

GRAN HEALTH

Project: GranHealth

Roles: Sole UX

Duration: Jan. 2022 - Feb. 2022

**Case Study by:
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Project Overview

The Project:

GranHealth is a senior-focused app that promotes the use of electronic health records. Typically, with older age means more care and seniors usually go to the doctor more often than any other age group. This app organizes health records, appointments, and medications to make it easier for seniors to have access to their health history. GranHealth's primary target users are seniors who would benefit from having access to their health records.

Project Duration:

January 2022 – February 2022



Project Overview

The Problem:

Between multiple doctors appointments, medications, and diagnosis, seniors have a lot of information to keep up with that can be difficult. In addition, seniors are face with the issue of having to wait until their next doctor visit to ask a question they may have forgotten to ask.

The Goal:

Design an app that will allow doctor and patient communication, as well as manage and organize all health records. This includes medications, diagnosis, and health suggestions.

Project Overview

My Role:

All roles- UX designer leading the app and responsive website design from conception to delivery

My Responsibilities

Conducting interviews, paper and digital wireframing, low and high-fidelity prototyping, conducting usability studies, accounting for accessibility, iterating on designs, determining information architecture, and responsive design

Challenges

- 1) Create easy-to-understand data visuals for users
- 2) Integrate notification reminders through the app to the phone
- 3) Construct detailed information pages for diagnosis, medications, and appointments

Understanding the User(s)

- User Research
 - Personas
- Problem Statements
- User Journey Maps

User Research Summary

At the time of this project, I worked at a senior independent living community where I was in contact with seniors daily. Overtime I documented common phrases, emotions, and feelings that were expressed by seniors before, after, and leading up to their appointments. I used this data to develop interview questions, which were then used to conduct user interviews. Most interview participants reported feeling overwhelmed or frustrated with forgetting information from visits or not asking all of the questions they had at the time. A lot of them also complained about the worry of forgetting to take their newly prescribed medications at the right time. The feedback received through research made it very clear that users would be open to help if they had access to an easy- to-use tool to help guide them.

User Pain Points

1

Memory

Users forget appointments, medications, and information given to them by doctors.

2

Unorganized

Some users don't have trouble remembering key information. However, they are feeling overwhelmed and unorganized with all of the information they have to keep up with.

3

Miscommunication

Due to forgetting to ask questions or forgetting answers to questions, users hate having to wait until their next doctor appointment to speak with their doctor.

Personas



Alice Watkins

Age: 84

Education: Master's

Occupation: Former School Teacher

"With my old age, goes my mind.
I can't remember a thing!"

Goals:

- tool to help her remember information appointments and doctor notes
- ways to talk to doctor without having to wait until next visit

Frustrations:

- forgets questions to ask certain questions
- can't keep up with all appointments

Alice attends a lot of doctor appointments throughout the that she loses track of her appointments and often forgets to ask questions to certain doctors. She wants an app to help eliminate these issues.



William Pierce

Age: 76

Education: Some college

Occupation: Veteran

"My old body has every issue there is.
It is a lot to keep up with."

Goals:

- reminder to take certain meds at certain times
- descriptions of health issues and their corresponding medications

Frustrations:

- doesn't remember when or what meds to take
- too many health issues to keep up with and understand what they are

William has a lot of health issues that require him to take a lot of medications. He often forgets what medication is for what issue and when to take the medications. He would benefit from an app that would tell this to him.

User Journey Map

Mapping Alice's user journey revealed how difficult or easy the app is to navigate through.

Persona: Alice

Goal: Find a diagnosis and the medication prescribed for it

ACTION	Open app on phone	Select "My Chart"	Open a listed diagnosis	Find medication listed
TASK LIST	Tasks A. Located app B. Clicked on the app	Tasks A. Find and click on hamburger menu B. Select "My Chart"	Tasks A. Select Diagnosis B. Select an diagnosis that I listed	Tasks A. Locate the medication listed under the name of diagnosis
FEELING ADJECTIVE	- Nervous	- Confused on what "hamburger menu" meant - Frustrated	- Open diagnosis page easily (relieved) - Eye squint on diagnosis page but selected one from list	- Relieved - Quickly found medication
IMPROVEMENT OPPORTUNITIES	--	Create menu alternative	Reduce the load of words and information on page	--

User Journey Map

Mapping William's user journey revealed how difficult or easy the app is to navigate through.

Persona: William

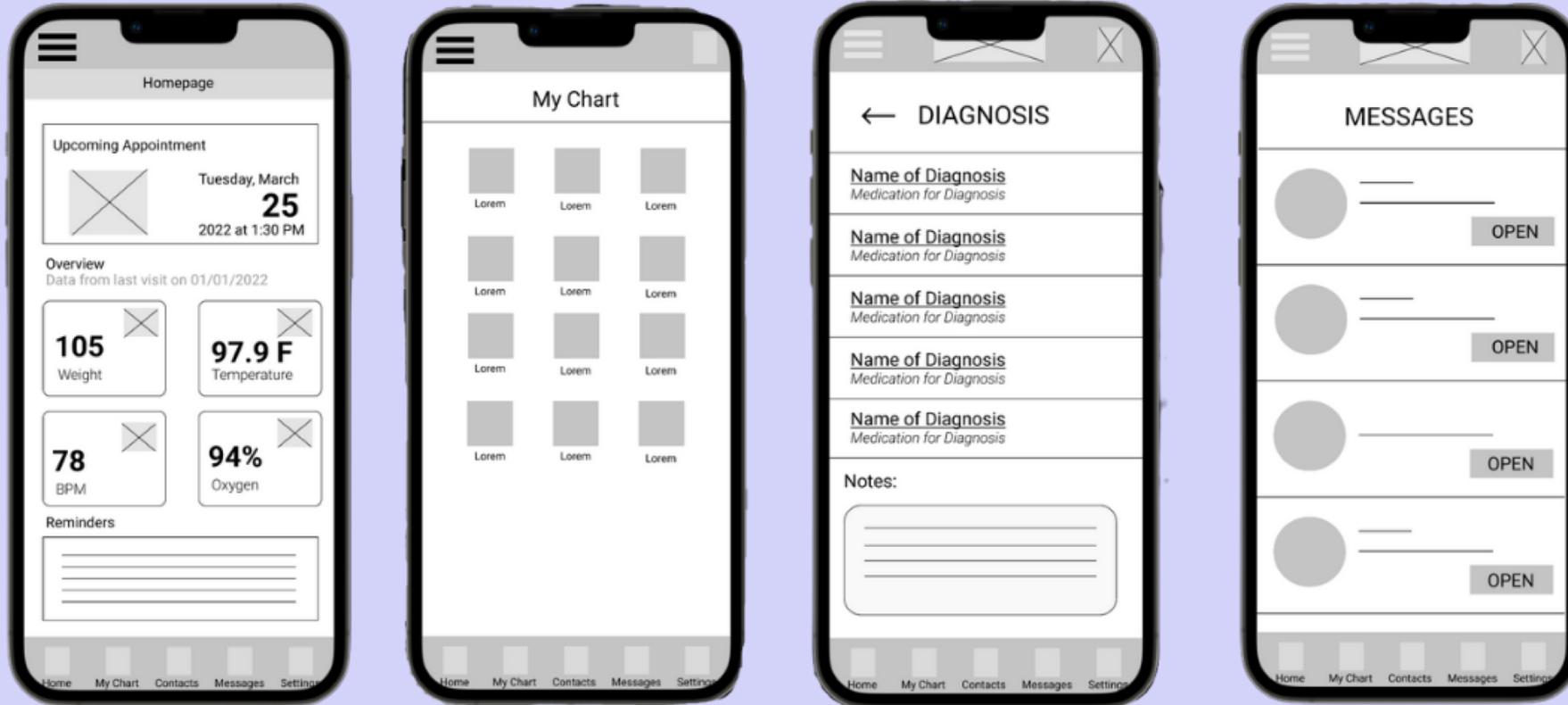
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FEELING ADJECTIVE	<ul style="list-style-type: none"> - Excited 	<ul style="list-style-type: none"> - Confused on what "hamburger menu" meant - Relieved to find it 	<ul style="list-style-type: none"> - Didn't know what to do once he selected diagnosis 	<ul style="list-style-type: none"> - Difficult to read but found the medication
IMPROVEMENT OPPORTUNITIES	--	Create menu alternative	Offer some call-to-action, maybe underline the names of the diagnosis	<ul style="list-style-type: none"> - Fix font size

Starting the Design

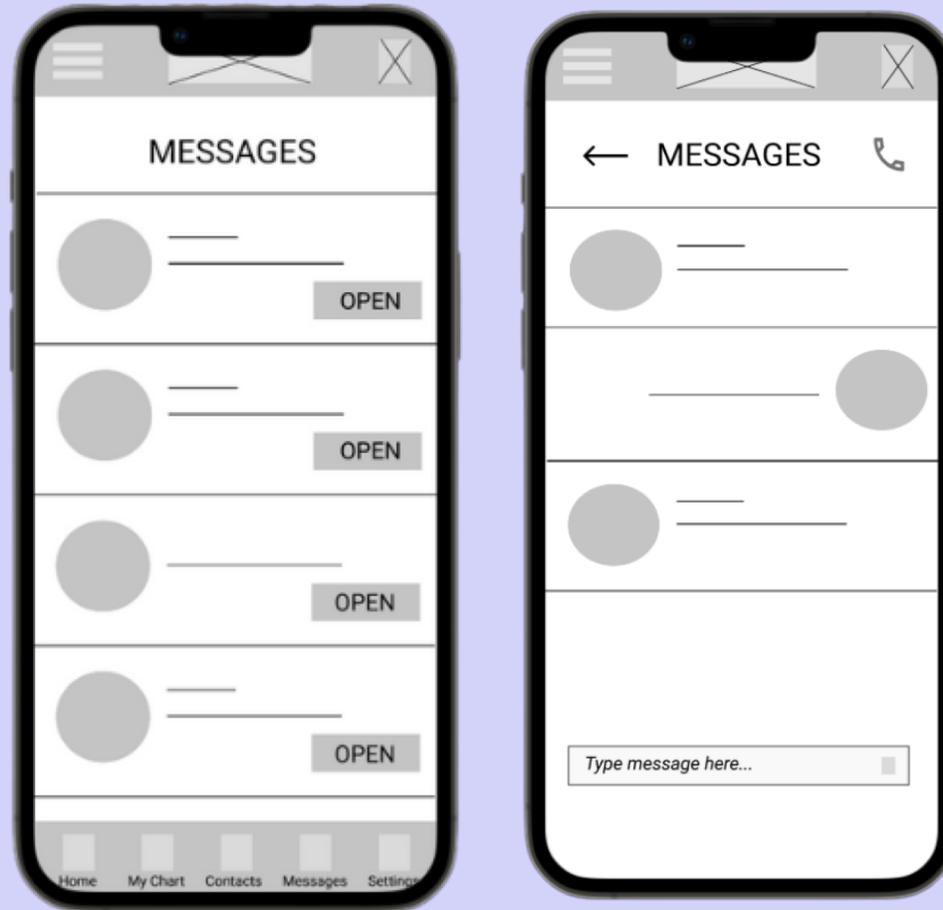
- Sitemap
- Digital Wireframes
- Low-Fidelity Prototype
 - Usability Studies

Digital Wireframes



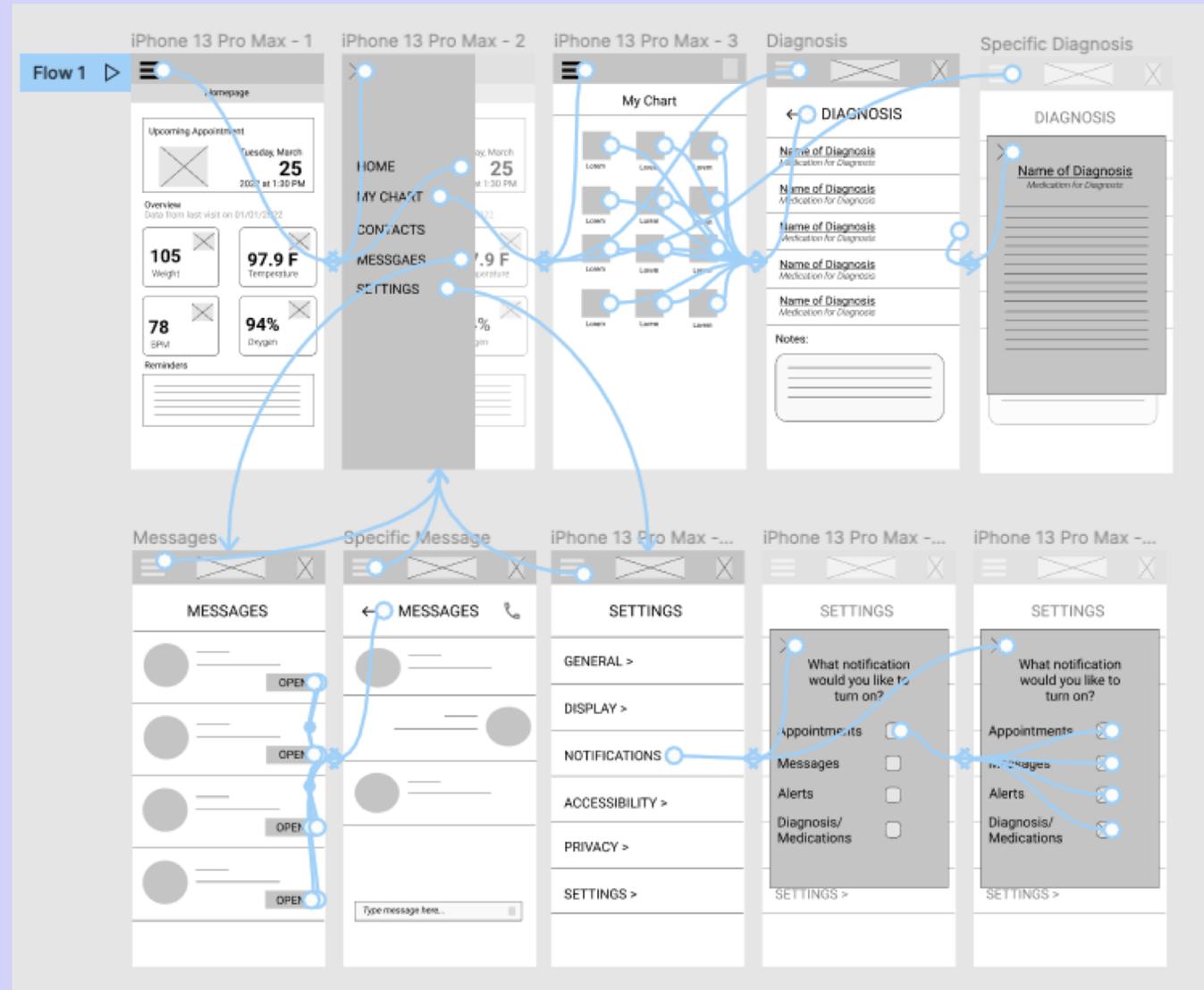
Here are the wireframes for the main screens the users will use: homepage, my chart, health diagnosis, and messaging.

Digital Wireframes



Here is a wireframe of the messaging tool. This shows the initial design on the messaging screens that the user would navigate through to speak with their doctors.

Low-Fidelity Prototype



Research Study Details:

Research Questions:

1. What do the users need most from this service?
2. What goals would users hope to accomplish from a senior-focused health app?
3. How do users currently keep up with medical health records and doctor appointments?

Participants:

1st Study:

10 participants
Five males and five females
Ages 55-89
Seven participants: visual impairments
Eight participants: hearing impairments

2nd Study:

15 participants
Seven males and eight females
Ages 55-90
Eight participants: visual impairments
Nine participants: hearing impairments

Methodology:

Users were asked to perform tasks in a low-fidelity prototype

1st Study:

30-35 minutes per participant
Location: GA, United States
Moderated Usability Study

2nd Study:

35-45 minutes per participant
Location: United States, remote
Unmoderated Usability Study

Usability Study: Findings

I conducted two rounds of usability studies. Findings from the 1st study helped guide the designs from wireframes to mockups. The 2nd study used a high-fidelity prototype and revealed what aspects of the mockups needed refining.

Round 1 Findings:

1

Users were unfamiliar with sub-menus or hamburger menus

2

Notifications/Reminders seemed to be a bit much for some users

3

Unfamiliar with what “scrolling” meant

Round 2 Findings:

1

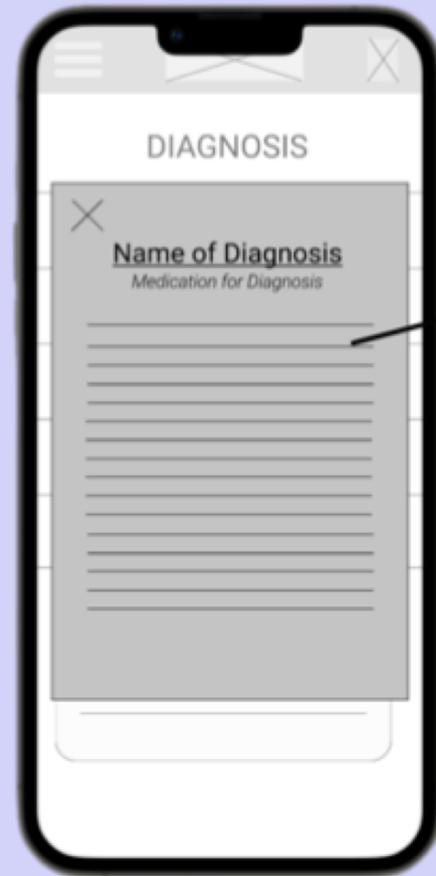
Too much information on diagnosis page

2

Users want notifications for some updates but not all

Usability Study: Insight Findings

Users wanted a less compacted information page for diagnosis

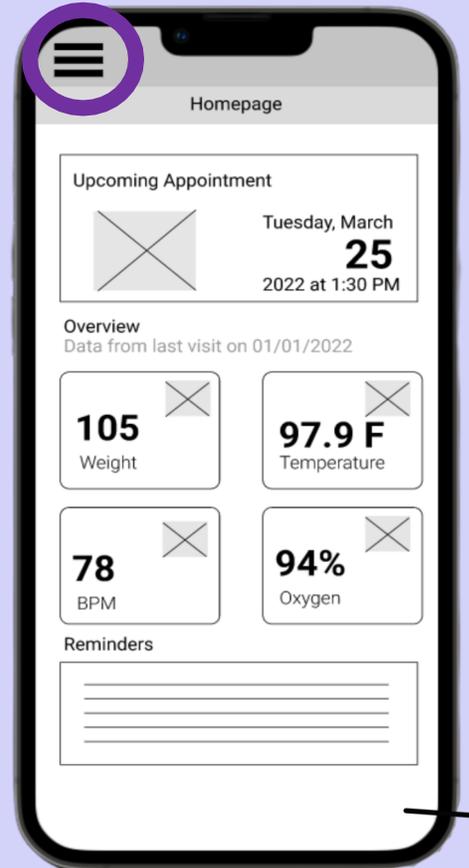


6 out of 10 participants had trouble reading the information on the page because there were so many words

“I can barely read the information on the page.” (Participant 7)

Usability Study: Insight Findings

Users were unfamiliar with hamburger menus and didn't understand what "scrolling" meant



9 out of 10 participants didn't understand "scrolling" and were unfamiliar with hamburger menus

"How do I scroll?" "I'm confused. What does a hamburger menu look like?" (Participant 5)

Research Insight & Recommendations

1

Menu alternative

- Include different menu layout that user would be understand and easier navigate

2

Compacted Information

- Ideate new design layout to show information but not make it congested

3

Notification Settings

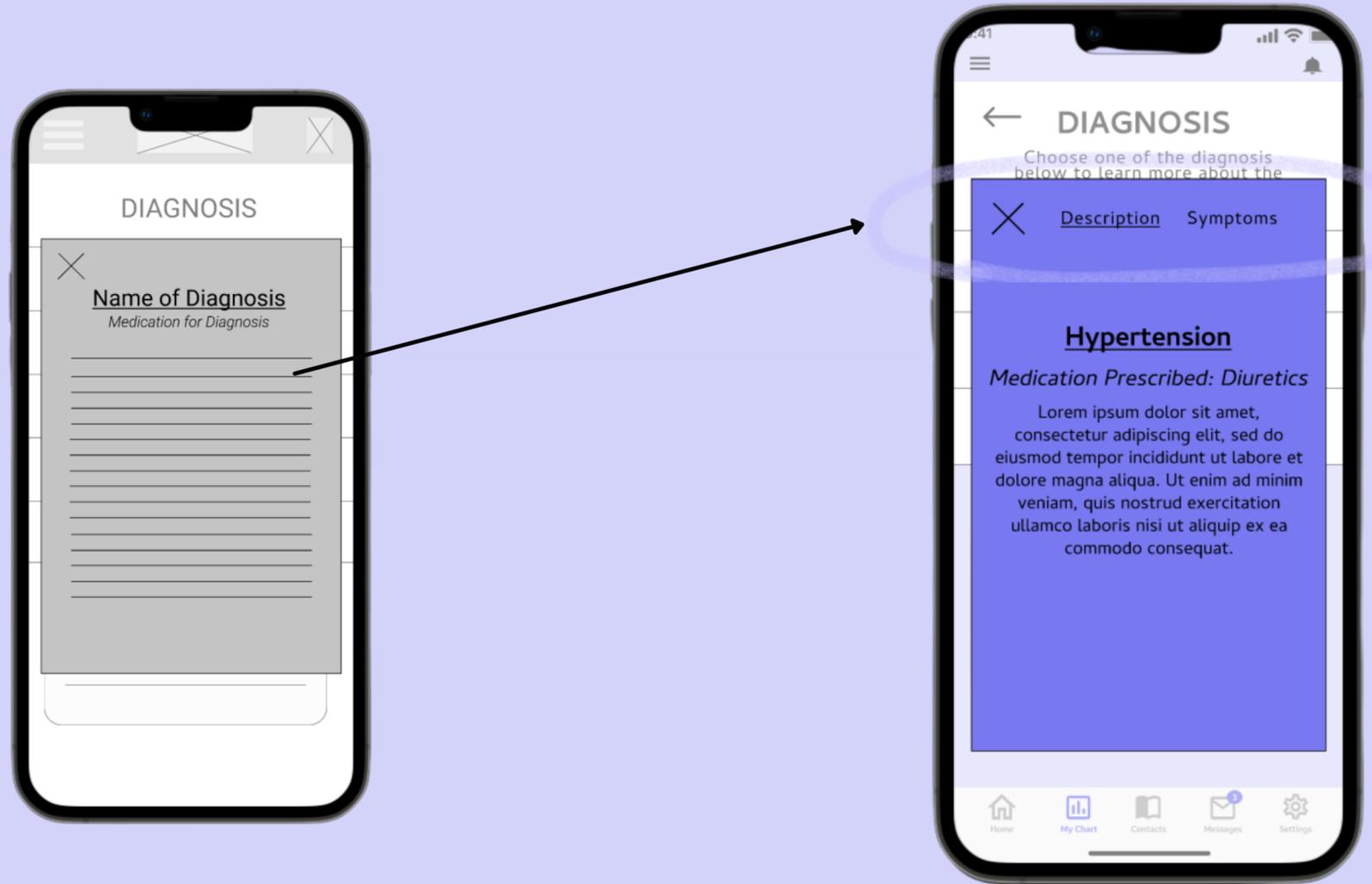
- Allow user to select if they want notifications or not

Refining the Design

- Mockups
- High-Fidelity Prototype
 - Accessibility

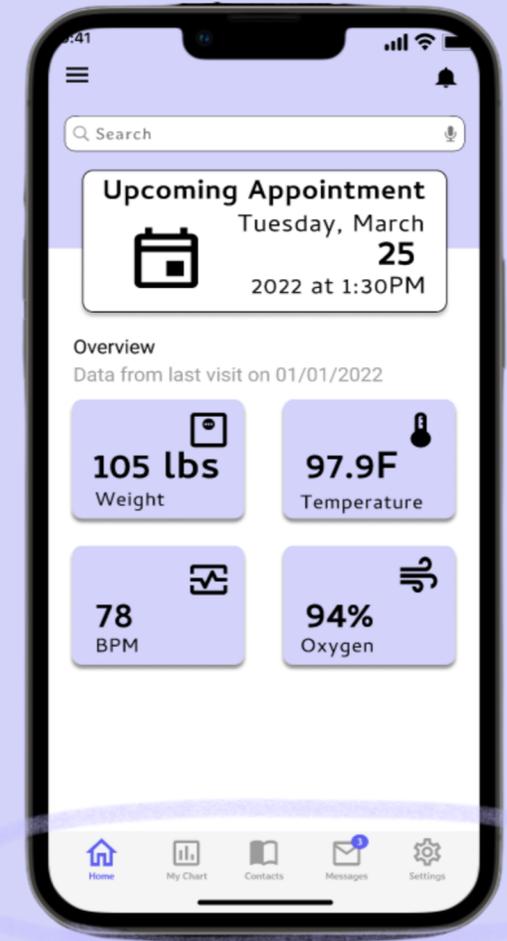
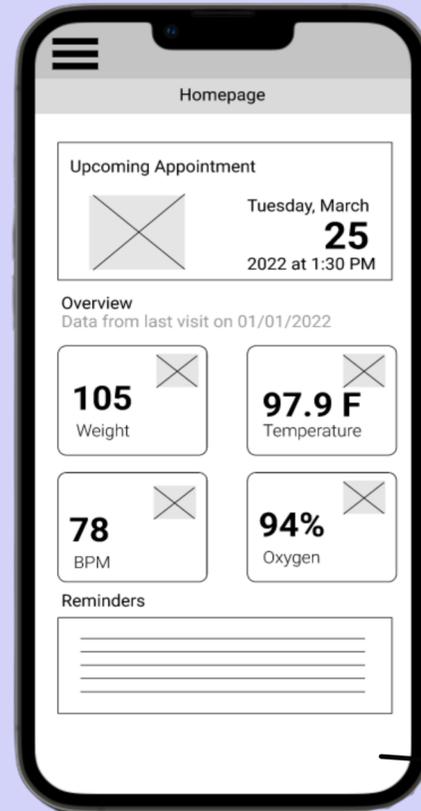
Mockups

During the usability study, many of the users voices that the descriptions were too overwhelming with so many words. I redesigned the Diagnosis page and categorized the information so the user can choose “description” or “symptoms”.



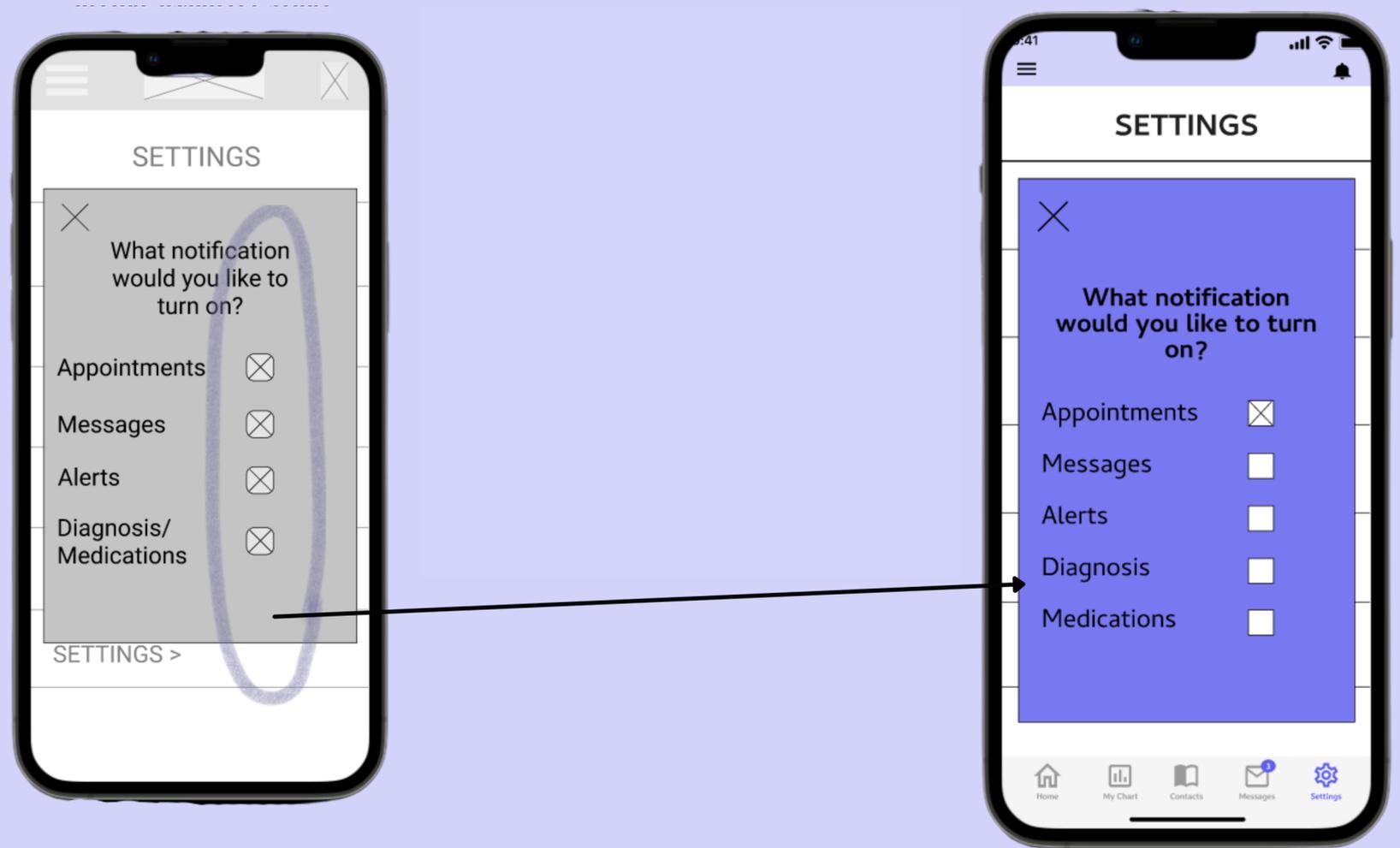
Mockups

I noticed that none of the users knew what or how to use a hamburger menu. Due to this, I decided to create a footer menu for easier navigation throughout the app.



Mockups

Some users didn't need or want notifications due to having a caregiver or because they felt like they could easily remember the information. Also, some users didn't want to be notified about certain issues that other did want to be notified of. I created the design to allow the user to select which notifications they wanted.



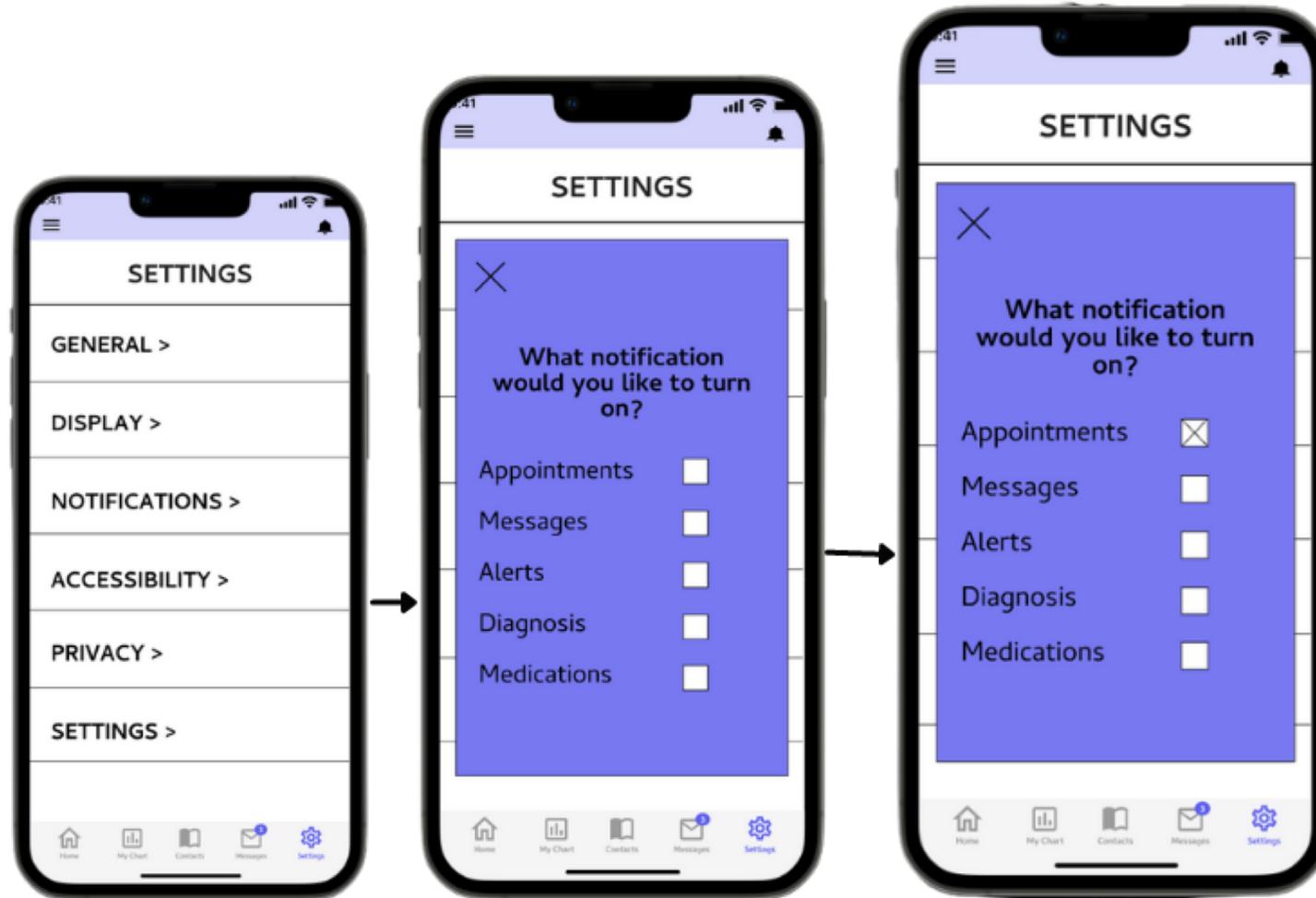
Mockups



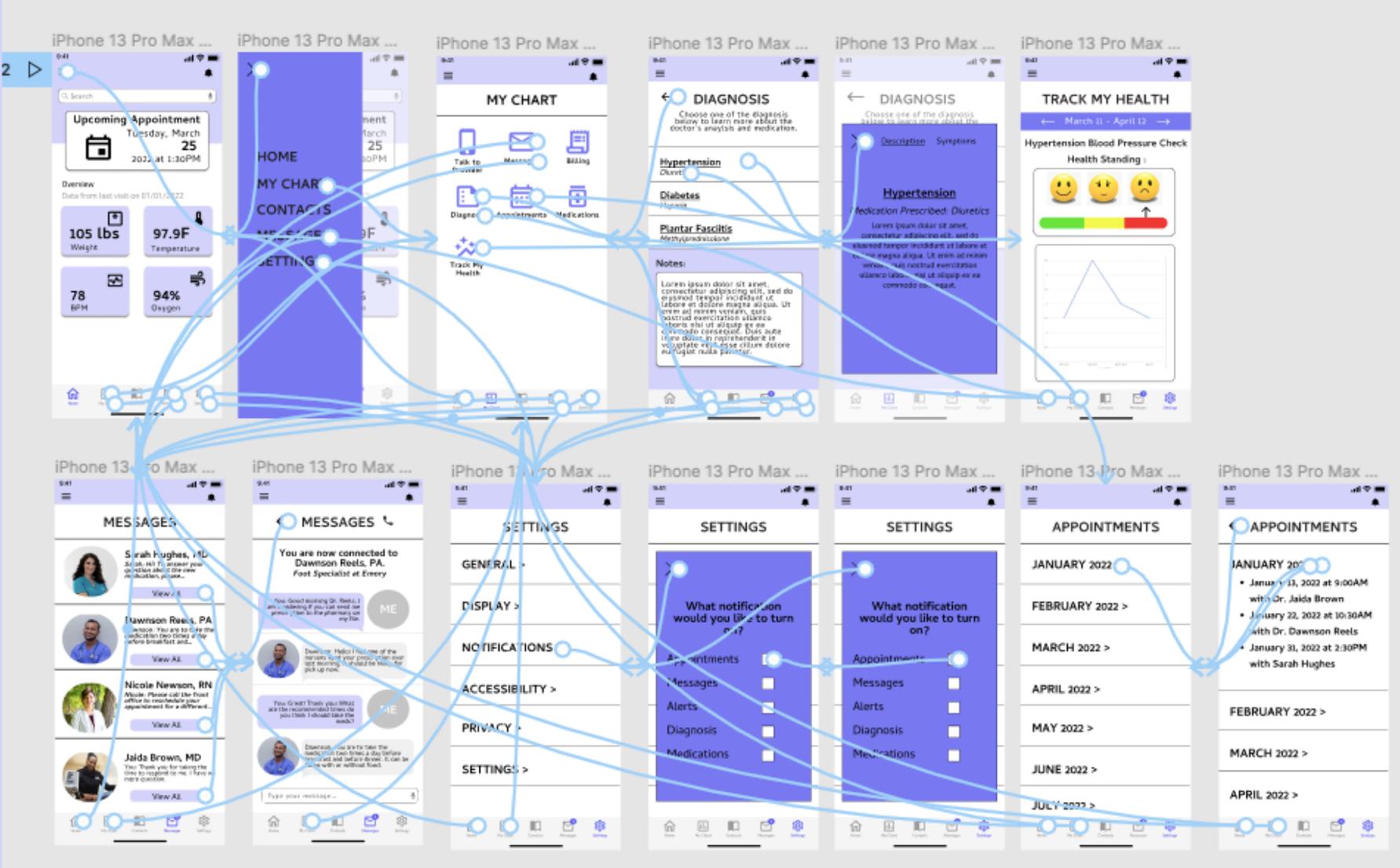
Mockups



Mockups



High-Fidelity Prototype



Accessibility Considerations

1

One Screen Design for all screens (eliminates the need for scrolling)

2

Voice memo, voice recognition, and Bluetooth keyboard for messaging tool

3

Accessible icons

Going Forward

- Takeaways
- Next Steps

Takeaways



Impact:

Because I dealt with this age group everyday, I was able to get firsthand feedback on their experience. To hear how much of a relief they felt and how heard they felt let me know I met a lot of user needs!

One quote from user feedback:

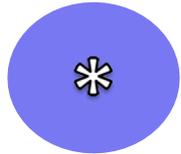
“This thing is doing the thinking and remembering for me!” (Participant 8)



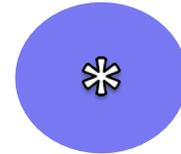
What I Learned:

A lot of folx are unaware of design terms, even the ones I may think are simple. For example, during the usability study, it was very apparent that none of the users knew what a "hamburger menu" was. I decided to ask someone else from a younger age range and they were unaware too. I've now learned how to redirect questions without using difficult design terms.

Next Steps



Conduct another round of usability studies to validate whether the pain points users experienced have been effectively addressed.



Conduct more user research to determine any new areas of need.