Week 3: Advanced Prototyping and Usability Testing

Table of contents

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1. SproutCare — UI/UX Design Research:

Problem Statement

People often forget to water their plants or don't know how to care for them properly. There's a need for a simple, visual app that reminds users to water, track care, and monitor plant health.

User Research

Target Users

- Busy students or working professionals with houseplants
- Plant hobbyists or beginner gardeners
- People using smart assistants or reminder apps

User Pain Points

- Forgetting to water on time
- Not knowing the plant's specific needs (sunlight, fertilizer, etc.)
- Using complex gardening apps not suited for casual users

User Goals

- Get reminders to water plants
- Easily track each plant's care status

- Keep plants alive with minimal effort
- Visual overview of plant health over time

Competitive Analysis

App	Strengths	Weaknesses
Planta	Smart care schedule, plant ID	Too complex, premium wall
Wateria	Simple reminders	Basic interface, lacks visuals
Vera by Bloomscape	Clean UI, calendar view	U.S.-focused, lacks fertilizer tracking
Plant Parent	Gamification, watering journal	Too many notifications, slow

Key Takeaways:

- Users prefer clean, simple UIs
- Reminders + visuals + tracking = ideal combo
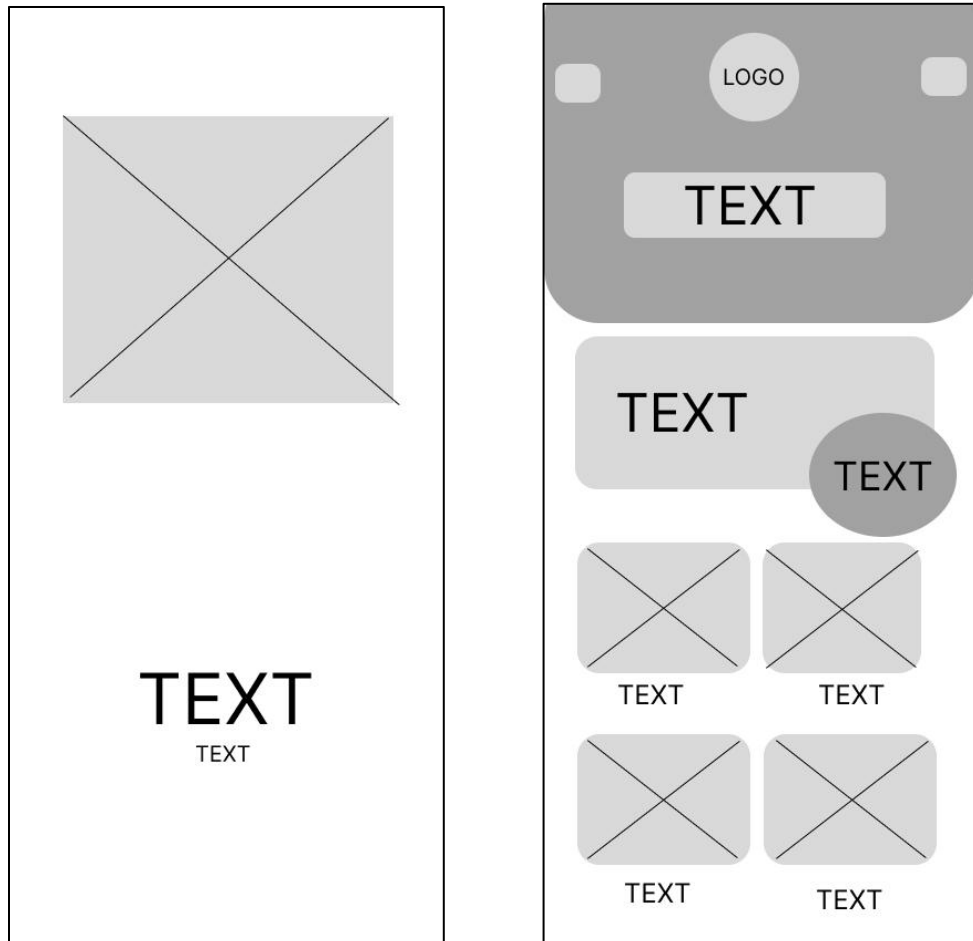- Avoid overly technical language or cluttered design

Design Goals for SproutCare

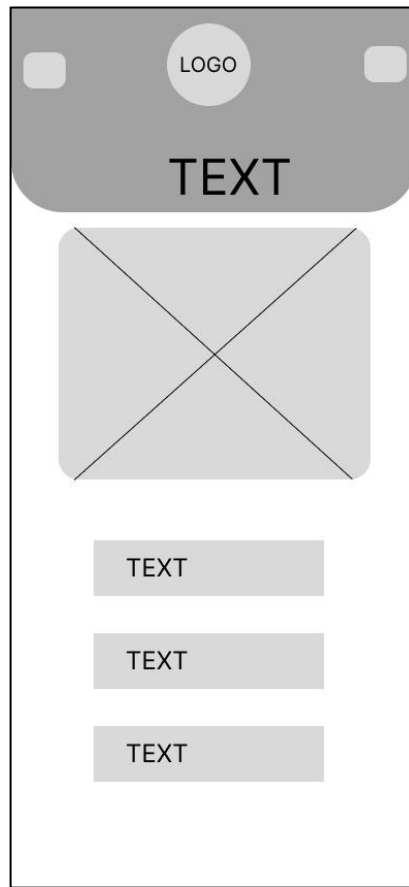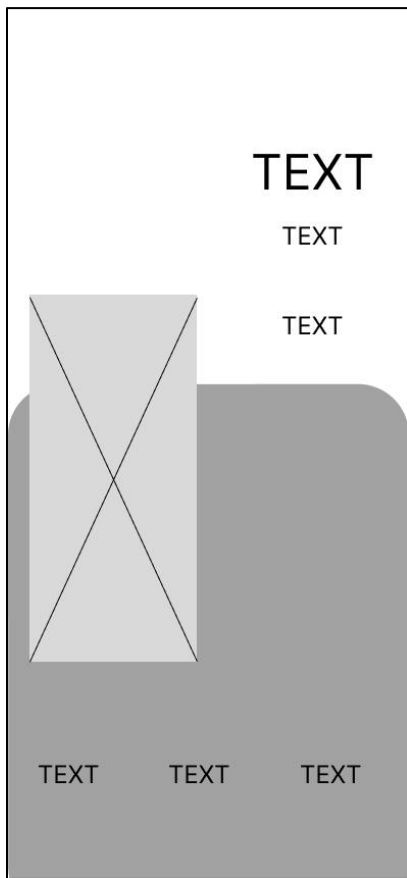| Goal	How to Achieve It
Simplicity	One main task per screen, clean layout
Personalization	User can name plants, set schedules
Fun + Friendly	Use of characters/icons like smiling plants or animated leaves
Trustworthy	Clear feedback after actions (e.g. "Snake Plant marked as watered!")

Design Systems to Reference

- Material Design for clean buttons, spacing, hierarchy

- Human Interface Guidelines (Apple) for card design, bottom nav
- Fluent UI (Microsoft) if you plan to expand to desktop

Wireframes

TEXT

TEXT

TEXT

TEXT   TEXT   TEXT

LOGO

TEXT

TEXT

TEXT

TEXT
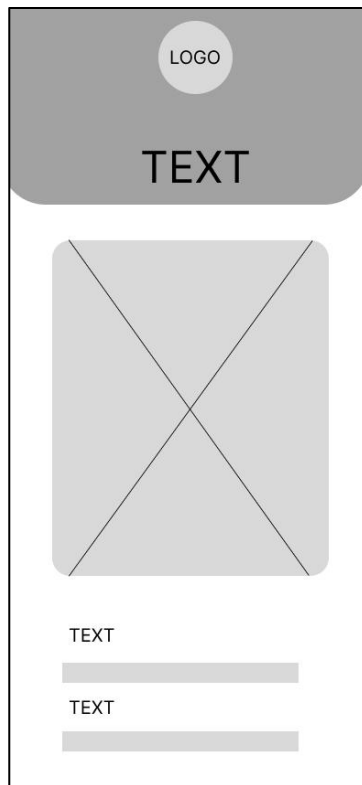
High-Fidelity Prototypes

Tool used: Figma

Link:
https://www.figma.com/design/bPqb2ZJOBtjTEw3sSZHFGZ
/Untitled?node-id=0-1&t=Fl6wy4JlBeLlr82g-1

Splash Screen 1

Let's hydrate some leaves today!

Welcome to today's Sprout care

Add Plants

Your Plants

Snake Plant

Peruvian Cactus

Banana Plant

Homalomena Emerald Gem

Home page 1

Snake Plant
15 weeks

🌡 24 Ċ
Temp

☀ 77%
Light

🧪 Water
Tank

40% Humidity

36% Fertilizer

74mins Next
Watering

Description page 1

Add Plant

Upload Image OR Take picture

Enter name

Age e.g 12 weeks

Set alarm for watering

Save

Add page 1

Plant Stats

Legend: Watering, Temperature, Light

Plant	Watering	Temperature	Light
Snake Plant	~15	~38	~47
Cactus	~20	~36	~43
Banana Plant	~23	~27	~50
Emerald Gem Plant	~30	~24	~44
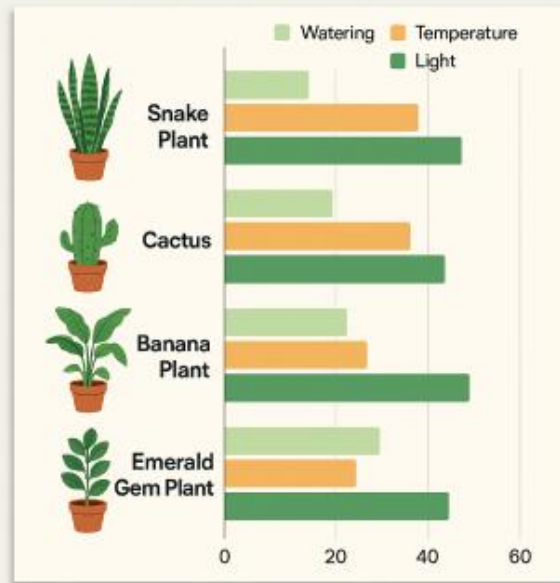
Best Condition
SNAKE PLANT

Worst Condition
EMERALD GEM

Stats page 1
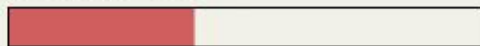
2. Usability Test Plan – SproutCare:

Objective

- Add a new plant
- Understand the home screen
- Check detailed plant info
- View plant stats
- Set a watering reminder

Target Users

- Plant lovers (beginner to intermediate)
- Ages 15–40
- People who use reminder or habit-tracking apps

Participants

Name	Profile
Ayesha, 20	Uni student, owns 3 plants, beginner
Daniyal, 30	Busy professional, wants easy plant tracking
Noor, 25	Hobbyist gardener
Sarah, 18	New plant owner
Hassan, 28	Uses reminders for health & daily tasks

Task Performance Summary

Task	Success Rate	Avg Time	Notes
Add a New Plant	✅ 100%	35 sec	All users could do it, but two didn't notice the photo upload field.
View Today's Plant Care Status	✅ 100%	20 sec	"Your Plants" section is very clear and visual.
Open Plant Details	✅ 100%	25 sec	Liked the icons, but some wanted the labels to be slightly larger.
Set a Watering Reminder	✅ 80%	40 sec	One user missed the toggle and pressed Save too fast.
View Plant Stats	✅ 60%	55 sec	2 users didn't understand chart colors until explained.

Observations & Feedback

 Positives

"I love how calming it looks—like a wellness app for plants."

"The icons make it feel friendly."

"It's so easy to use. I didn't need help!"

 Issues Found

Image Upload Field: Not visually clear it's tappable (add icon or border)

Chart Legend Missing: Users didn't know what the chart colors meant

Reminder Toggle: One user thought the alarm was saved automatically

Quantitative Metrics

Metric	Score
Task Completion	88% avg
Overall Satisfaction	4.6 / 5 ★
Ease of Navigation	4.8 / 5 ★
Visual Appeal	5 / 5 ★