div>5</div></div></div><div><div>I felt very confident using the tool.</div><div><div>5</div></div></div><div><div>I found the tool very cumbersome to use.</div><div><div>1</div></div></div></div></div><div><div>ERRORS</div><div><div>Task 1: 0</div><div>Task 2: 1</div><div>Task 3: 0</div></div><div><div>ERROR RATE:</div><div>33%</div></div><div><div>TASK SUCCESS RATE</div><div>100%</div></div></div><div><div>OVERALL COMMENTS</div><div><div>Impressions?</div><div><div>"I think it is really good. Very neat, tidy, conversational and easily accessible."</div><div>"I like the colour scheme and everything is where it should be."</div><div>"The icons make sense."</div><div>"I like that I have quick access to everything important."</div></div><div><div>Benefits?</div><div><div>"I liked that it was tailored to me - my expertise level, commitment and schedule."</div></div><div><div>Areas of improvement?</div><div><div>"I would want to see more colours in the final product."</div><div>"I want to have a more clear and manual way to add my plants."</div><div>"I wish I could also add watering reminders to my own calendars - It would be easier if it could be synced."</div><div>"I did not see the 'Are you feeling adventurous' button."</div></div><div><div>Features to add</div><div><div>"I think the AI chat should not be only for plant diagnosis, but for any plant questions or planning strategies."</div></div></div></div></div></div></div></div></div>				
<div>TASK 1 PLAN A GARDEN</div>	<div><div><div>"I am glad it is asking where I am at, because what if I live in an apartment!"</div><div>"I like the question about type of shading for the plants."</div><div>"Oh awesome, I do not even have to manually input my address"</div><div>"These are fun descriptions. They are personable and relatable".</div><div>Confused after the plant was being created - "Wait, is this a recommendation? Or is this the plan?"</div></div></div>	<div>Yes</div>	<div><div><div>"Everything was pretty clear, and I liked how guided it was"</div><div>"Very friendly language and easy to use"</div><div>"I liked that I could also upload a photo of my plants when deciding which plants to add in my garden plan!"</div><div>"I was confused when I saw the cactus as an example because I did not select it earlier"</div><div>"The Sipe-by-Step Plan page was very text heavy I would have liked less information. I wish it was focus on only one step at a time, just like the previous pages."</div></div></div>	<div><div><div>"The button for Use my Current Location should disappear after I select/input the address, otherwise it is a bit confusing"</div><div>"I'd like to be asked at what time and which days I am able to take care of the plants, rather than just the duration commitment."</div></div></div>
<div>TASK 2 VISIT A PLANT'S PROFILE</div>	<div><div><div>"I do not see a reminder or immediate action on the screen to check my plants. Oh wait, there it is, I did not see it."</div><div>"It told me I could be overwatering my plant, and I think the diagnostic would tell me what I need to do."</div><div>"I like that I can see all the information about the plant, even when I first planted it"</div></div></div>	<div>Yes - "I was able to go on the plan profile and chat with AI to get a diagnosis"</div>	<div><div><div>"I liked the big reminder for recommended actions at the top of the screen."</div><div>"I like that I am able to chat with AI to get insights on the plants' health. It feels like on-demand access to a plant doctor."</div></div></div>	<div><div><div>"It would be nice if what suggested by AI turned into a checklist of things to do, so I could check mark the steps once I completed them. I would not want to forget."</div><div>"I wish I would be able to the log the diagnosis information from the AI chat automatically, or at least have the option to, instead of having to do it manually."</div></div></div>
<div>TASK 3 POST A QUESTION IN COMM HUB</div>	<div><div><div>"I see some posts in the main page, but I think I would click on the people icon to access the Hub"</div><div>"I would expect to get on the same page by clicking on View All in the Hub posts from the homepage."</div><div>"I like that there are hashtags and also my location showing in the post."</div><div>"Love the 'Published' notification."</div></div></div>	<div>Yes</div>	<div><div><div>"The post looks a bit different from the previous page where I was typing in so that was a bit confusing."</div><div>"Easy and intuitive process"</div><div>"It was confusing to still see the plus sign when I was creating the post, I would expect it to not be visible while I am typing my question."</div></div></div>	<div><div><div>"I would expect to be able to see my post again. Is there a notification centre? It would be helpful."</div><div>"I want to be able to quickly see other people's responses to my post."</div><div>"I would also like to know about the hashtags, how do I add them? And is the location in the post added automatically?"</div><div>"Once posted, I would expect to see a feed like on IG, rather than the individual post I just created."</div></div></div>



# Quantitative Analysis Results



Our quantitative analysis revealed key insights on task success rate, time on task, SUS scores, and error rate:

## Task Success Rate & Time on Task

- **Average Task Completion: 100%** across all participants.
- **Longest User Flow: Task 1** (~4 minute average) – This may suggest some intuitiveness issues.
- **Shortest User Flow: Task 3** (~1 minute average) – Indicates a smooth, intuitive experience.

## SUS Scores & Error Rate

- **Average SUS Score: ~4/5**, indicating a good usability experience overall.
- **Average Error Rate: ~39%** – Errors were mostly due to difficulties with the plant profile location, low visibility of app sections, and lack of task completion visuals. Although users managed to complete the tasks, the error rate suggests areas of confusion.

# Qualitative Analysis Results



Within each of the 3 research objectives, we identified several findings from our qualitative analysis, in particular:

**Objective 1 (RO1): How is the experience of creating a new garden plan like?**

**Key findings:**

- Unclear task completion
- Need for visual cues

**Objective (RO2): Can users find and understand plant information?**

**Key findings:**

- Difficulty with plant profile discoverability
- Low "recommendation" section visibility

**Objective 3 (RO3): How is the experience of posting questions & engaging with the community?**

**Key findings:**

- Intuitive posting process
- Appreciation for community engagement
- Desire for enhanced interaction features

# 02

## Findings

- Research Objective 01: Findings
- Research Objective 02: Findings
- Research Objective 03: Findings
- Additional Findings



# Unclear Task Completion



## Insight

Users were unsure if they had successfully completed the garden planning task due to a lack of clear confirmation and next steps.

**Quantitative Evidence:** 4 out of 5 participants expressed uncertainty about task completion.

“I don’t know what to do after this.  
Providing next steps would be nice.”

– Participant 4

## Objective 1

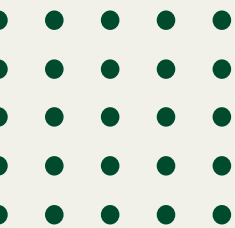
# Need for Visual Cues

## Insight

Users expressed a desire for more visual cues, such as images, to enhance their understanding of indoor garden spaces.

“There are no images. It’s difficult to imagine what an indoor space is.”

– Participant 4



## Objective 2

# Plant Profile Discoverability



### Insight

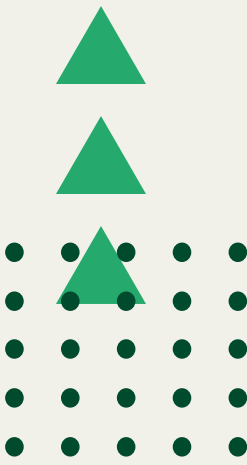
The plant profile page was difficult for multiple users to locate.

**Quantitative Evidence:** 3 out of 5 participants experienced difficulty finding the plant profile.

“I highly suggest adding a plant profiles button to either the home page or the tool bar.”

– Participant 1

# Low "Recommendation" Section Visibility



### Insight

The "Recommendation" section's color scheme blended with other UI elements, making it difficult for users to notice.

“I think the green colour of the Recommended Action is confusing and does not stand out.”

– Participant 2

## Objective 3

# Intuitive Posting Process



### Insight

Posting questions in the community hub was generally considered intuitive and easy.

**Quantitative Evidence:** Average time spent on Task 3 was approximately 1 minute and 20 seconds, the shortest of the three tasks.

“It was very easy, I just used the plus button!”

– Participant 2

# Appreciation for Community Engagement

## Insight

Users appreciated the community aspect of the app and the ability to interact with other gardeners.

“I really liked the community aspect of posting a discussion post.”

– Participant 5



# Desire for Enhanced Interaction Features

### Insight

Users expressed a desire for features like usernames and @ mentions, suggesting improvements to enhance social interaction and clarity within the community hub.

“Can you incorporate usernames into this or @’s? Some people might have the same names.”

– Participant 1

Small but Mighty

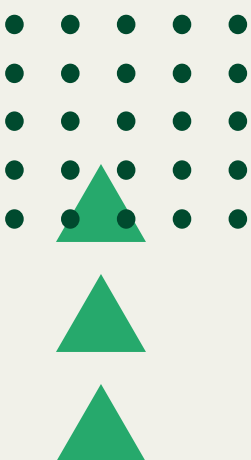
# Linking to Phone Calendar

## Insight

1 user suggested to link the watering reminders to phone calendar.

“I wish I could also add watering reminders to my own calendars - It would be easier if it could be synced.”

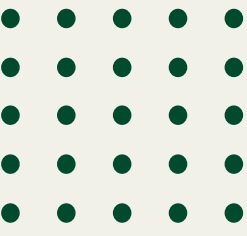
– Participant 3



# 03

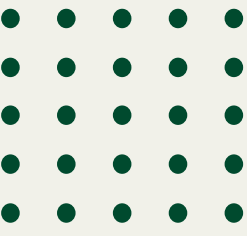
- Recommendations
- Additional Resources

## Next Steps



# Recommendations

Finding	Description	Consequence	Confidence	Next step
Unclear task completion (R01)	Users unsure if task completed due to lack of confirmation.	User frustration, uncertainty.	High	Implement clear confirmation messages or visual indicators open task completion.
Plant Profile Discoverability (R02)	Plant profile difficult to locate.	Users struggle to access critical plant information.	High	Add a more prominent "Plant Profiles" button on the home screen or make navigation bar clearer.
Low "recommendation" section visibility (R02)	"Recommendation" colour blends with UI, making it hard to notice.	Users may miss important plant care recommendations.	Medium	Use a contrasting colour or visual cues to make the "Recommendation" section more prominent.



# Recommendations

Finding	Description	Consequence	Confidence	Next step
<b>Need for Visual Cues (R01)</b>	Users want images to understand indoor spaces.	Lack of images hinders garden space imagination and planning.	Medium	Add images to the garden planning process, especially for indoor spaces.
<b>Desire for Enhanced Interaction (R03)</b>	Users want usernames and @ mentions in the community hub.	Limited social interaction reduces engagement.	Medium	Implement usernames and @ mention functionality in the community hub.
<b>Calendar Integration Desire (R01)</b>	Users want to link watering reminders to their calendar.	Harder to keep up with plant maintenance.	Low	Add a feature to link water reminders to the user's phone calendar or an in-app calendar.



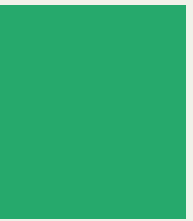
# 04

## Appendix

- Additional Resources

# Additional Resources

- [Research Plan/Guide](#)
- [User Data - Miro Board](#)
- [Mid-Fidelity Prototype](#) (user tested)
- [High-Fidelity Prototype](#) (final product, not user tested)



Thank You!

