MedMinder

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Project overview
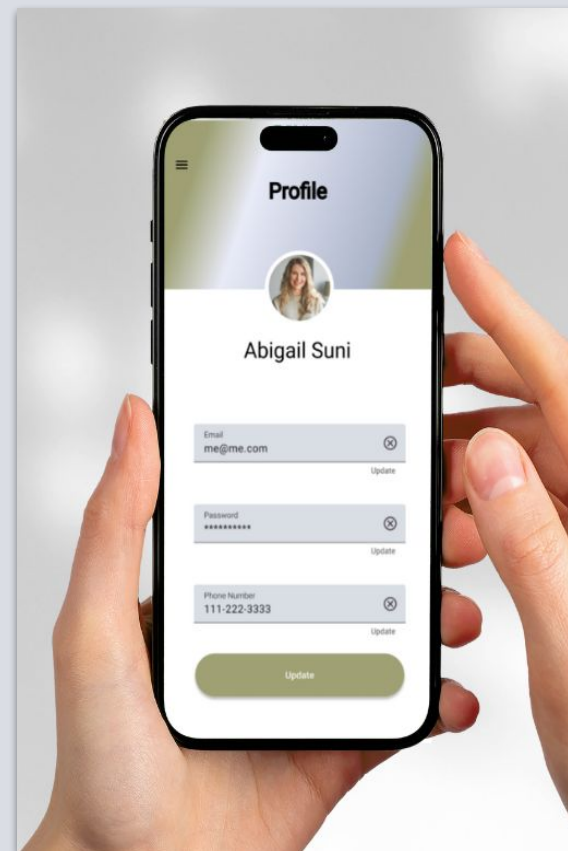
The product:

MedMinder is an app that helps remind users when to take their prescribed medications.

Project duration:

February 15th - March 1st

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Project overview

The problem:

Users taking medication(s) have trouble taking the correct medicine at the correct dose, at the correct time.

The goal:

Our goal is to give users an easy way to manage their prescription medications.

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Project overview

My role:

Generalist UX Designer

Responsibilities:

- User research
- Wireframing
- Prototyping (Figma)
- Paper Prototyping
- Site Mapping (IA)
- User Flows
- Journey Maps
- Personas

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Understanding the user

- User research
- Personas
- Problem statements
- User journey maps

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User research: summary

To understand user needs, requirements and pain points, we conducted research through interviews and participant surveys for the MedMinder project. Our goals were to use the data to gain insight to better understand our users and their needs when setting and adhering to medication taking routines.

Given the two types of research methodologies: qualitative and quantitative, we chose to incorporate both to give us a more granular view of our users needs and possible pain points.

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User research: pain points

1

Financial

Affordability is important to our users, so they are looking for an app that might be free or available at a low cost

2

Product

Our users were looking for an app that could schedule their prescribed medications and allow them to assign a variety of repetitive patterns for doing so.

3

Process

Having an app to streamline the process of taking prescribed medication was exactly what our users were looking for.

4

Support

Our users need assistance keeping track of their prescribed medication schedules.

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Persona: **Abigail**

Problem statement:

Abigail is a single mother who recently underwent an intensive surgery. She is having difficulties keeping up with her many medications and her two children.

"I need help managing medications from a recent surgery."

Goals
- An easy way to remember to take medications
- Not have to worry about missing a dose
- A way to organize my medications and all of their respective dose times

Frustrations
- It upsets me that I have many different medications and no way to organize them.
- It's difficult to remember to take my medications because I am often busy tending to my children.

Abigail

Age: 35
Education: Bachelor's Degree
Hometown: Spring Branch, Tx
Family: Single, 2 middle-school children
Occupation: Professional Volleyball Player

Abigail, a single mother recovering from ACL surgery, finds herself struggling to juggle her own healing with the constant demands of caring for her children. The prescribed medication regimen slips through the cracks in her busy schedule. Between forgotten doses and misplaced pills, the stress of managing both motherhood and her own health takes its toll. Abigail worries about the potential consequences of missed medications while simultaneously feeling overwhelmed by the responsibility of tending to her children's needs. This internal conflict, fueled by exhaustion and love, paints a picture of a dedicated mother navigating a challenging recovery amidst the whirlwind of family life.

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User journey map

As Abigail goes through the user journey, each step shows what she went through to have a happy end user experience.

Persona: Abigail

Goal: Have a reliable system that will remind me to take my medication.

ACTION	Locate/Install App	Login/Create Account	Create Profile	Input Medication	Input Doses	Set Up Timers
TASK LIST	**Tasks** A. Search for app B. Install app	**Tasks** A. Choose username B. Choose password	**Tasks** A. Input personal information B. Choose a profile photo	**Tasks** A. Click on 'medications' icon B. Search for medication name	**Tasks** A. Add dosage	**Tasks** A. Choose time B. Choose alert tone C. Add another medication or press schedule
FEELING ADJECTIVE	**User Emotions** - Nervous - Skeptical	**User Emotions** - Curious - Eager	**User Emotions** - Overwhelmed - Intimidated	**User Emotions** - Eager - Excited	**User Emotions** - Eager - Hopeful	**User Emotions** - Satisfied - Relieved
IMPROVEMENT OPPORTUNITIES	- Option to download offline	- Face ID for login	- Auto-fill information from other platforms	- Add pre-populated list of medication names	- Scrollable dose bar	- Allow users to make or use a customizable sound - Create a scrollable time bar

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Starting the design

- Paper wireframes
- Digital wireframes
- Low-fidelity prototype
- Usability studies
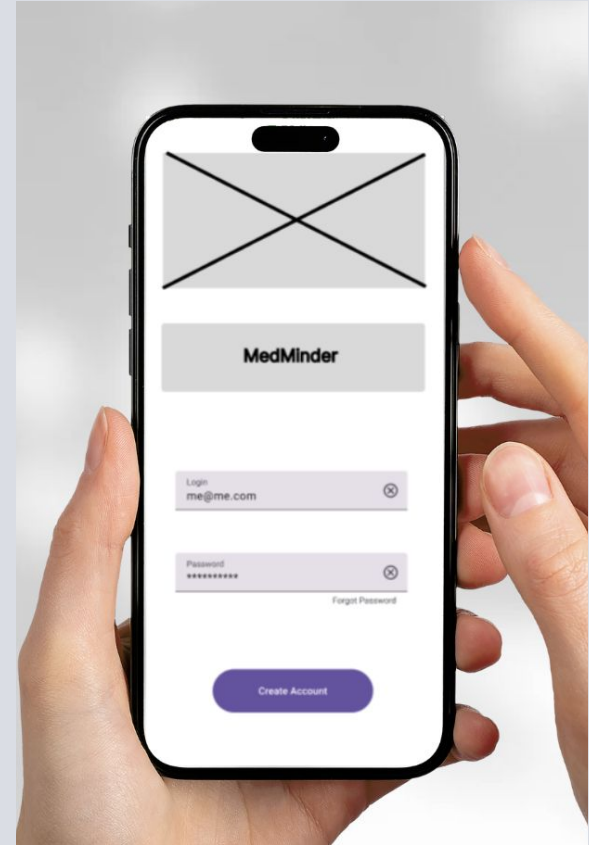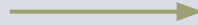
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Paper wireframes

Taking into account the key features our users were looking for we sketched our wireframes.

Digital wireframes

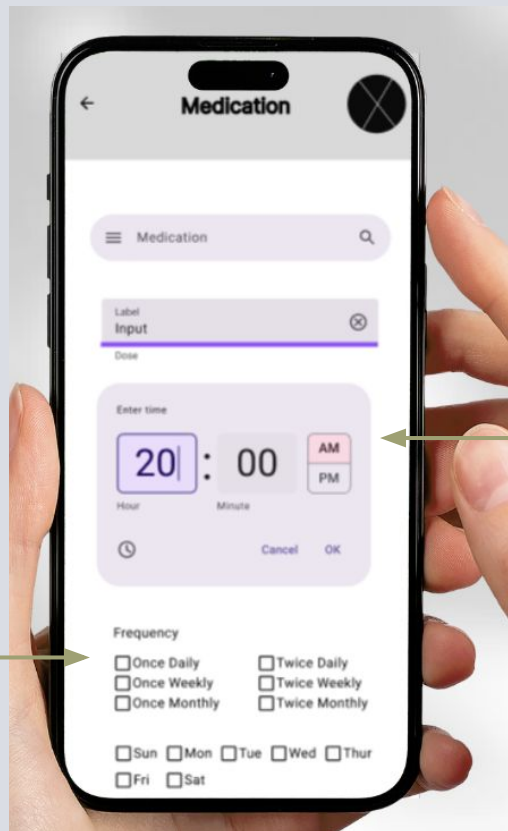Using our site map we sketched a variety of screens for each screen our app would need.

The applications login screen needed to be very user friendly do to the varied ages and levels of technology use.

Digital wireframes

After going through all of the sketches for one screen we narrowed down elements we felt were going to be a best fit for our users and combined them into V.1 of each screen. This is an example of the combined elements from several medication scheduling sketches.
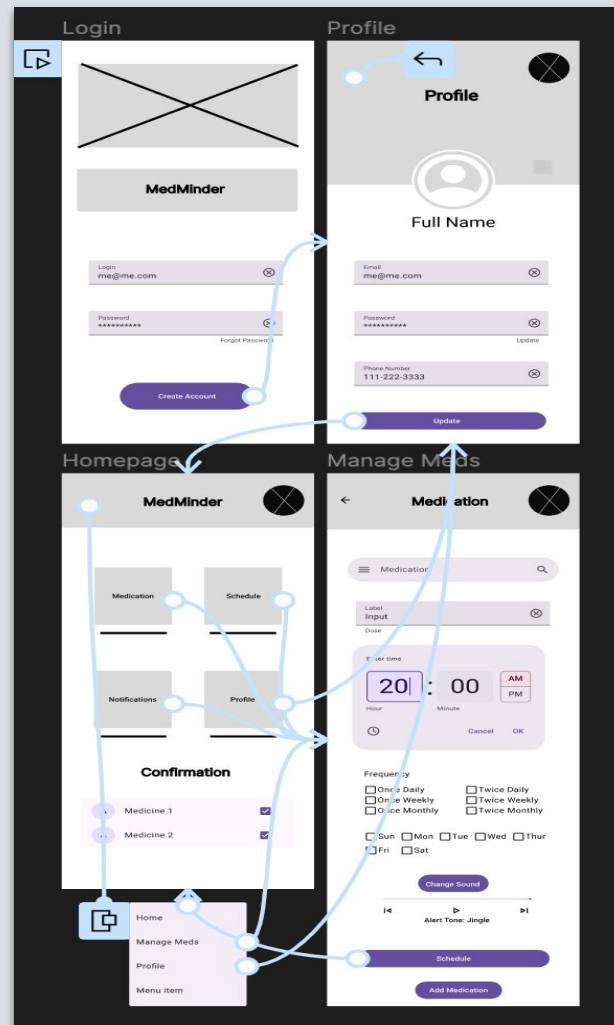

Time picker for medicine notifications to be taken on exact times

Frequency for users to check off days on they need to take medicine

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Low-fidelity prototype

Mobile App

Low-Fidelity Prototype

Usability study: parameters

We conducted an unmoderated usability study to test our prototype and to gather insights about participants who take medication.

Study Type

Unmoderated

Length

30-40 min.

Participants

4 Participants

Location

Bulverde, TX

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Usability study: findings

Now that we have key insights from the usability study, let's take a look at the findings and define the actual problems a designer can solve.

1

There was no login button. A separate login button and create account button is crucial.

2

Users could not tell which items were together. Placing items in groups makes for easier navigation.

3

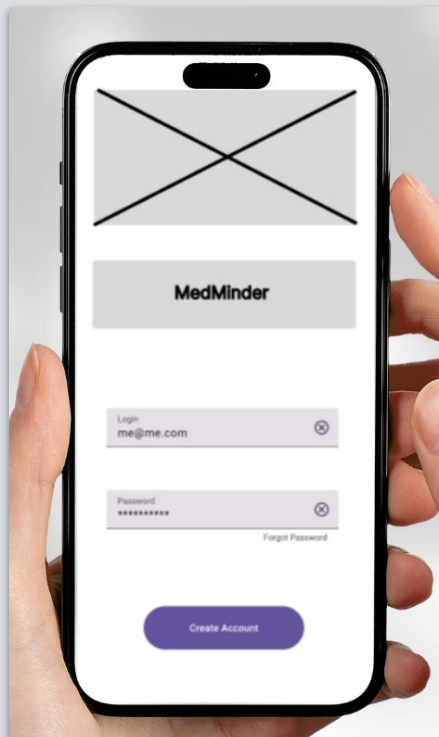There was too little text and action buttons. Increasing space solves crowding issues.

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Refining the design
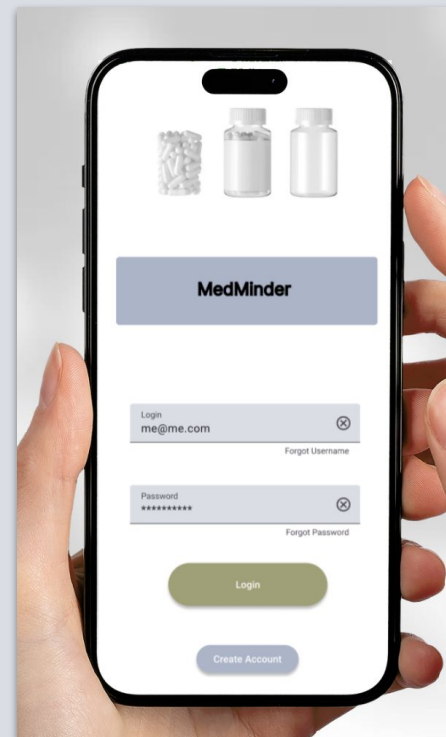
- Mockups
- High-fidelity prototype
- Accessibility

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Mockups

We needed to add a separate button for login and create account.

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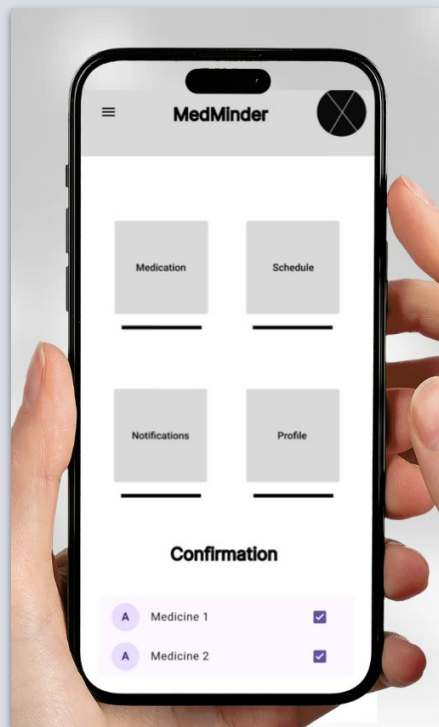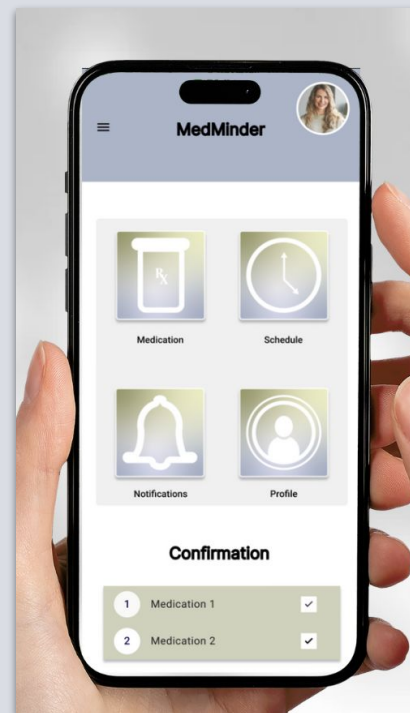
Mockups

We found that we needed to add a containment card behind the action buttons to show a visual grouping as well as increasing the negative space between the text and the action buttons.
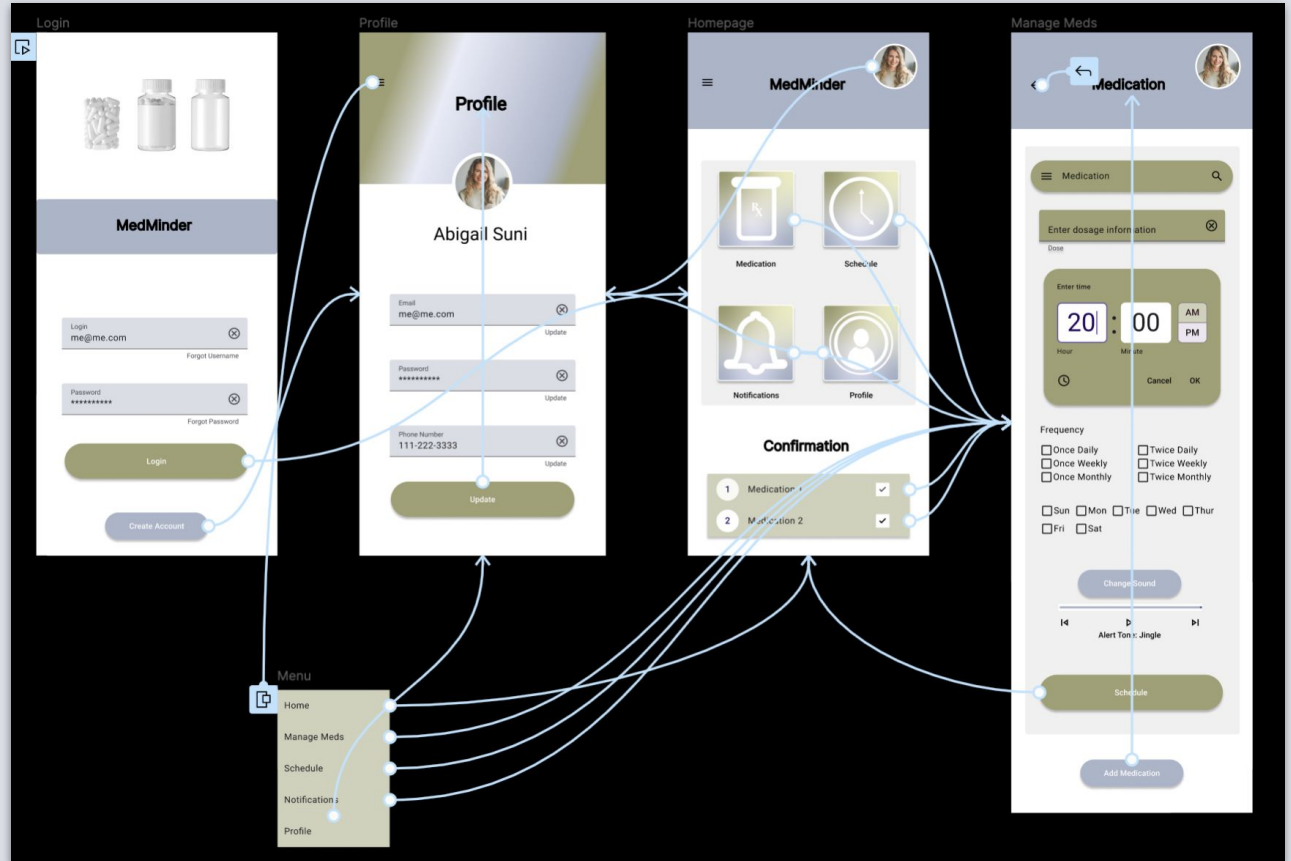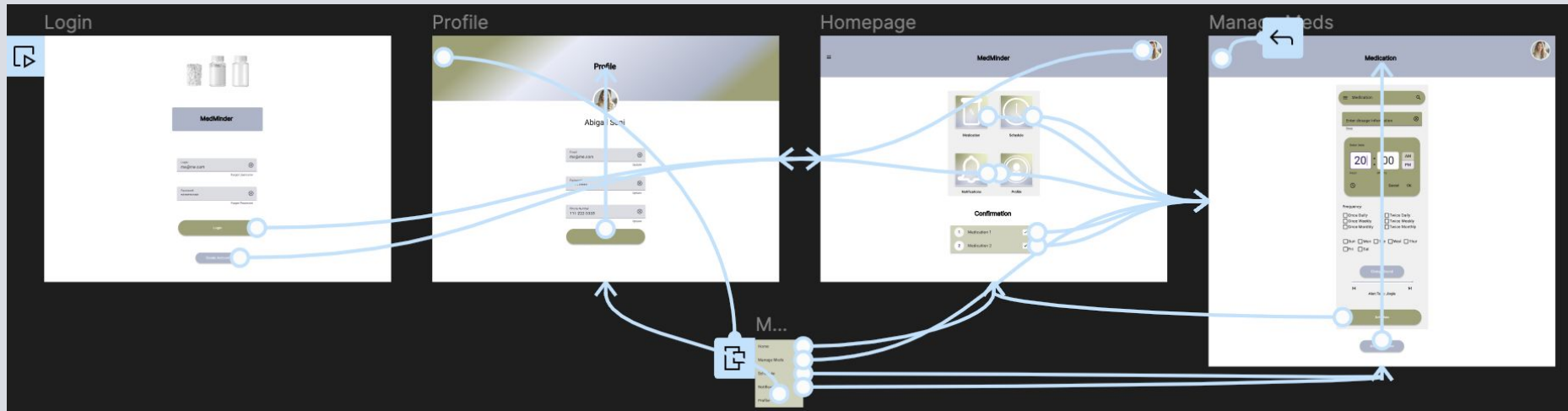
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Mockups

High-fidelity prototype

High-Fidelity

[Responsive App](#)

[Prototype](#)

High-fidelity prototype

High-fidelity [Responsive Website Prototype](#)

Accessibility considerations

1

When choosing a color palette, we made sure that primary colors met WCAG AA Compliance before building out the UI for each screen.

2

We only used one typeface: Inter. Mixing multiple typefaces can make an app seem busy and fragmented.

3

We included containment cards to better group similar items together. By doing this, users can more easily identify which items go together and which do not.

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Going forward

- Takeaways
- Next steps

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Takeaways

Impact:

The app's design is simple, and makes it effortless to add one medication, or multiple. This can greatly improve the lives of those who regularly forget to take medicine on time and in the correct doses, through notifications.

What I learned:

While designing this app, we learned that the first ideas for the app are only the beginning of the process. Usability studies and peer feedback influenced each iteration of the app's design.

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Next steps

1

We would add an everyday option button for users when choosing the frequency of their medication. This would be easier for users that do take medication everyday, so that they do not have to physically check each day's box separately.

2

For notifications, we would add an option for a physical notification, such as a buzz so that people with visual disabilities can know when they receive a notification.

3

For notifications, we would add an option for flashing camera light, so that people with hearing disabilities can know when they receive a notification.

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Let's connect!

I hope this case study was enjoyable and properly showcased my skills and the work I am capable of. Let me know what you think!

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Google