Medications Reminder App

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Project overview

The product:

PillUp! is a medications reminder app that aims to help people to remember when to take their medications and which medications it's to take.

Project duration:

February 2023 - May 2023

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Project overview

The problem:

Due to the sheer number of activities that we have nowadays, it's hard to remember when to take medications, especially for older people who might have memory impairment.

The goal:

Design an app that could help people to remember when to take their medications and which medications to take.

Project overview

My role:

UX designer designing a new app called PillUp! that would remind people when to take their medications.

Responsibilities:

Conducting interviews, paper and digital wireframing, low and high-fidelity prototyping, conducting usability studies, accounting for accessibility, and iterating on designs.

Understanding the user

- User research
- Personas
- Problem statements

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User research: summary

I conducted interviews and created empathy maps to understand the users I'm designing for and their needs. A primary user group identified through research was people with a busy daily activities and people who have memory impairment.

This user group confirmed initial assumptions about people who are too busy to remember when to take their medications and people who have memory impairment. The research has revealed that the sheer number of medications to take is one of the main concerns of taking medications on time.

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Persona 1: **Name**

Problem statement:

Brenda is finance manager in Sacramento who needs a reminder to take her medications because of her busy daily activities.

"I'm so busy with my daily activities, that I often forget taking my medications"

Brenda

Age: 45
Education: Graduate School
Hometown: Sacramento, California
Family: Single, live with roomate
Occupation: Finance Manager

Goals

- Taking medications on time
- Sustain a daily habits of being healthy
- Minimize the energy used to remember taking medications

Frustrations

- It's often hard to find which medications to take
- Most of the time, remembering when to take meds is distracting

Brenda is a finance manager who has a busy daily activities. Due to how occupied she is during the day, she can't remember when to take her medications or which medications it's to take.

Persona 2: **Name**

Problem statement:

Christopher is a retiree living alone in Lexington who needs a reminder to take his medications because he is sometimes forgetful.

"I'm often inattentive and forgetful about my daily activities and needs."

Christopher

Age: 78
Education: Highschool
Hometown: Lexington, Kentucky
Family: Single, live alone
Occupation: Retiree

Goals
- Maintain a good health by taking medications daily
- Find an easy way to know when to take which meds and when

Frustrations
- The label of the meds are often unreadable and too small
- There are so many meds that I can't keep track of it.

Christopher is a retiree living alone in his house in Lexington, Kentucky. Due to his age, he is sometimes forgetful about which meds and when does he have to take them. He wishes to have an easy way to remember those things.

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Starting the design

- Digital wireframes
- Low-fidelity prototype
- Usability studies

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Digital wireframes

The home page is designed to show the simplicity of the app so it's compatible with all user's age. The home page also features all the primary use of this app.
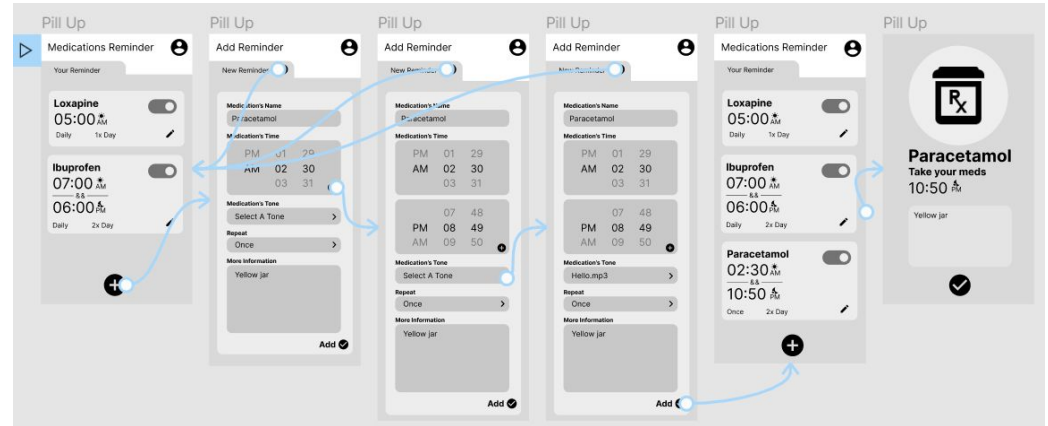
Medications Reminder

List of reminders with simple design

Meds name

Meds name

Easy to add reminders
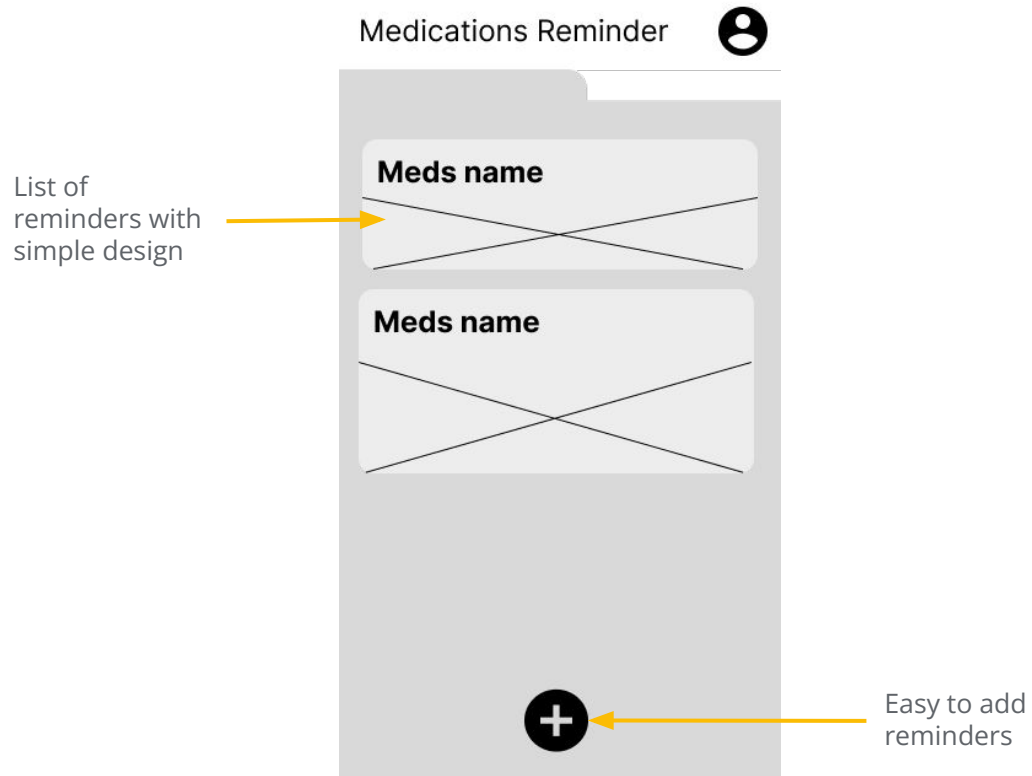
Low-fidelity prototype

Utilizing the wireframes, I created a low-fidelity prototype. The primary user flow was adding a medications reminder.

View the low-fidelity design here:

[Low Fidelity Prototype](#)

Usability study: parameters

Study type:

Unmoderated usability study

Location:

United States, remote

Participants:

5 participants

Length:

5-10 minutes

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Usability study: findings

I conducted two rounds of usability studies. Findings from the first study helped guide the designs from wireframes to mockups.

1

Finding

For most users, it's not immediately clear how to set the medications time

2

Finding

Some users, the default ringtone is unpleasant

3

Finding

Not everyone is familiar with the medication's reminder interface

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Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

Mockups

The usability study revealed that the form fields to set the time are unappealing for some participants. Some of the participants also wished to add some custom ringtone.

Before usability study

Add Reminder

New Reminder ✕

Medication's Name
Paracetamol

Medication's Time
AM   02   30   ⊕

Medication's Tone
Bird's Tone

Repeat
Once   ›

More Information
Yellow jar

Add ✓

After usability study

Add Reminder

New Reminder ✕

Medication's Name
Paracetamol

Medication's Time
PM   01   29
AM   02   30
03   31   ⊕

Medication's Tone
Select A Tone   ›

Repeat
Once   ›

More Information
Yellow jar

Add ✓

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Mockups

The usability study revealed that the for some users the reminder interface or screen isn't modern or robust enough.

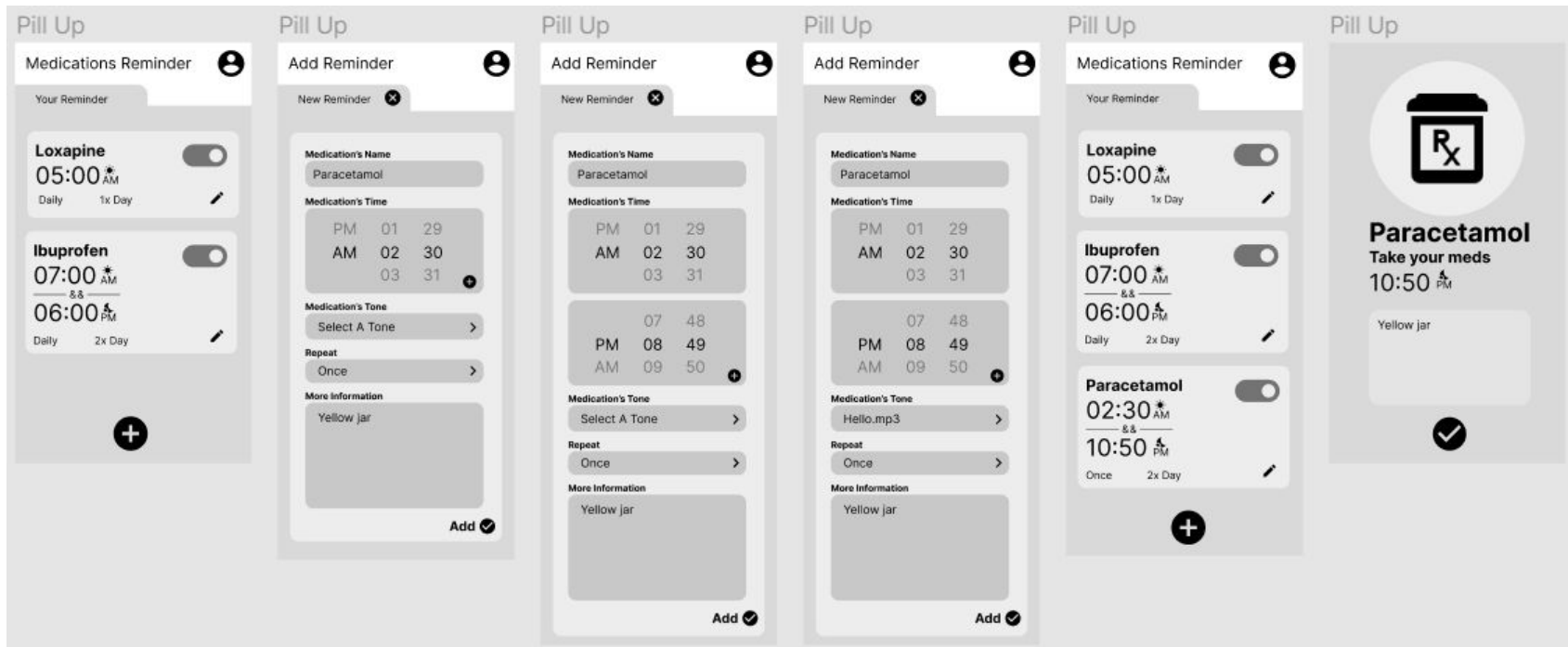**Paracetamol**

Take your meds

Yellow jar

Paracetamol
Take your meds
10:50 PM

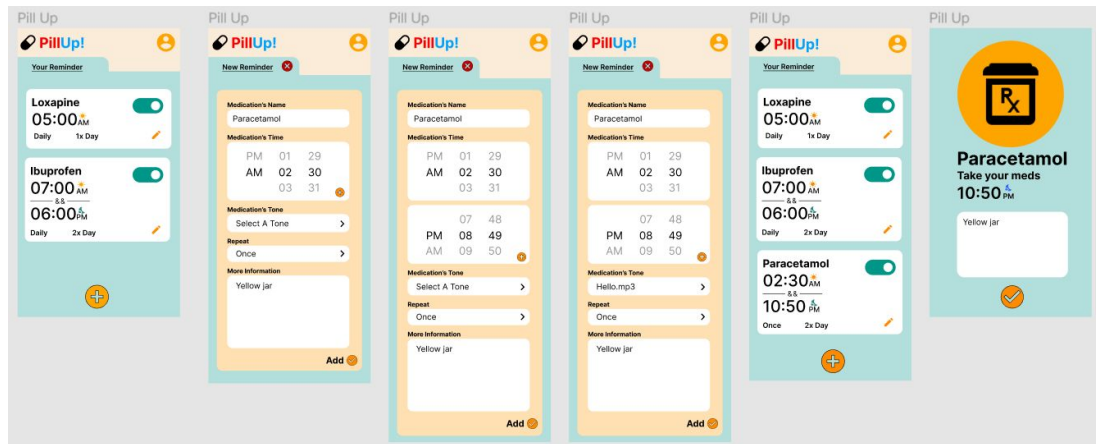Yellow jar

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Mockups

High-fidelity prototype

The final high-fidelity prototype presented a simple and cleaner user flows to add new medications reminder.

View the high-fidelity design here:

High Fidelity Prototype

Accessibility considerations

1

Intuitive design and flow with icons to make navigation easier.

2

Provide a good contrast between text and background to accomodate for user with vision impairment.

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Responsive Design

- Information architecture
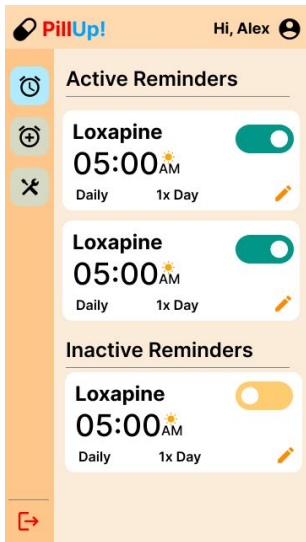- Responsive design

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Sitemap

With the app designs completed. I started on designing the responsive website. The sitemap that I decided is pretty simple so it's intuitive and easy to use for all age group.
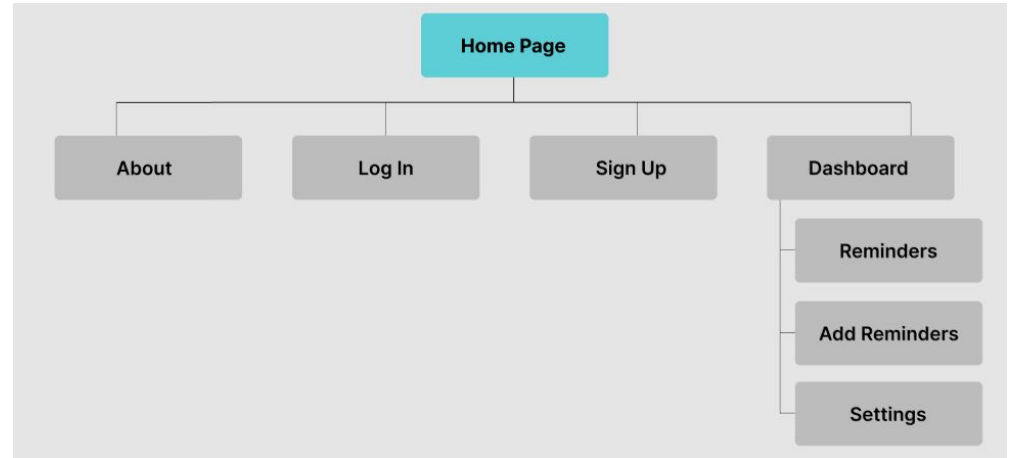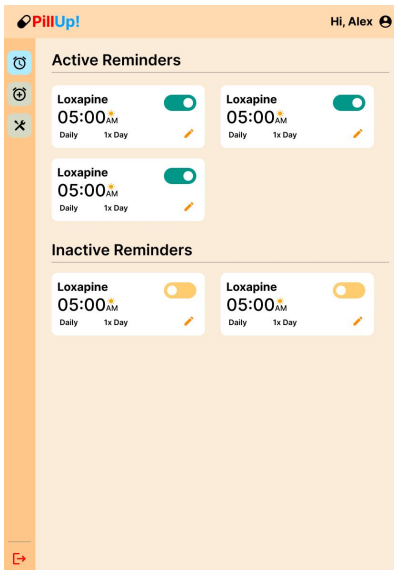
Responsive designs

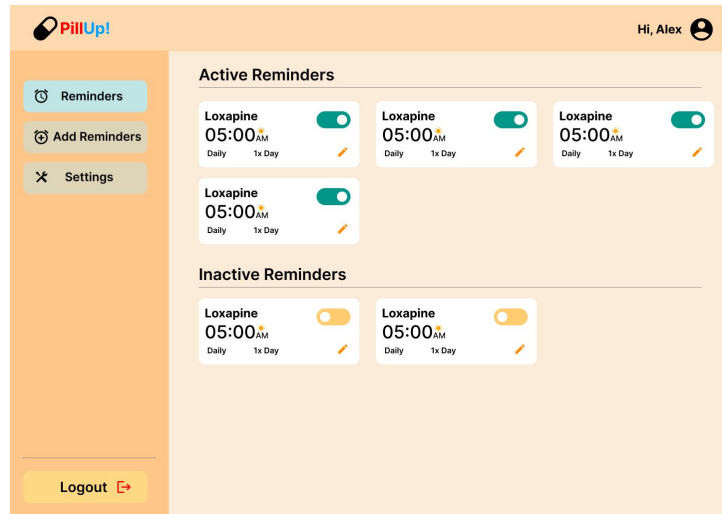The design for each screen size is optimized for simplicity and ease of use

Mobile Website

Tablet Website

Desktop Website

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Going forward

- Takeaways

- Next steps

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Takeaways

Impact:

The app makes people with busy schedule and people with memory impairment able to take their medications on time.

One quote from peer feedback: "The simplistic design and flow of the app is really convenient to use."

What I learned:

While designing the PillUp! Medications reminder app. I learned that having a user-centered design in mind, really helps elevate the app usability

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Next steps

1

Conduct another round to usability studies to validate the high-fidelity design and to check whether the pain points users experience have been effectively addressed.

Let's connect!

Thank you for your time reviewing my work on the PillUp! app. If you'd like to see more or get in touch, my contact information is provided below.

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