Sage

Designing for an Active Transition into a Retirement Lifestyle

Adam Barry, Amy Chang, Ethan Hellman, Brendan McLoughlin

CS 147 · F23 · Stanford University

Outline

1. Problem & Solution
2. Values in Design
3. Tasks
4. Usability goals & metrics
5. Revised Interfaces Sketches
6. Medium-fi task flows
7. Prototype Implementation

THE PROBLEM

Elderly people who lack community and contribution to something bigger than themselves often feel lonely and purposeless.

Needs & solution

NEEDS

- Create sense of purpose
- Prevent loneliness

SOLUTION

App that organizes shared gardens & strengthens community

VALUE PROP

Creating newfound purpose and friendships through gardening

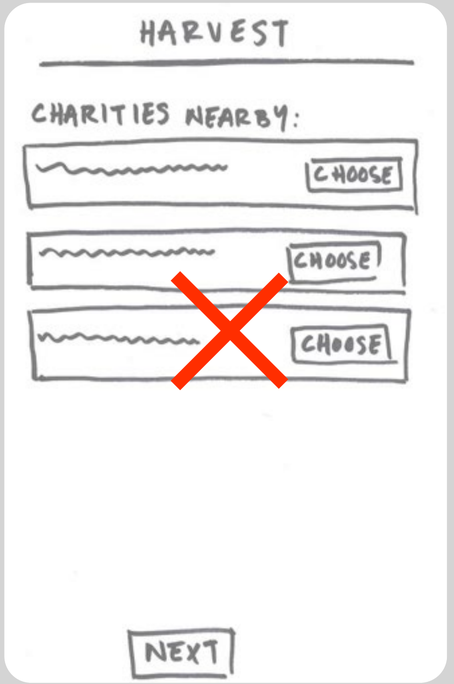
Values in Design

1. Its about people, not plants
2. Gentle accountability
3. Extreme accessibility

It's about people, not plants

Accountability flow instead of harvest flow

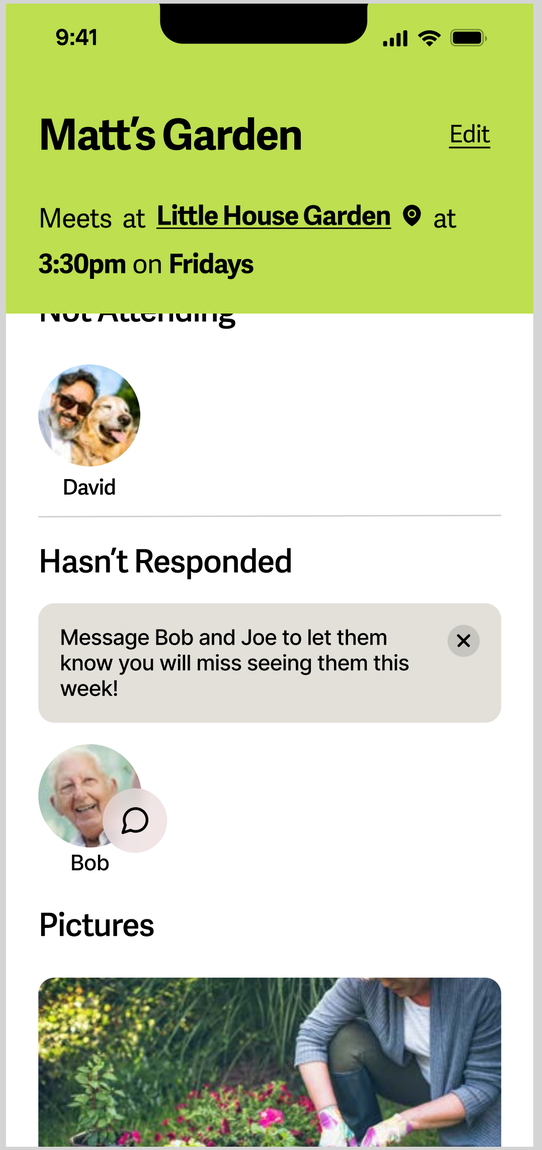
Decided to revisit harvest task flow and scrap it...because it didn't achieve that value

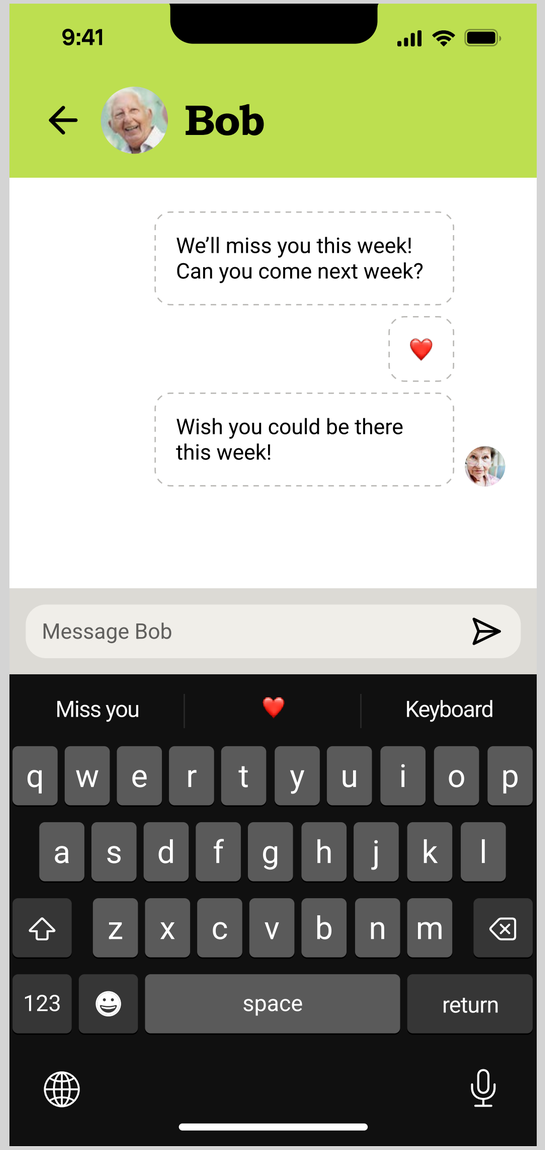


Gentle Accountability

Being ~missed~

Rather than strict attendance feature, want something subtle that people can act on...a small thing to make someone feel seen





Extreme Accessibility

1. Larger Buttons (Salman et al., 2022)
2. Higher Contrast (Alsswey & Al-Samarraie, 2019)
3. Full-Sentence Instructions (Chia et al., 2018)
4. Simplicity & Clarity (Alsswey et al., 2022)
5. Blue and Green Confusion (Kvitle et al., 2016)

Tensions

1. “Subtlety” runs in the face of large buttons and full sentences
2. Is accountability at odds with friendship formation?

Usability Goals & Key Metrics

Name	Goal	Metrics
Ease of Learning	Users can quickly learn how to navigate and use the app's basic features.	1. Time to complete specific tasks for the first time. (mins / secs) 2. User success rate on first attempt. . (percentage)
Memorability	A returning user can re-establish proficiency quickly.	1. Time taken for a returning user to complete tasks after a period of not using the app. (mins / secs) 2. Error rates for returning users. (percentage)

we show progress on these later

full list in appendix

Tasks

Tasks

Annotated Task Flows

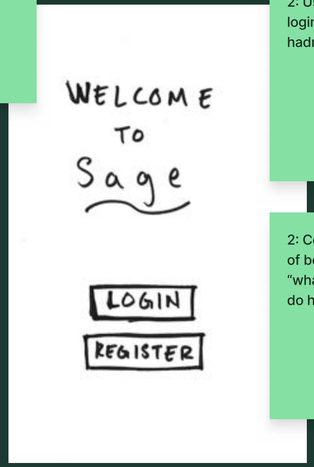
3: Didn't know what name to enter when joining the garden ("what name do I put in?")

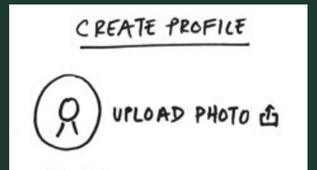
3: Login page was not like ones she had encountered before - did not like the fact that it was not username and password

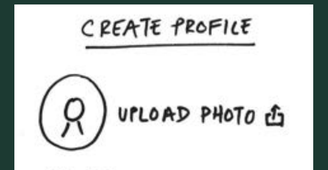
3: Didn't really understand how the logging worked

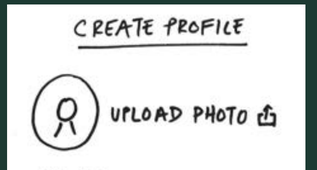
2: User initially went to login even though they hadn't become a user yet

2: Confusion with the idea of being a first time user "what do you want me to do here?"



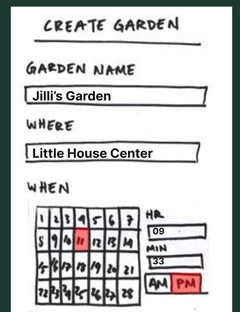






Tasks

Annotated Task Flows

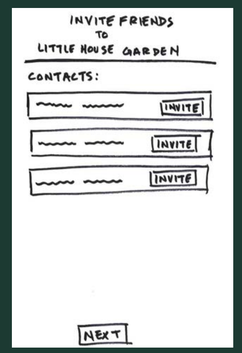


3: Confused at times which direction to take with the app (invite or harvest)

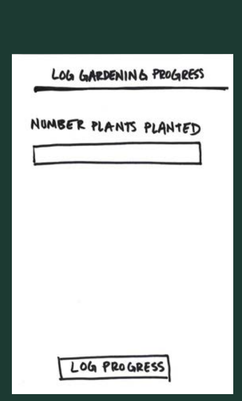
2: Wants to be able to assign jobs / responsibilities to different individuals within the group (perhaps calls for a group administrator)

2: Couldn't distinguish what the options were on the home page
"I can't tell what I am supposed to do next"

0: Likes the directions feature as it makes it

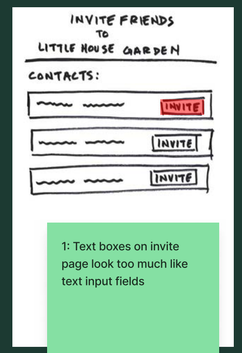


2: Wanted the option to assign different tasks to

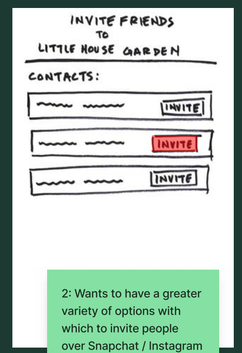


Logging page was super sparse / devoid of information (need to add in more ways to log, and more detail when it comes to logging i.e. what type of plant, how many, by who, etc)

2: Didn't know how progress was measured... "what exactly should I be 'logging'?"



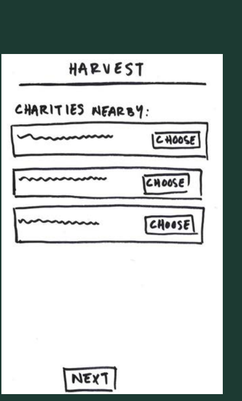
1: Text boxes on invite page look too much like text input fields



2: Wants to have a greater variety of options with which to invite people over Snapchat / Instagram

The harvesting task flow should be highlighted better when the time comes to harvest

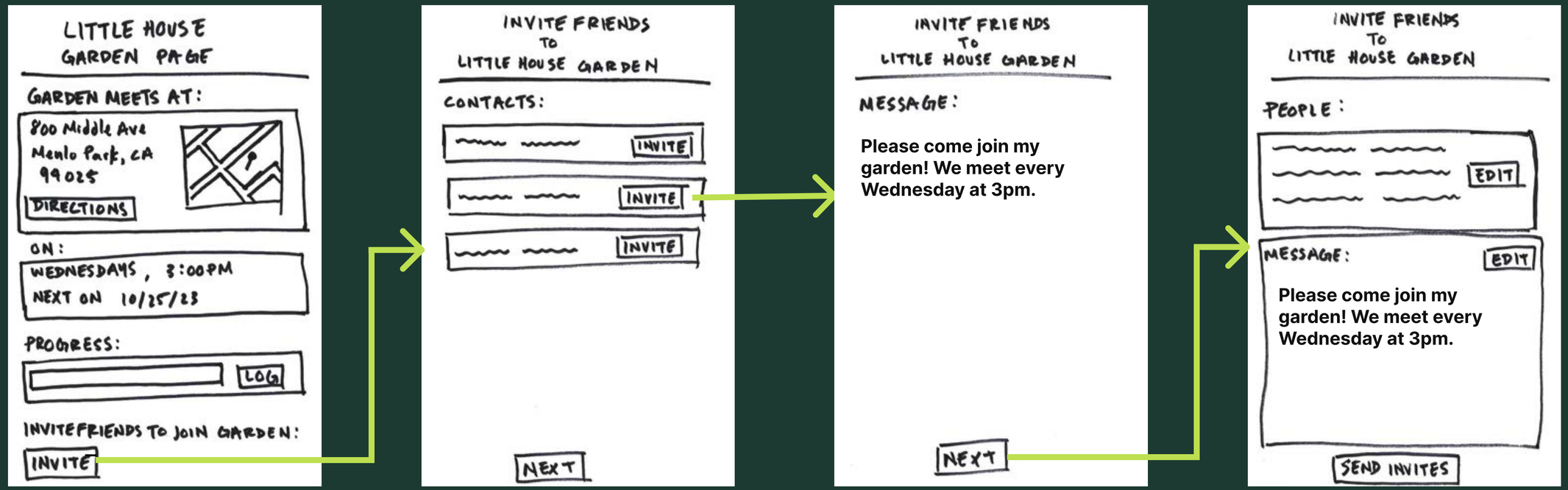
3: Didn't know whether to harvest or invite first... "am I inviting people to harvest?"



1: Didn't understand why there was an option to edit

Old LoFi Prototype

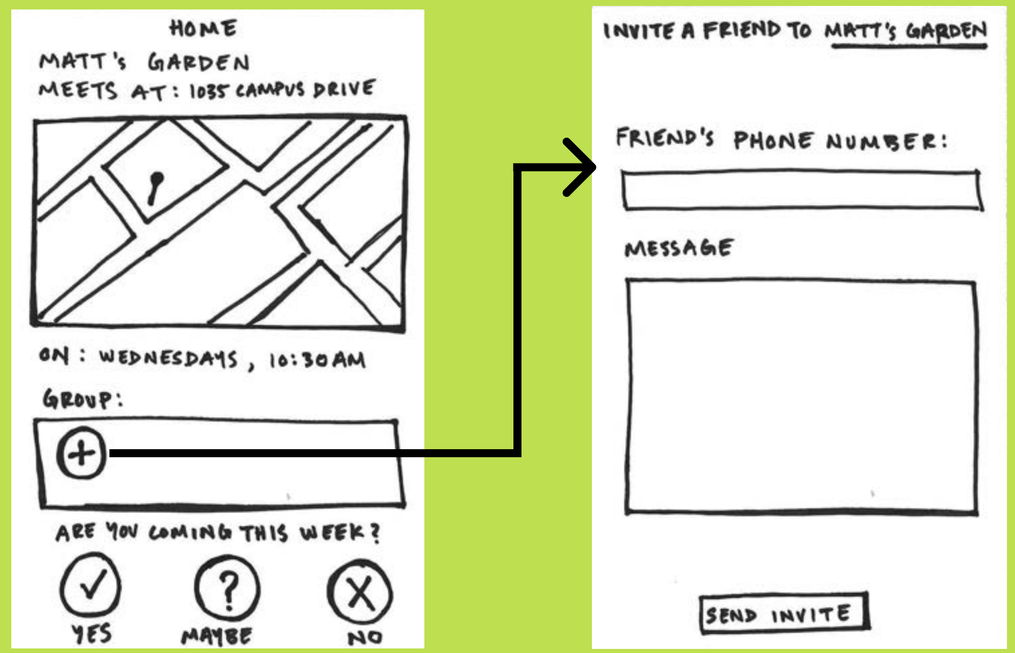
Simple Task Flow



Invite new group members

Resvised LoFi Prototype

Simple Task Flow



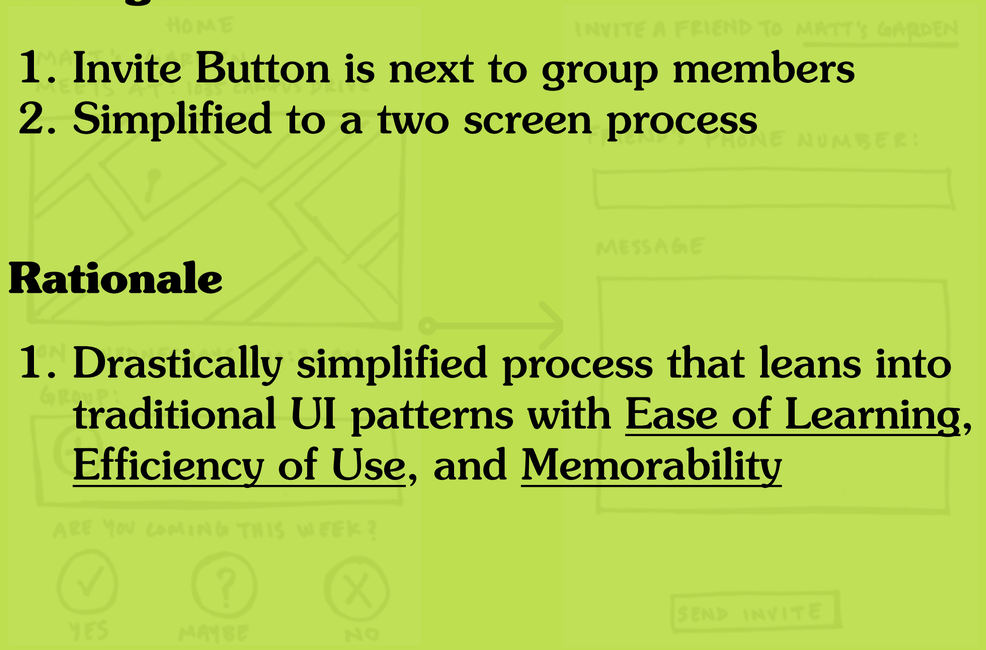
Invite new group members

Resvised LoFi Prototype

Simple Task Flow

Changes

1. Invite Button is next to group members
2. Simplified to a two screen process



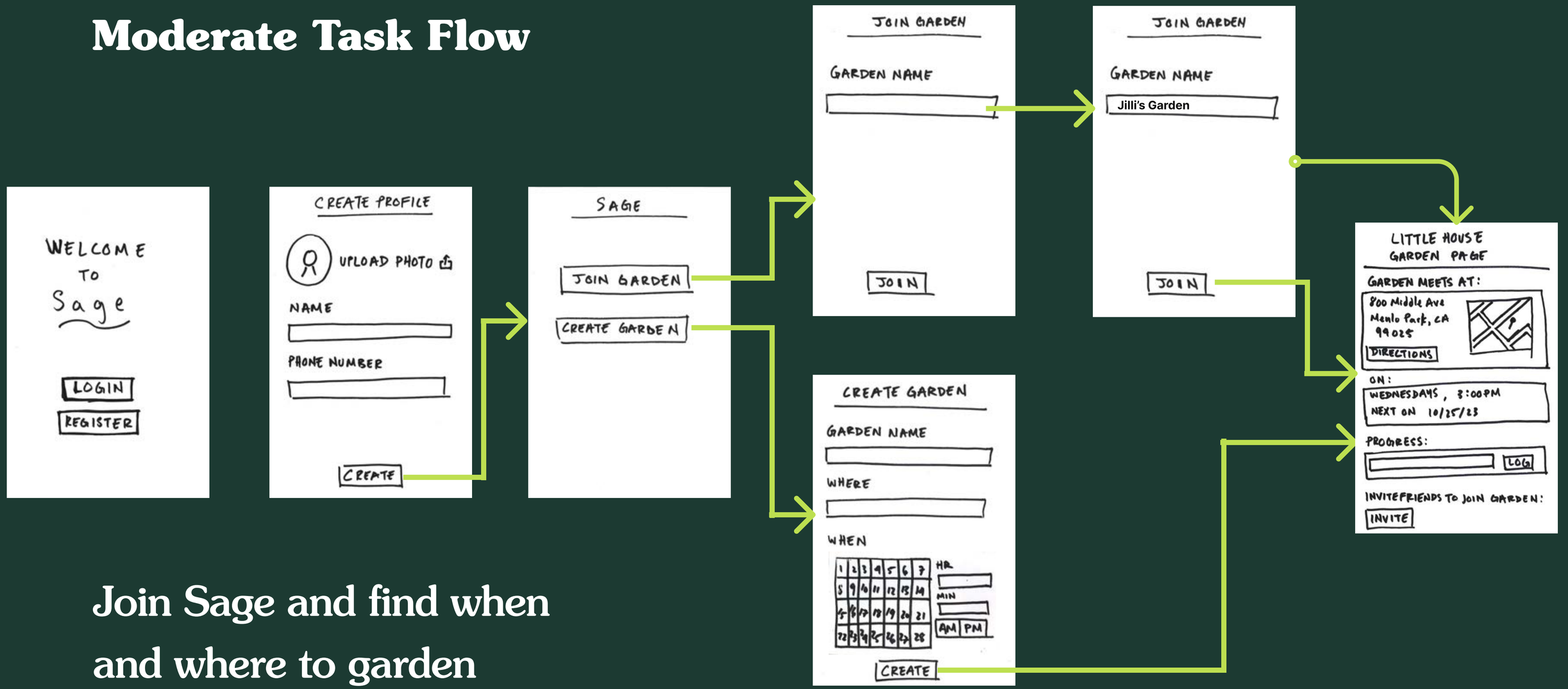
Rationale

1. Drastically simplified process that leans into traditional UI patterns with Ease of Learning, Efficiency of Use, and Memorability

Invite new group members

Old LoFi Prototype

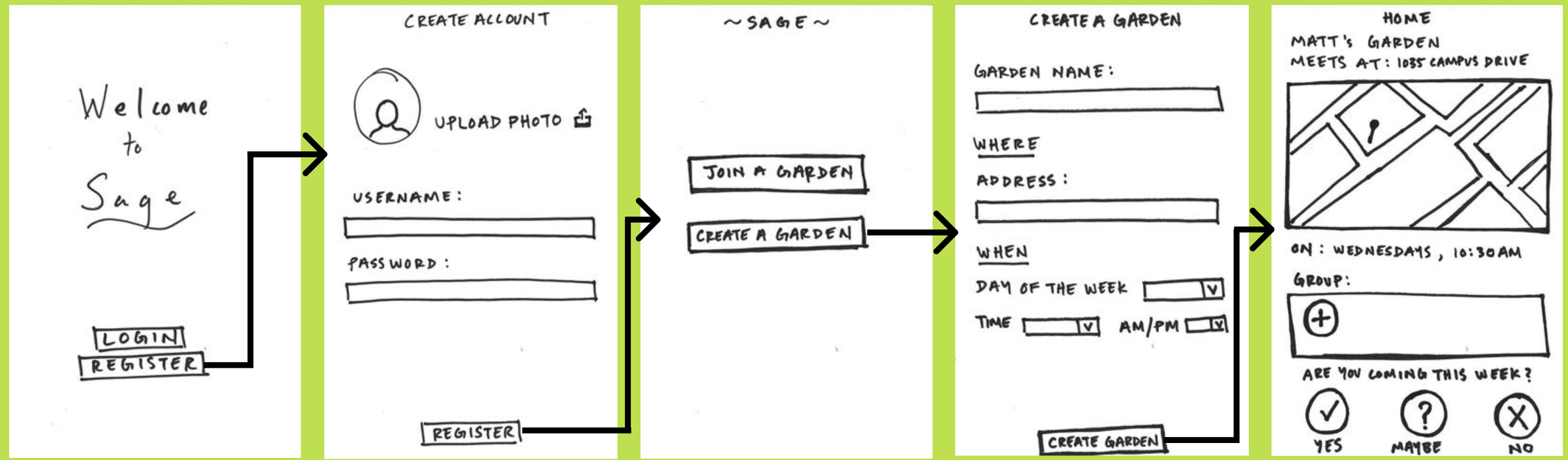
Moderate Task Flow



Join Sage and find when and where to garden

Resvised LoFi Prototype

Moderate Task Flow



Join Sage and find when and where to garden

Resvised LoFi Prototype

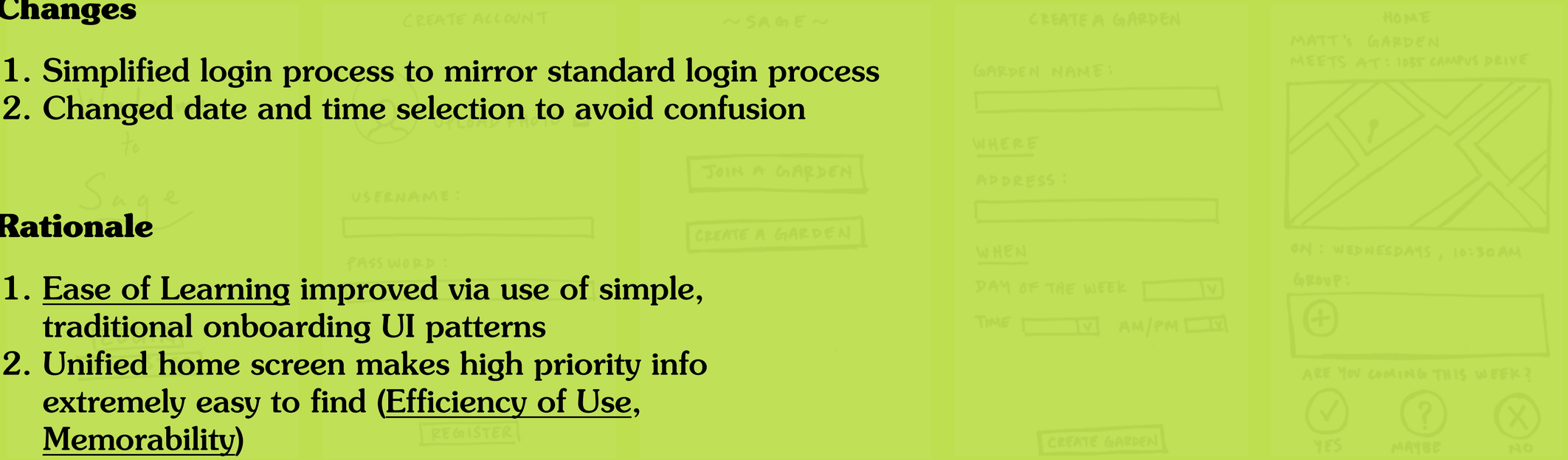
Moderate Task Flow

Changes

1. Simplified login process to mirror standard login process
2. Changed date and time selection to avoid confusion

Rationale

1. Ease of Learning improved via use of simple, traditional onboarding UI patterns
2. Unified home screen makes high priority info extremely easy to find (Efficiency of Use, Memorability)

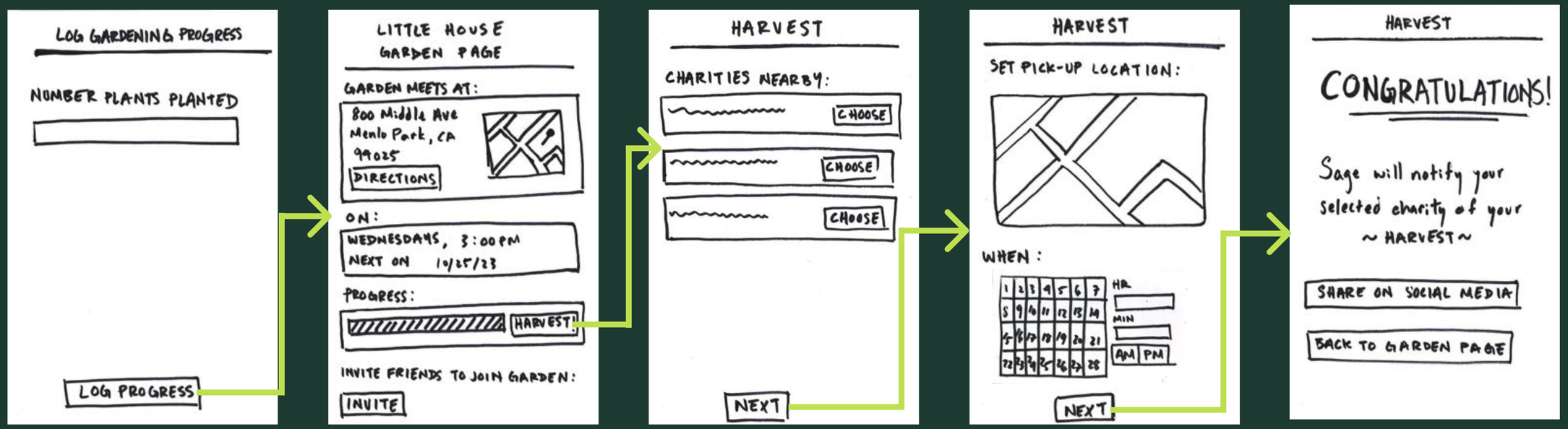


Join Sage and find when

and where to garden

LoFi Prototype

Complex Task Flow



Distribute harvested food to the community

Resvised LoFi Prototype

Complex

Matt's Phone

Matt's Phone

Ethan's Phone

Let your group members know that "I miss you 💚"

Changes

1. Changes complex task flow from harvest to check-in
2. Consolidated information to home page for simplicity
3. Call to action to check in with absent members

Rationale

1. Ease of Learning improved given that harvest functionality not intuitive, attendance more comprehensive
2. Unified home screen makes high priority info extremely easy to find (Efficiency of Use, Memorability)
3. Error Rate and Severity lowered given fewer screens should invite fewer errors
4. Satisfaction increased given group member section requested

Med-Fi Prototype

MedFi Prototype Before Feedback

Sage

New Members

Returning Members

Go Back

Welcome to

Sage

Username

Choose a username

Password

Choose a password

Confirm Password

Confirm your password

Join

Go Back

Settings

Matt's Garden

Meets at 1035 Campus Drive on Wednesdays at 10:30 AM

Marie

Matt

John

It looks like **Matt** won't be able to make it this week.

Would you like to check in on **Matt**?

Check In

Go Back

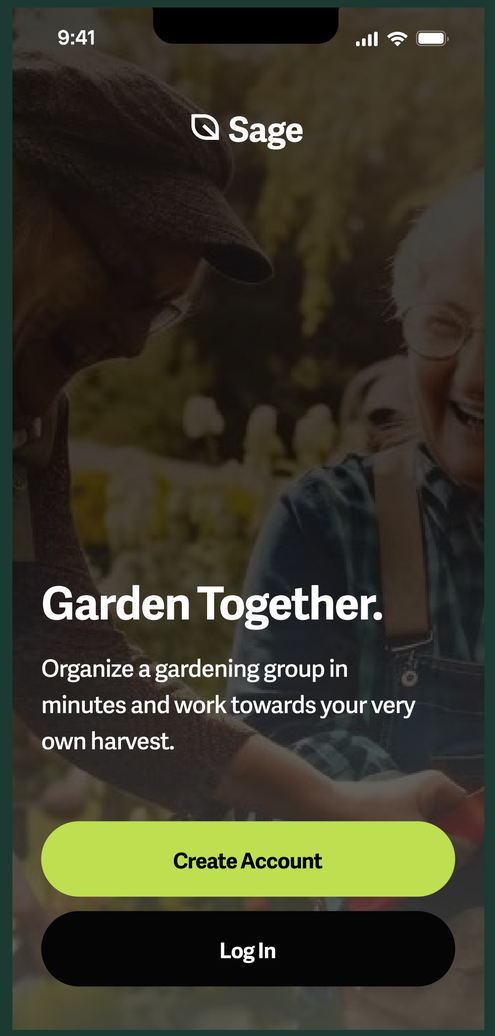
Settings

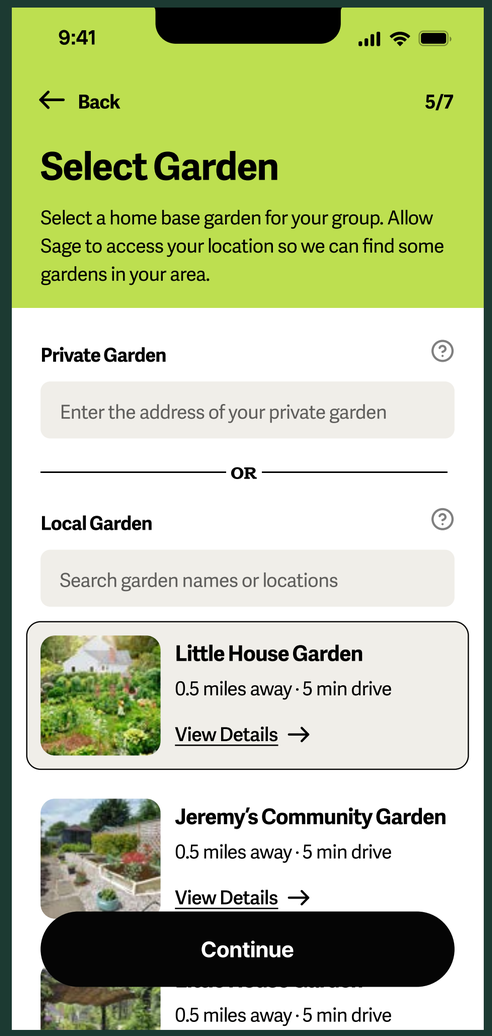
Private Chat with Matt

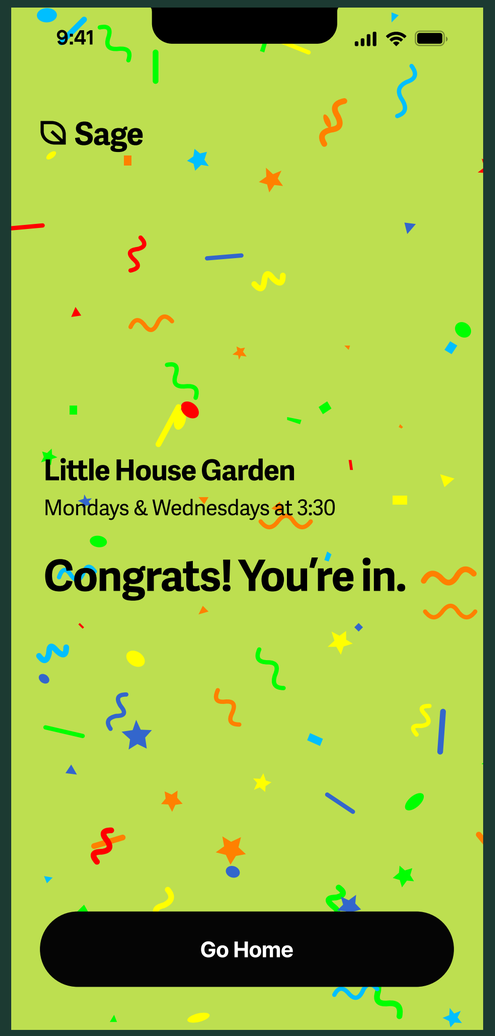
Hi Matt! I saw you weren't making it to the meeting. Are you okay?

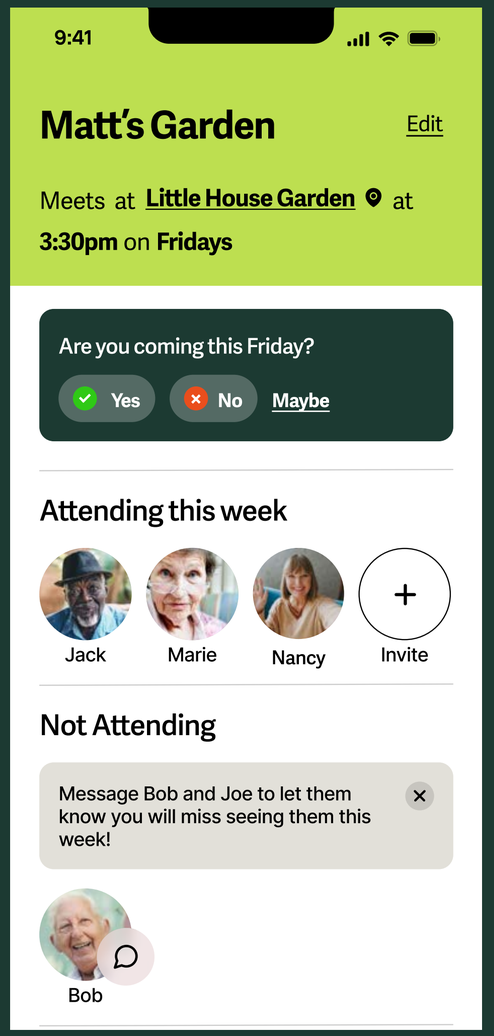
Message...

MedFi Prototype After Feedback







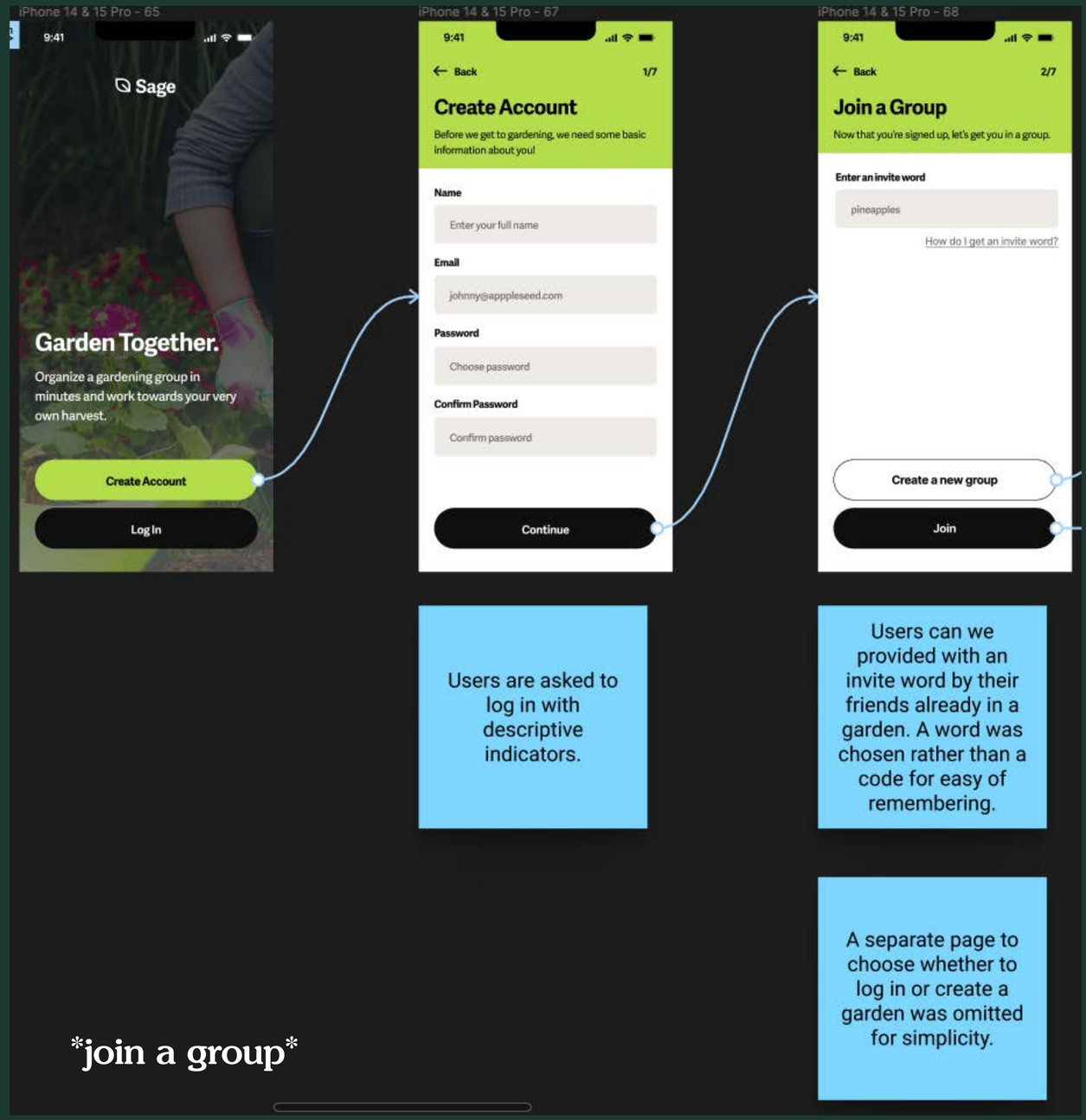


MedFi Prototype After Feedback

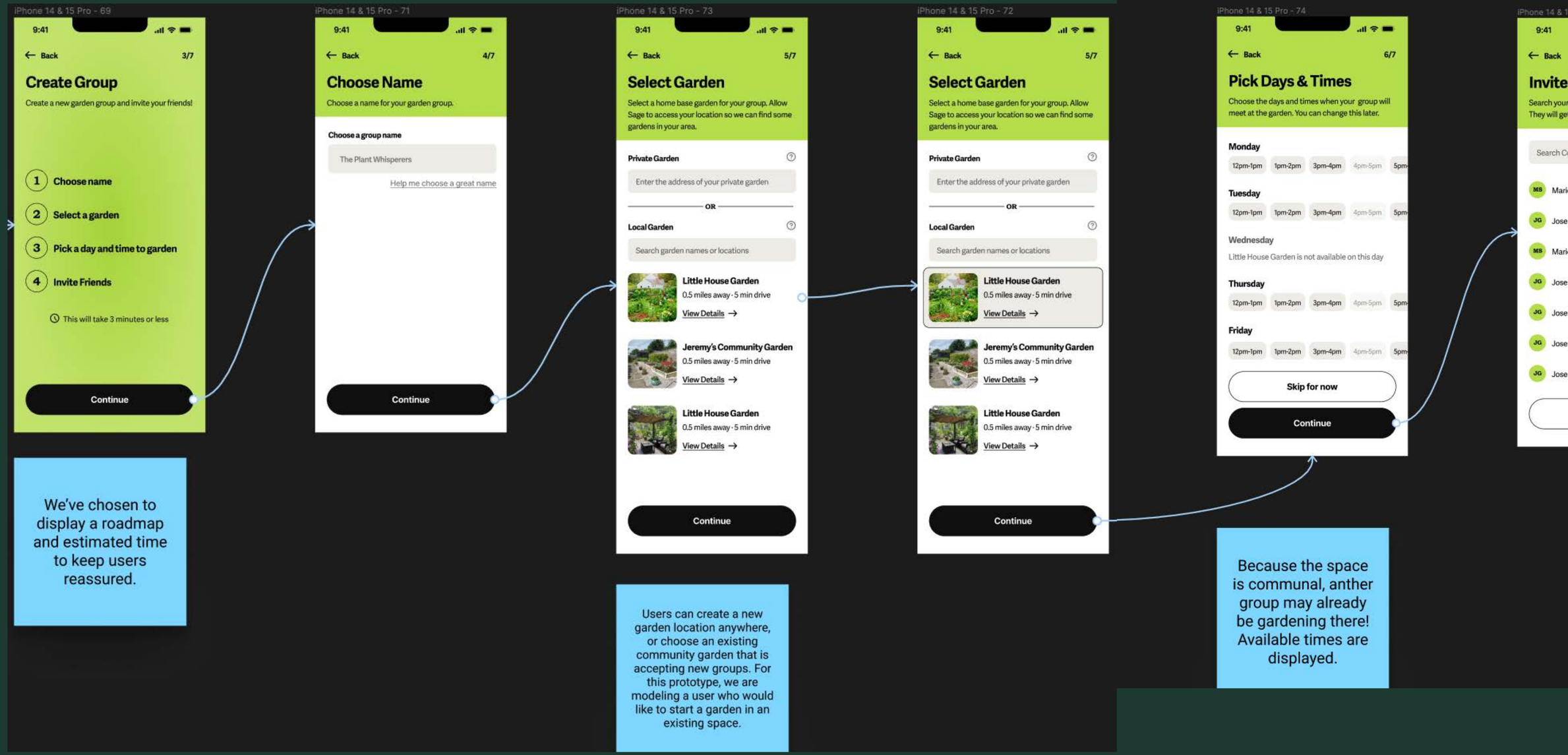
Main Changes	Usability Progress
Traditional UI	Ease of Learning & Efficiency
High contrast color choices	Accessibility
Use of typography, colors, and UI blocking to prioritize information	Memorability and Accessibility

Moderate Task Flow

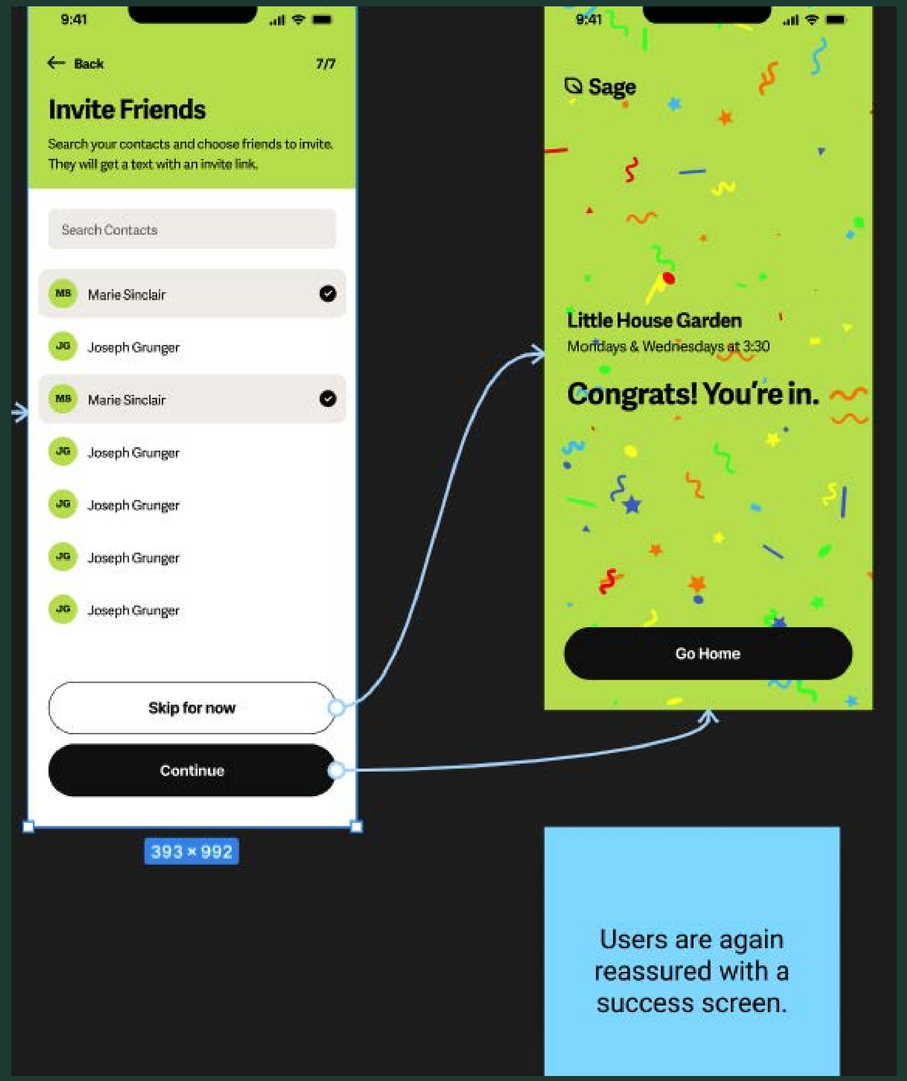
Join Sage and find out when and where to garden



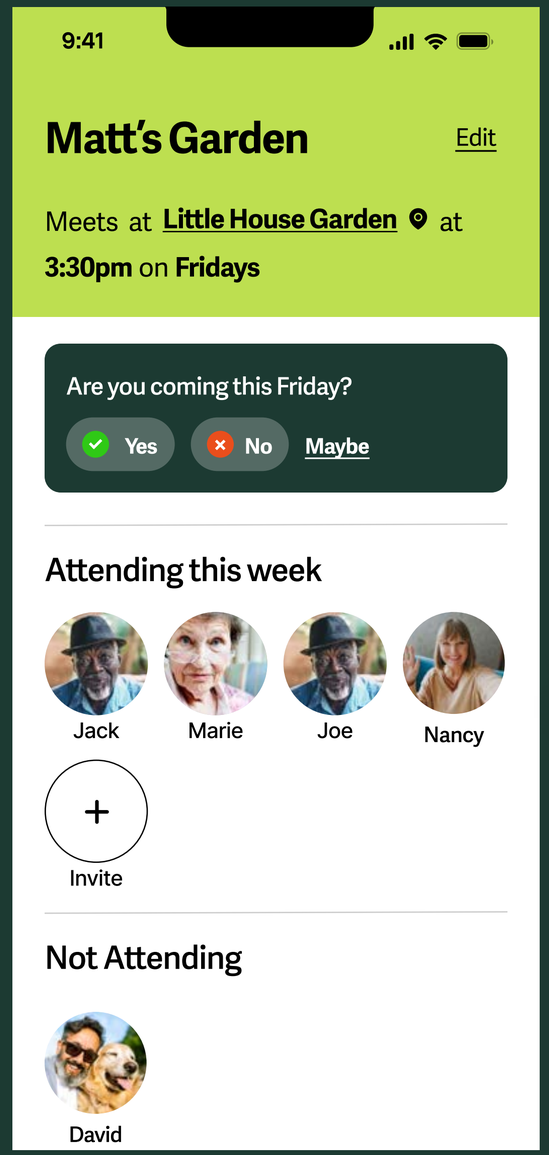
create a group



create a group



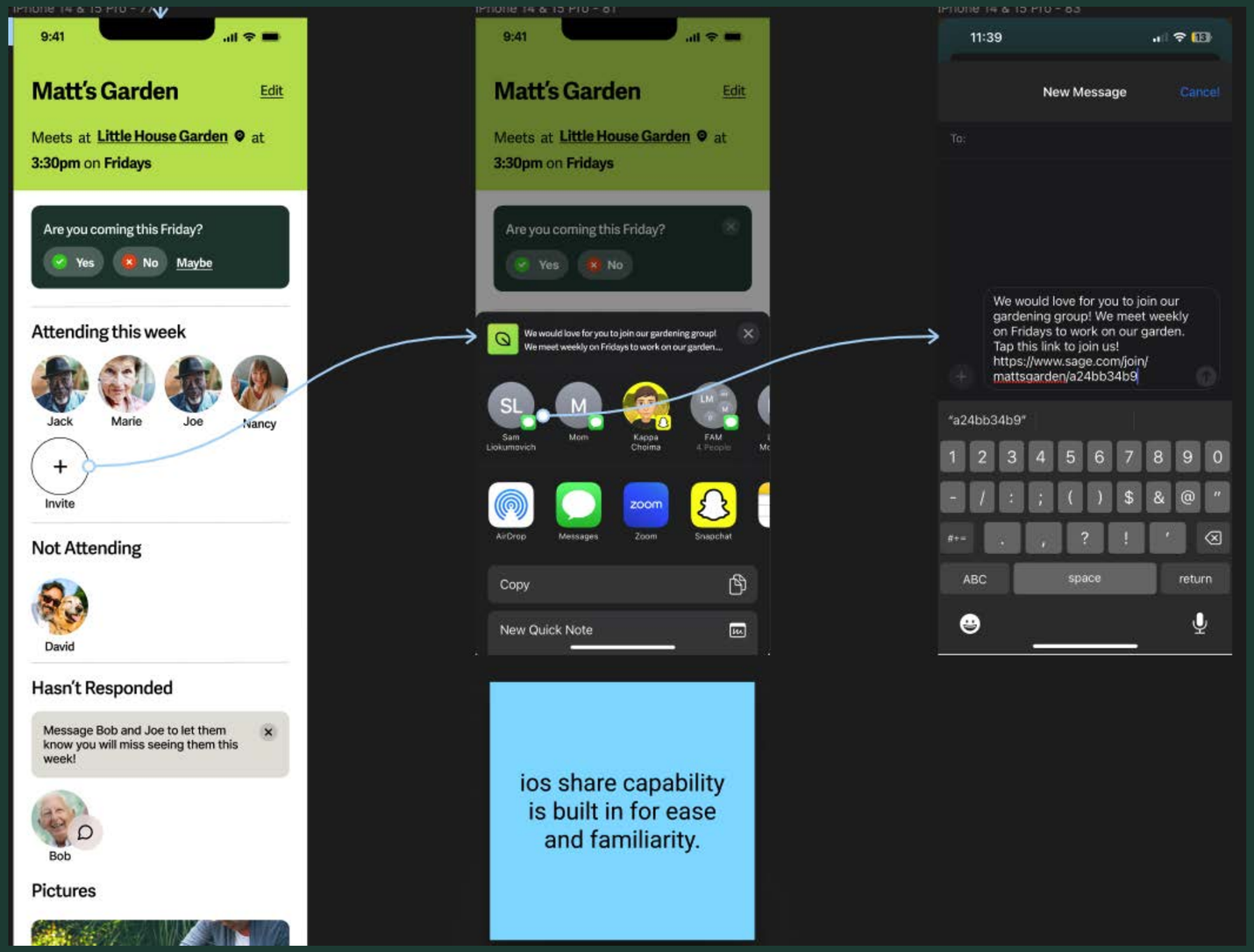
find out when and where to garden after creating or joining a group



One unified home screen which contains all necessary info about when and where garden meets. Clicking on location gives more direction information on 3rd party platform

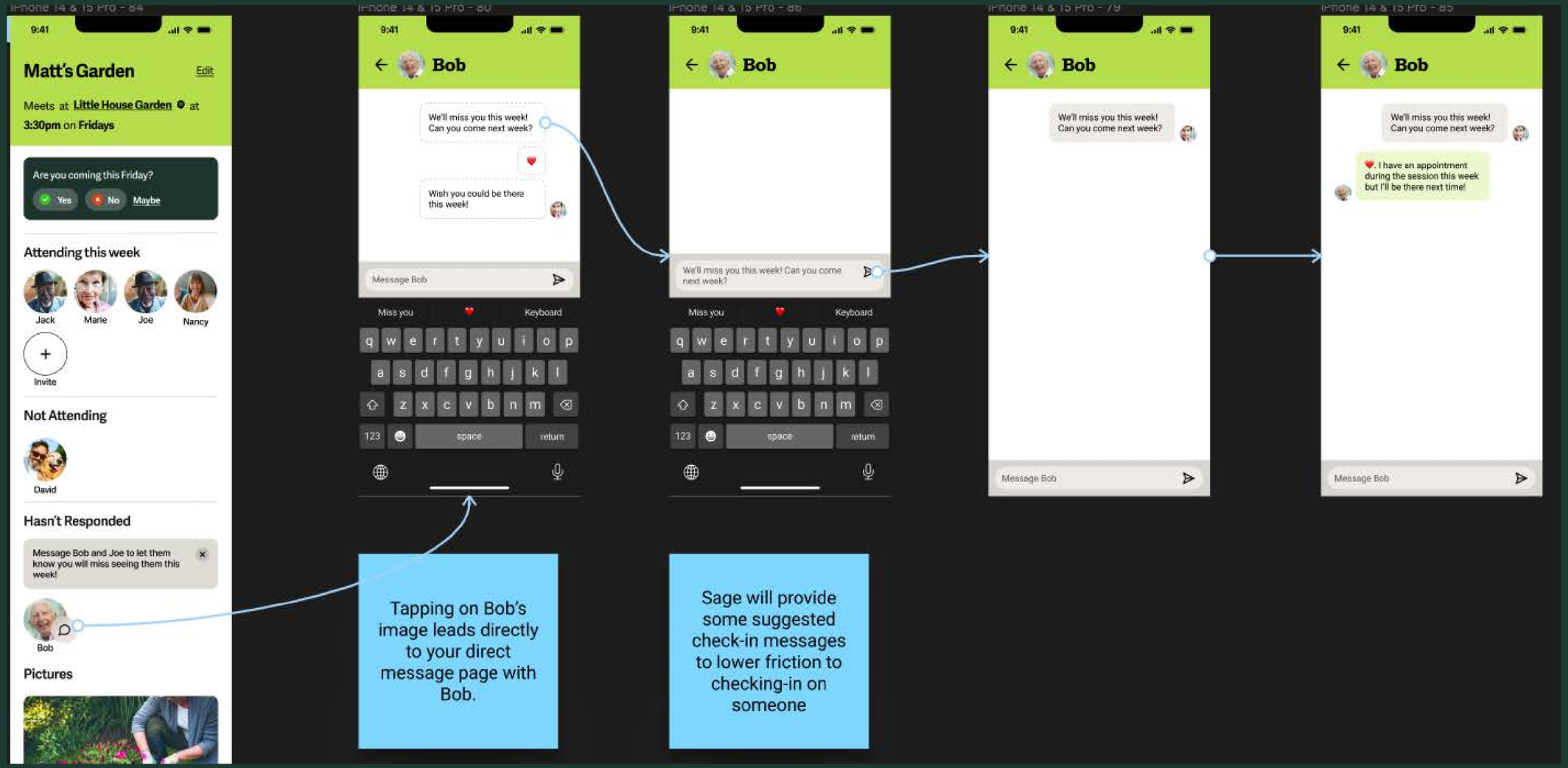
Simple Task Flow

Invite new group members



Complex Task Flow

Check-in on group members



Prototype Implementation — Tools

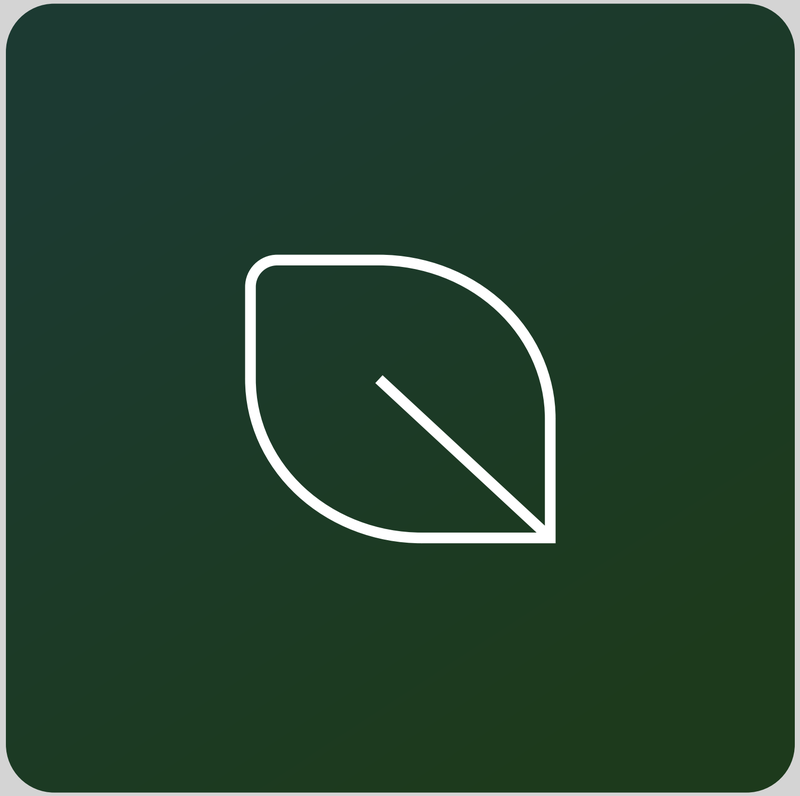
Pros

- Easy to collaborate with other team members
- Enables the creation of a cohesive design system
- Interactive prototyping shows realistic interactions and task flows

Cons

- Figma knowledge limited for certain team members
- More Figma files ➜ more expensive

Prototype Implementation — Limitations



- Cannot input dynamic content — want people to get a sense of the platform without fully implementing all of the features
- Does not include advanced functionality and task flows — for purposes of med-fi prototyping, we decided to focus primarily on core functionality
- Contains untested elements — additional changes made to the prototype still need feedback from our users

Prototype Implementation — Wizard of Oz

- Available garden locations are simulated - given that we have not yet determined where users are allowed to organized gardens, we simulate this.
- Group dynamics have been simulated given that we do not yet have a database of users and backend to support consistency across screens.
- Dynamic selection of contacts list is simulated given that this requires advanced Apple integration and permission handling.

Appendix

Medium-Fi Prototype

Bibliography

Usability Goals & Metrics

README