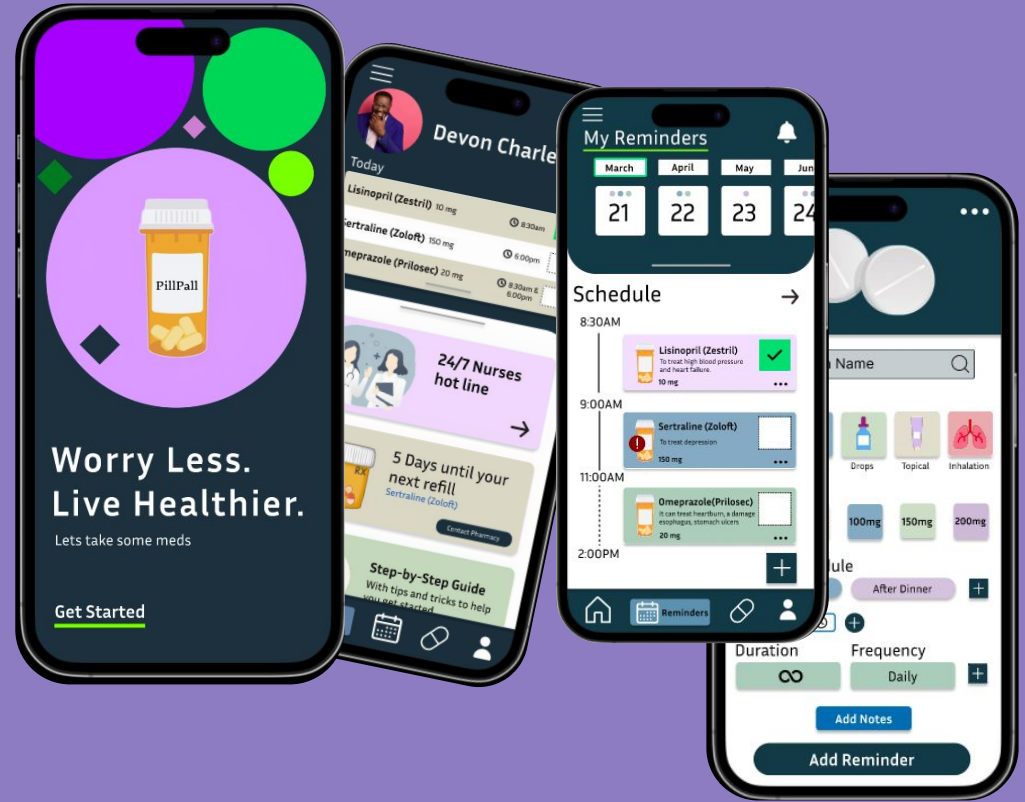


PillPal

The Medicine Reminding App



Mayur Chopra

Project overview



The product:

This is a medication reminder app that will help users take their medications on time and without delay.

Users will be able to add other profiles for kids, pets, ect., and be confident that their medication has been not been forgotten.



Project duration:

September 2023 - October 2023



Project overview



The problem:

Everyday users around the world are being prescribed medications. Whether it's new or they have been taking it for awhile, it can be difficult to remember to take medication on time everyday. Specially if it is a new prescription. Now add several medications and it can be difficult to remember what you've taken and when.



The goal:

I wanted to help users feel confident that they are taking the right medication at the right time without any worries. I want to take the worry of when to refill their prescriptions away by adding a countdown and making it easy to contact their pharmacy. If users have a child, a pet, or even an elder who needs help with medication, users will be able to add different profiles to help keep track and remember their persons medication as well.

Project overview



My role:

Lead UX designer, UX researcher



Responsibilities:

User research, wireframing, prototyping,
mockups, UI design

Understanding the user

- User research
- Personas
- Problem statements
- Competitive audit
- Ideation

User research: summary



I conducted user research to gain insights into the preferences and needs of users regarding a medication reminder app. Our research involved surveys, interviews, and usability testing with a diverse group of participants. Initially, we assumed that the primary concern was simply medication forgetfulness, but our research revealed a broader range of challenges, including concerns about medication interactions and side effects. We also assumed users preferred basic reminder features, but they showed a strong desire for medication databases, calendar integration, and gamification elements. Our assumptions evolved, highlighting the importance of offering a comprehensive solution that addresses a variety of user concerns and preferences to improve medication adherence effectively.


Persona 1: Jessica Maisie

Problem statement:

Jessica Maisie is a 31 year old living in Houston TX who needs a simple and easy way to remember to take her medication because she is busy and not super tech savvy. She likes to spend time outdoors and doesn't like to be on her phone too much.

[Click here to see personas](#)

Jessica Maisie



Bio
Jessica is currently living in Houston TX with her girlfriend. She enjoys her work but would like to continue to grow and educate herself. On her off time she enjoys exploring and hiking. She tends to be a bit impulsive and doesn't always plan things in advance.

Goals

- Go back to school to get her Masters Degree.
- Be better at planning.
- Cook more healthy meals and bring left overs to work for lunch.
- She values her personal life and strives to maintain a healthy work-life balance. She enjoys spending time with her family and pursuing hobbies like hiking and photography.


Frustrations

- **Work-Life Balance:** Balancing a demanding career with personal life can sometimes be a challenge.
- **Complex apps:** since she is not super tech savvy, using software or interfaces that are over complex or difficult to navigate can lead to frustration.
- **Financial Stress:** She is currently struggling with debt and budgetary constraints causing her much anxiety.


Personality

Reader Outgoing Impulsive Adventurous

Brands




Payment medium



Digital Payment Debit Card

Platform



Mobile Phone Desktop

Additional Info:

- AGE: 31
- EDUCATION: Bachelors in Communication
- STATUS: Relationship
- OCCUPATION: HR
- LOCATION: Houston TX
- TECH-LITERATE: Medium

Quote: "I use tech everyday at work and for personal use, but never feel fully confident in it. I get tired of always being on my phone."

Persona 2: Devon Charles

Problem statement:

Devon, a dedicated freelance photographer, is facing the challenge of consistently managing his medication while juggling a busy schedule filled with photography assignments and projects. He is seeking a solution to help him remember to take his medication at the right times and doses, ensuring he maintains his health without compromising his professional commitments.

[Click here to see personas](#)

Devon Charles



AGE	34
EDUCATION	Bachelors in Film/ Photography
STATUS	Single
OCCUPATION	Photographer
LOCATION	London
TECH UPDATE	High

Flexibility in my work allows me to find inspiration outside the confines of an office and stay creative.

Personality

Creative Client-focused
Tech-Savvy Adaptable Stubborn

Bio

Devon is a freelance photographer with a passion for creativity and aesthetics. He has a degree in Film and Photography and has been working independently for the past 4 years. His portfolio includes a diverse range of projects, from wedding and engagement photos to professional head shots. He often works with different clients all over the country from various backgrounds.

Goals

- Client Satisfaction:** He aims to ensure every client is satisfied with his work and is willing to return for future projects.
- Portfolio Growth:** Continuously expanding and diversifying their portfolio is important for attracting new clients and showcasing his skills.
- Work-Life Balance:** As a freelancer, Devon values the flexibility to manage their own work schedule and maintain a healthy work-life balance.

Frustrations

- Client Communication:** Effectively communicating photo ideas and concepts who may not have a background in photography can be challenging.
- Deadlines:** Balancing multiple projects and meeting tight deadlines can sometimes be stressful.
- Marketing and Self-Promotion:** As a freelancer, Devon needs to actively market his services and find new clients, which can be time-consuming.

Brands

Adobe, Airbnb, WhatsApp, Instagram

Payment medium

Digital Payment, Debit Card

Platform

Mobile Phone, Laptop

Pain Points:

1. **Forgetting Medication:** Users often forget to take their medication, which can lead to missed doses and compromised health.
2. **Complex Medication Regimens:** Some users have complex medication schedules with multiple drugs at different times, making it challenging to manage effectively.
3. **Motivation and Engagement:** Maintaining user motivation and engagement over the long term can be challenging, as users may lose interest in taking their medication regularly.
4. **Lack of Medication Information:** Users may lack comprehensive information about their prescribed drugs, such as side effects or how to take them, which can impact adherence.

Competitive audit

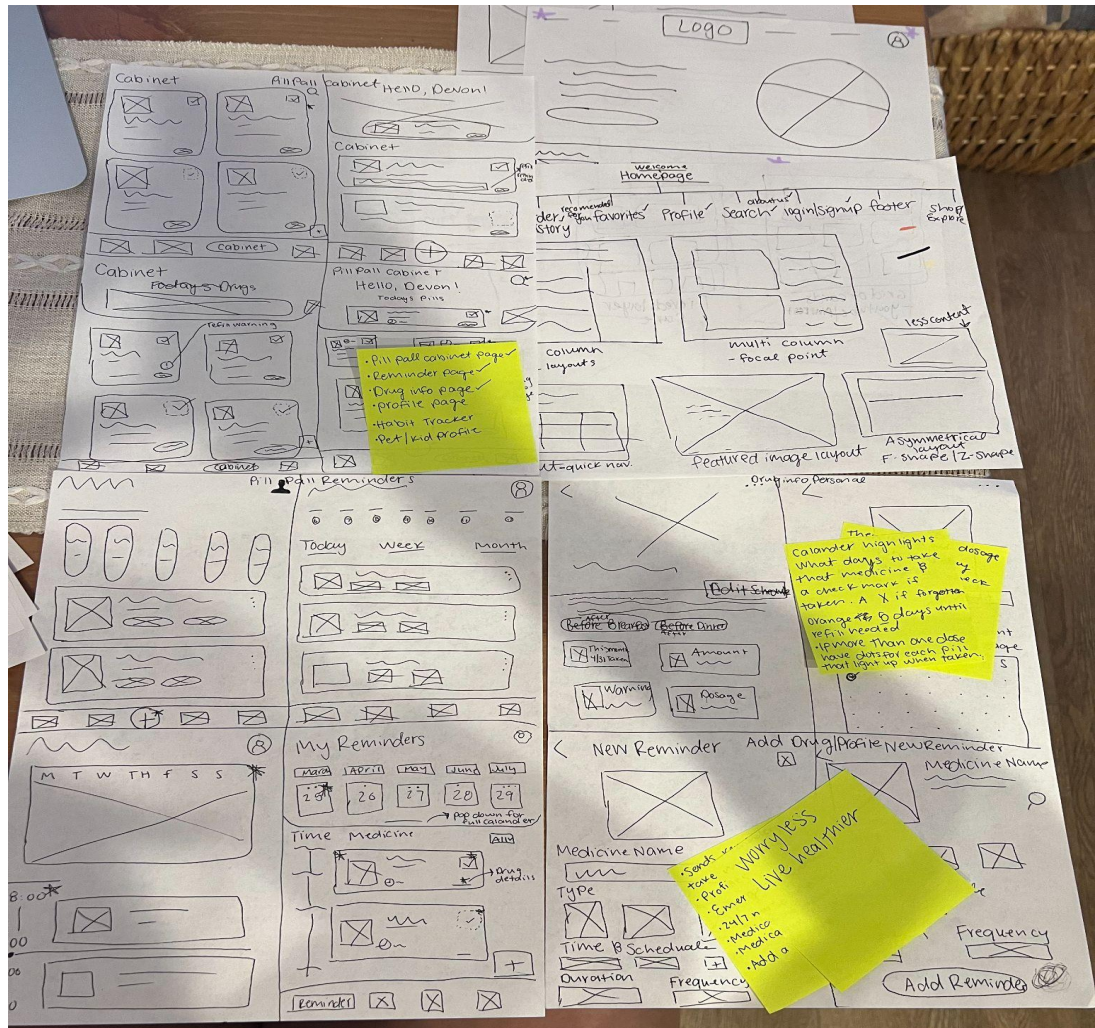
An audit on three other medication reminder apps to help provide information on gaps and opportunities to expand PillPal

	Unique value proposition	Company advantages	Company disadvantages	Similar capabilities
PillPal Our company	<p>Define the unique value proposition of the company here</p> <ol style="list-style-type: none">Medication interaction CheckerUser friendly interface designMedication information and warnings	<p>List out company advantages here</p> <ul style="list-style-type: none">Has 24/7 Nurses hotline for paid membershipsCan add personalized notes to each medicationRefill medication countdownCan add profile for pets, kids, ect.Can add insurance, doctor and pharmacy info.	<p>What disadvantages does the company face? List out here</p> <ul style="list-style-type: none">Doesn't have a reward for consistency.Could have more fitness and health tracking.Could have more reminders for different health related tasks.	
Medisafe Competitor 1	<ol style="list-style-type: none">Medication interaction Checker- while minimizing the risk of harmful drug interactions.User Friendly interface-Design makes it accessible and appealing to a wide range of users, including those who may be less tech-savvy or have visual impairments.	<ul style="list-style-type: none">Highly rated for user-friendly interface.Offers medication interaction checking and health diary features.Provides options for caregivers to monitor users' adherence.	<ul style="list-style-type: none">Limited customization of reminder schedules.Some users find the free version has intrusive ads.Lack of integration with major fitness and health tracking apps.	<ol style="list-style-type: none">Medication Scheduling.Push NotificationsMedication InfoCustomizationMedication History TrackingMulti-Medication support
Mango Health Competitor 2	<ol style="list-style-type: none">Gamification for Motivation - rewards and points for taking medication consistently.Medication info and interaction checking-empowers users to make informed decisions about their healthcare.	<ul style="list-style-type: none">Gamification elements to motivate usersMedication information and interaction checker.Rewards for adherence	<ul style="list-style-type: none">Limited medication database compared to other apps.Less customization for reminder tones and schedule.Some users find the gamification features distracting.	
Walgreens Pill Reminder Competitor 3	<ol style="list-style-type: none">Seamless Pharmacy Integration- allows users to easily refill their prescriptions.Pill images- making it simpler for users to visually identify their pills. This visual aid enhances medication safety and accuracy.	<ul style="list-style-type: none">Integration with pharmacy services for prescription refills.Medication information and interaction checking.Pill images for easy identification.	<ul style="list-style-type: none">Focused primarily on walgreens customers.Limited features for non-prescription medications.Fewer reminders for other health-related tasks.	

Competitive Audit

Ideation

I did a quick ideation exercise to come up with ideas on how to address users issues with remembering to take medication. Mostly focused on easily adding and editing medications and simple medication information access.



Starting the design

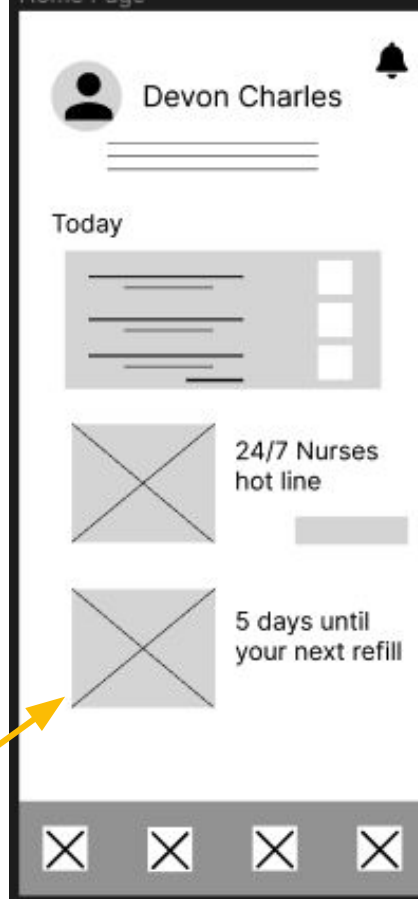
- Digital wireframes
- Low-fidelity prototype
- Usability studies

Digital wireframes

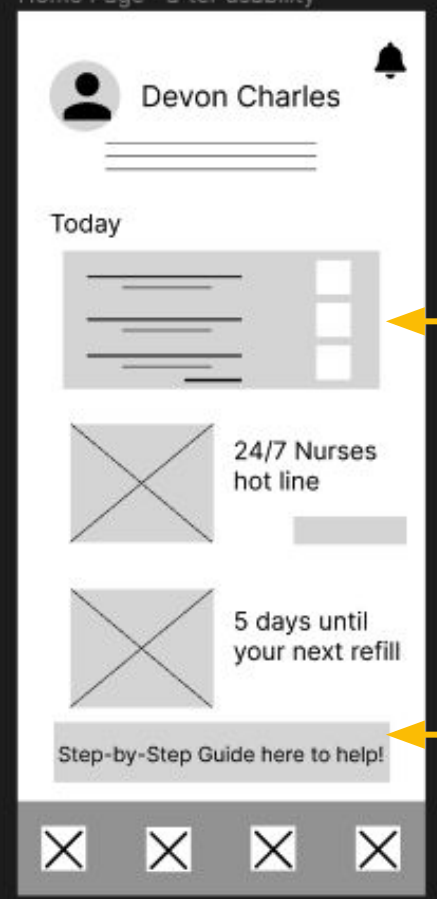
After the ideation step and drawing paper wireframes, I made digital wireframes of the main homepage. I wanted the medication of the day to be front and center, the profile signed in to easily see whose medication is on screen, and easily seen refill notification.

Countdown for refill and easy access to contact pharmacy.

Before Usability Study



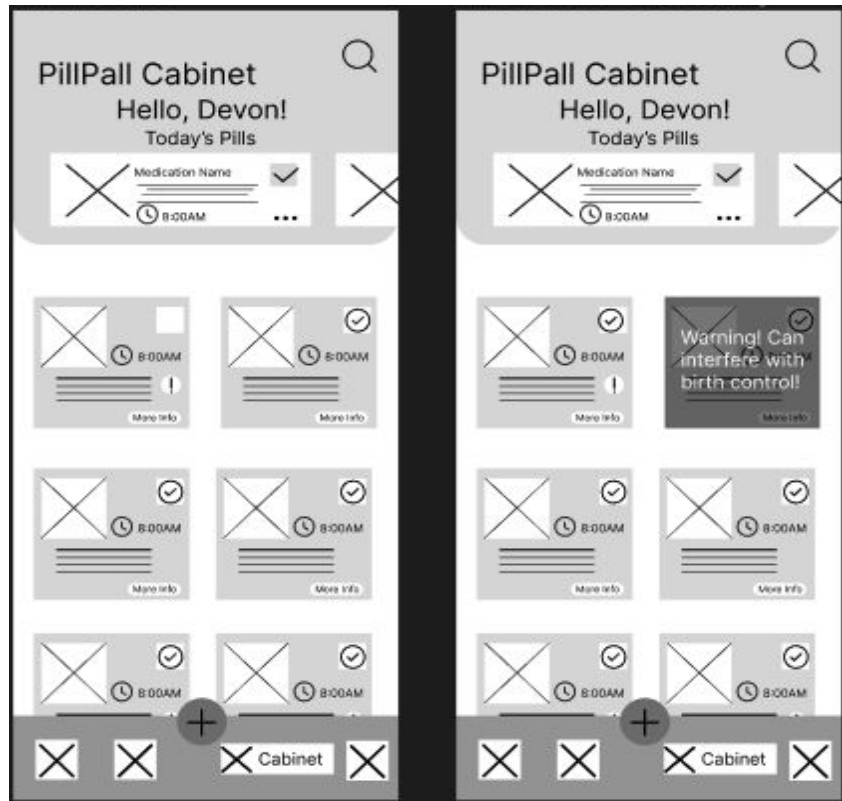
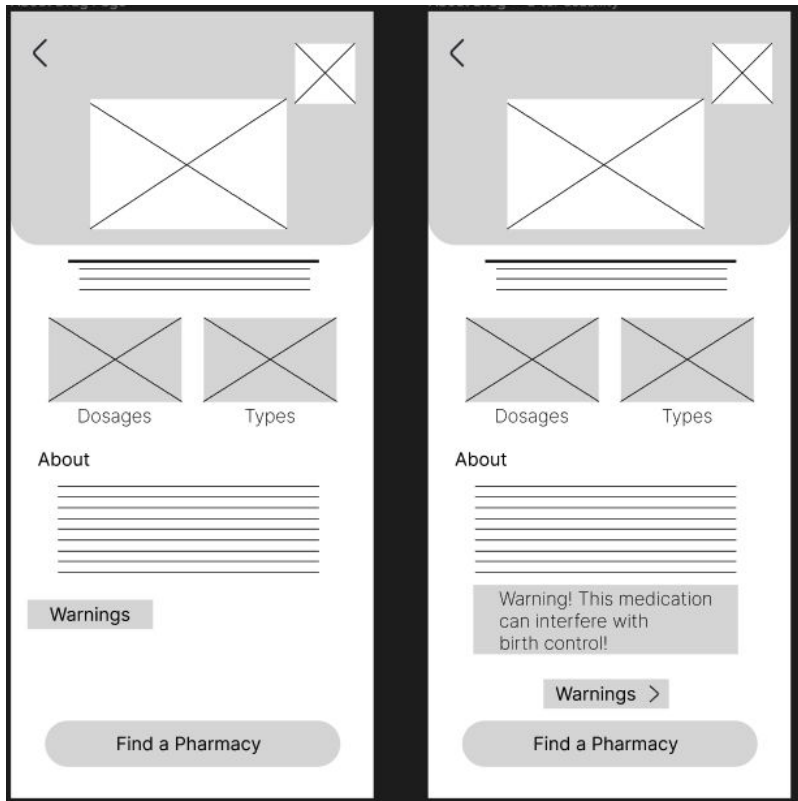
After Usability Study



List of today's medication with time to take and interactive check mark

Step by step guide for the app to make it easier to use

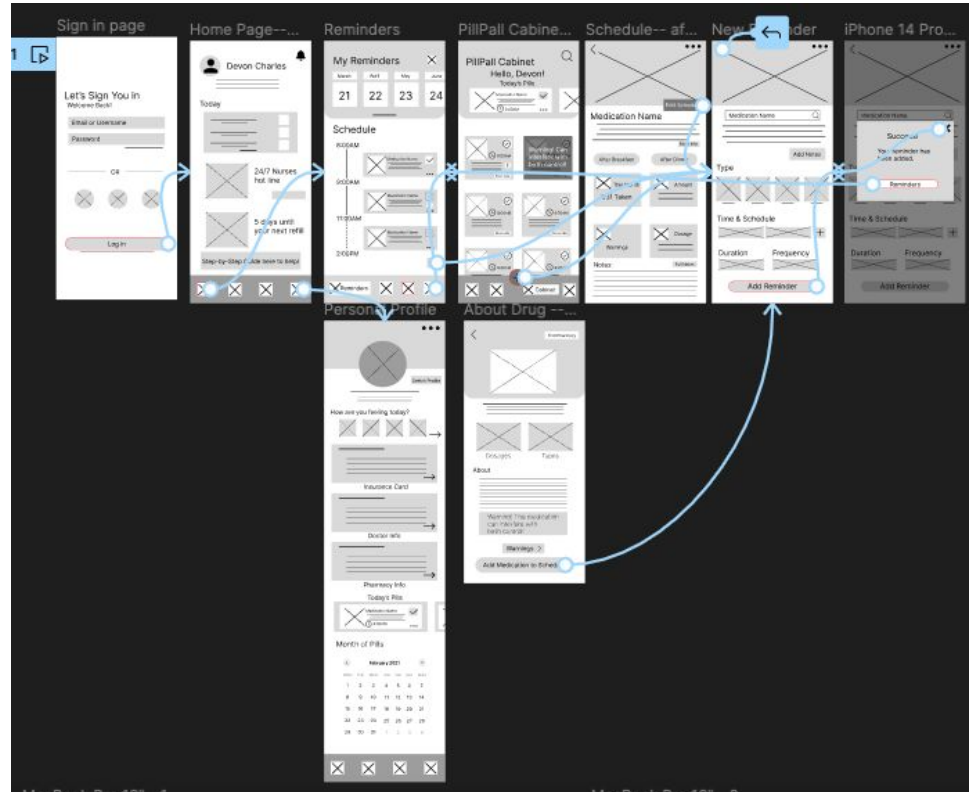
Digital wireframes



Low-fidelity prototype

I prepared a low-fidelity prototype to prepare for a usability study. The process is to add a medication to the users schedule.

[Low-Fidelity prototype](#)



Usability study: parameters



Study type:

Unmoderated usability study



Location:

Los Angeles, Remote



Participants:

7 participants



Length:

15-30 minutes

Usability study: findings

These were the main findings from my usability study.

1

Finding

Users want to see their medication history.

2

Finding

Pill imagery for easy identification.

3

Finding

Caregiver Support: enable family members or caregivers to monitor and assist users in their medication management.

Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

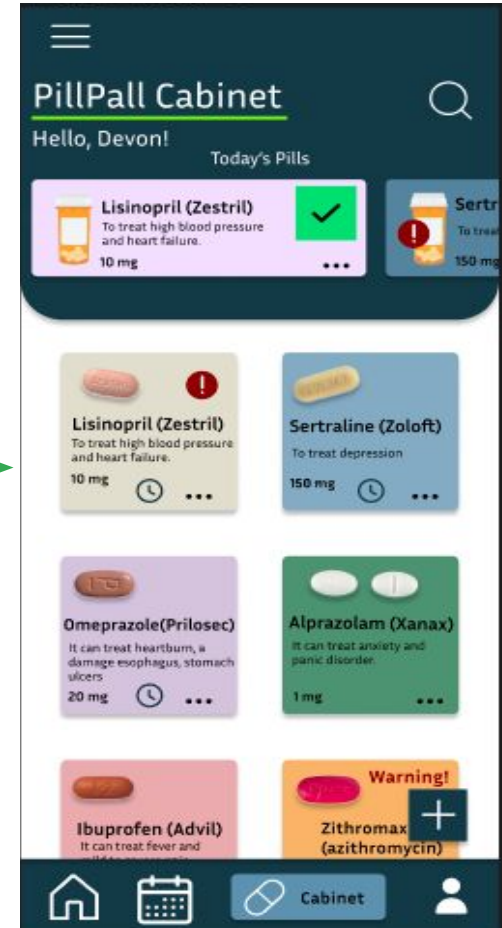
Mockups

From my usability study, I found that users want medication imagery for easy identification. Instead of the original animated pills I had placed by each medication information, I added real images of the medication.

Before usability study



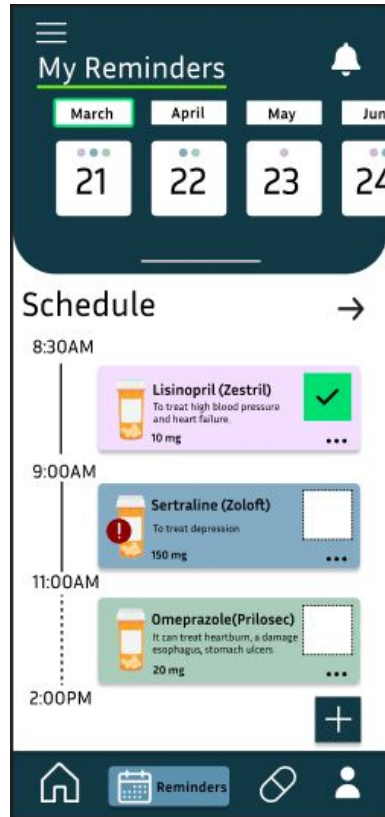
After usability study



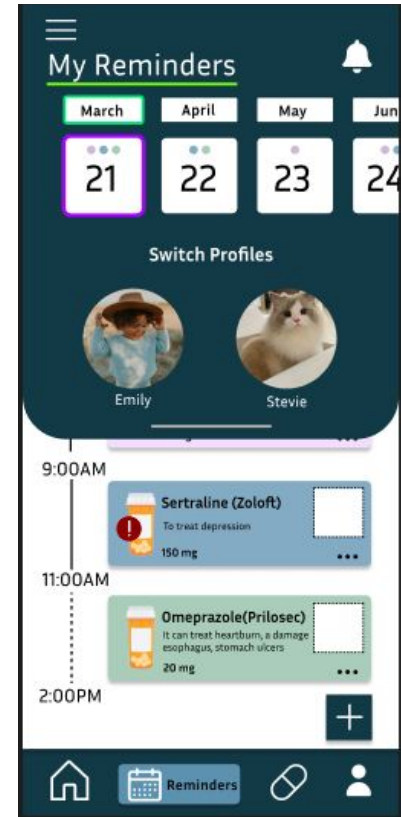
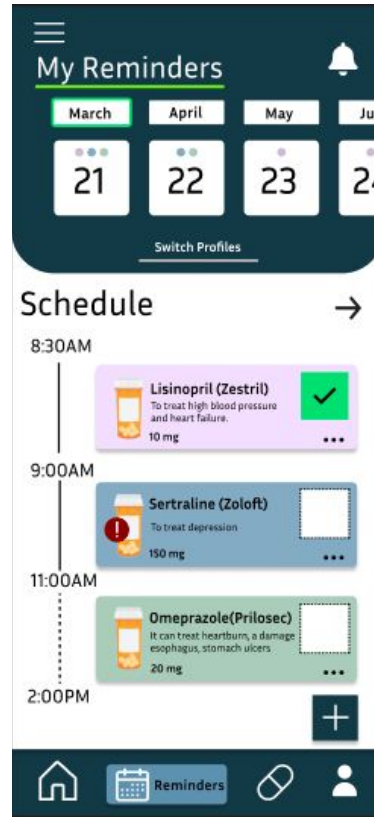
Mockups

Users want to have a caregiver option and while I had the option, I wanted to make it easier to switch profiles.

Before usability study



After usability study



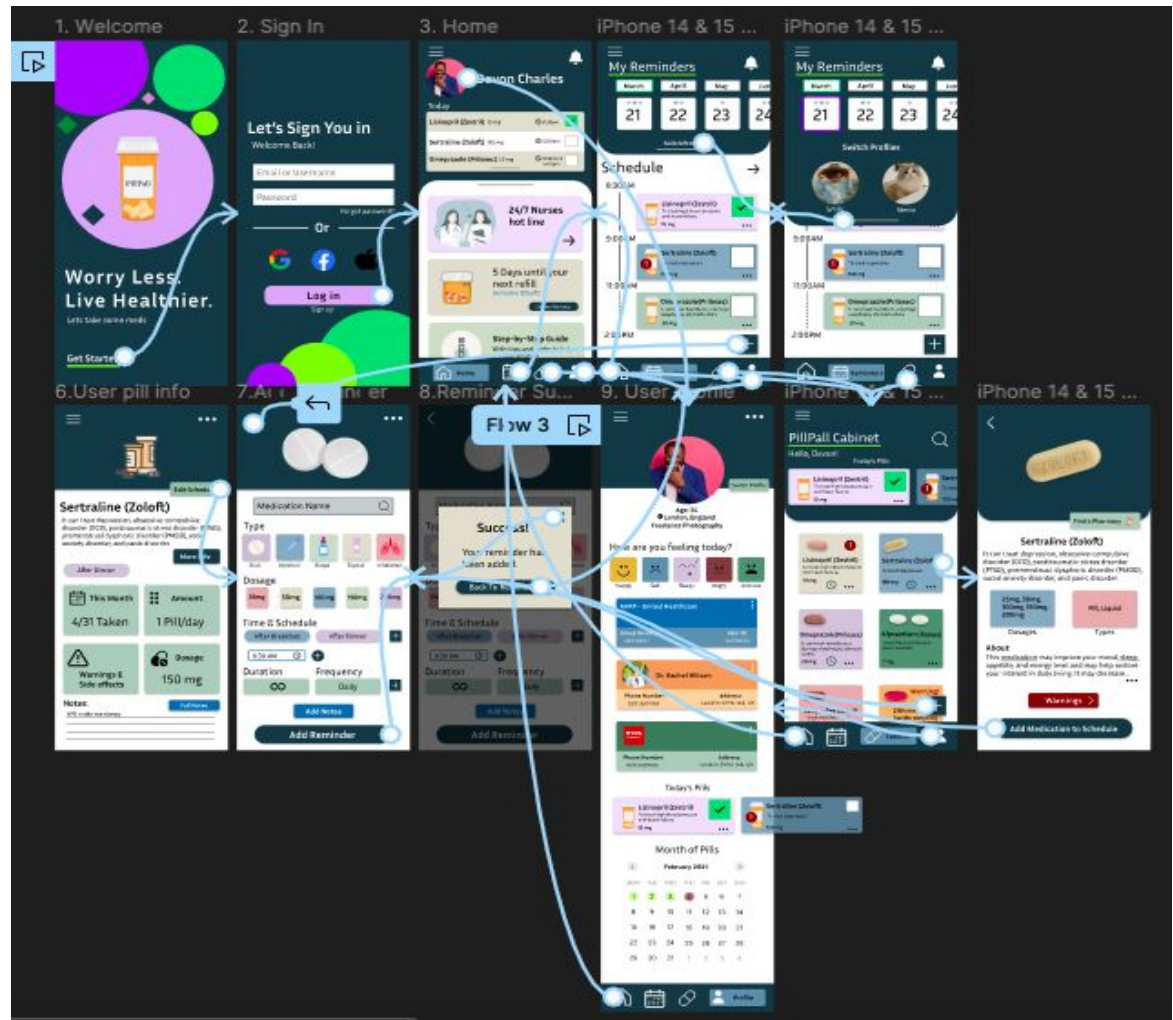
Mockups



High-fidelity prototype

After creating my mockups, I implemented my prototype. The user flow is to add a new medication to their schedule.

[High Fidelity Prototype](#)



Accessibility considerations

1

Clear medication imagery for easy identification and to reduce the chances of taking the wrong pills.

2

When a medication can interfere with another medication a user is taking, a warning will pop up next to that medication to warn the user. They will be able to acknowledge the warning saying they are aware of the interference.

3

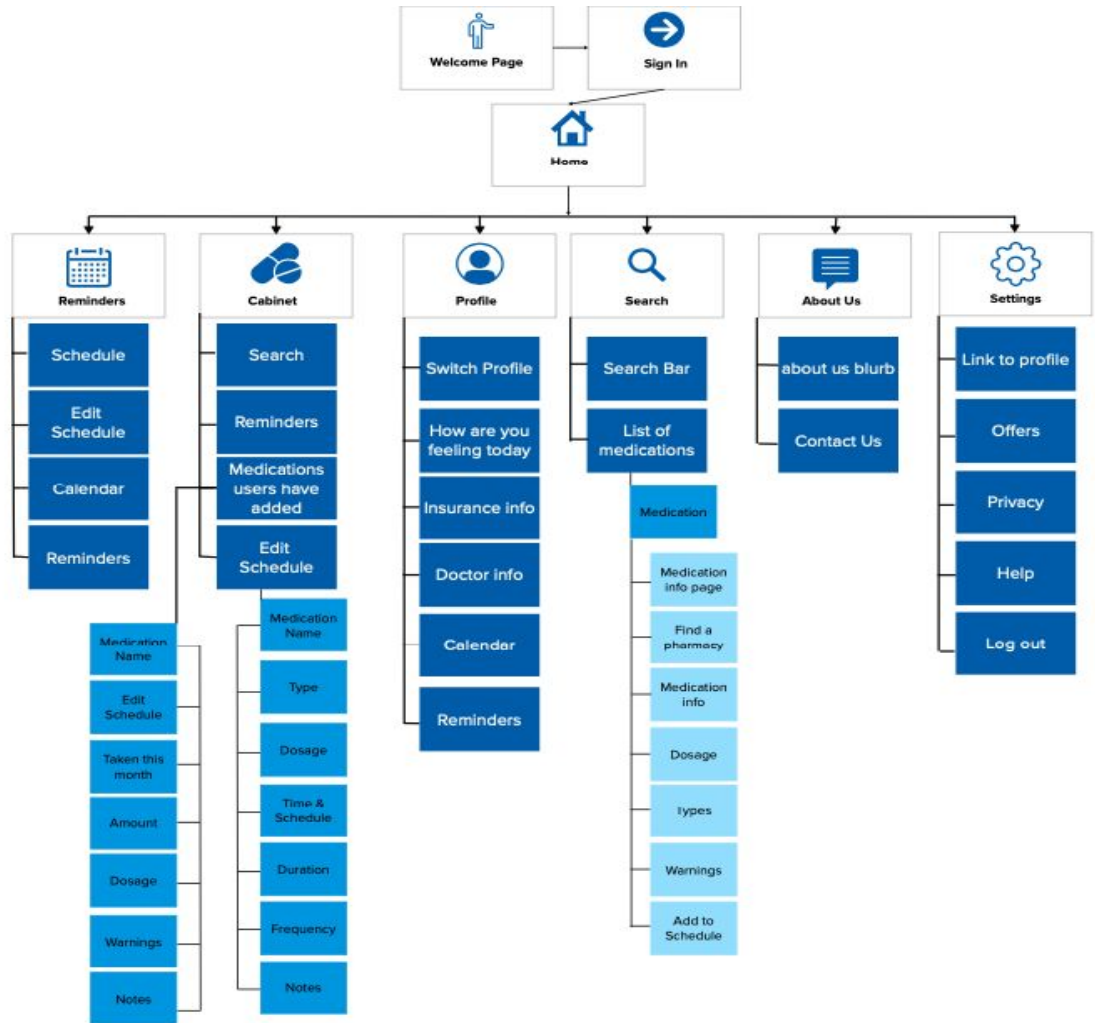
I created a smart watch interface to help users with reminders. They will be able to customize their reminders not only on the app but on their smart watch too. This will make it easier for them to be reminded to not only take their medication, but if they are a caregiver, to make sure the person they are caring for has taken their medication.

Responsive Design

- Information architecture
- Responsive design

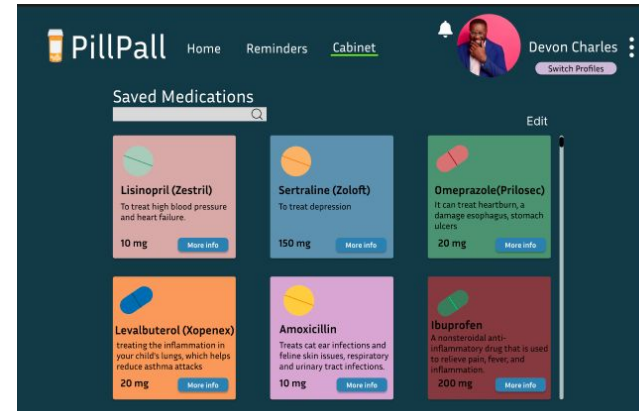
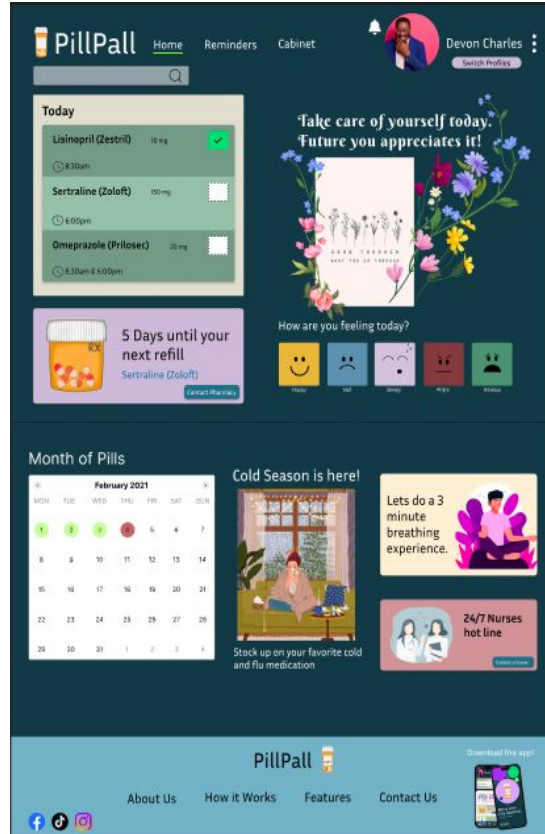
Sitemap

With the app design finished I started working on a responsive website. I used my sitemap to help guide the organization structure to make sure the website's user experience was consistent across devices.



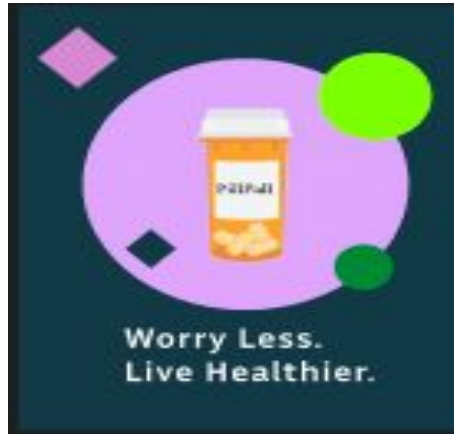
Responsive designs

The design for different screen sizes include phone, desktop, tablet and smartwatch. I did a mobile-first approach and worked my way up to desktop size. Then decided to include smartwatch designs as well. I prefer mobile-first design approach, it keeps me focused on the most important features to make the user experience more enjoyable and keep it accessible.



Responsive designs

Here is my mockup for a smartwatch design. This was a challenge in that I had to make sure to have the most important features available while being accessible. I found it important to have a smartwatch design to make it easy for users to be reminded of their medication even if they don't have their phones next to them.



Going forward

- Takeaways
- Next steps

Takeaways



Impact:

Users shared that they were able to remember to take their medication on time and stay consistent. One user said, “I was able to remember to give my dog Rocket her medication on time the first day I used PillPal”.



What I learned:

I learned that there are a lot of different user needs when it comes to taking medication. At first I thought this project would be pretty straight forward, but after doing research I found many different needs and wants from users that I had never thought of. I learned a lot about how users prefer to be reminded and how they like more interactive and customization qualities in their schedule making

Next steps

1

Conduct research on how successful that app is globally and how different needs in different countries need to be met.

2

Add more resources for users who don't have insurance.

3

Add a reward system for taking their medication consistently.

Let's connect!



Thank you for taking the time to review my work on the PillPal App. If you'd like to see more of my work please contact me!

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