CASE STUDY

Desktop and Mobile Apps.

Family Medications and Appointments Reminder

Desktop (with your Figma account)   **Prototype**
Mobile   (Adobe XD)   **Prototype**

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Project Overview

The product:

Patients Medical Reminder for users who uses different medications and visiting medical offices often and on continuous base
(Desktop, iPad and Mobile versions).

Project duration:

March, 2021 – April, 2021

Project Overview

The problem:

Patients who uses a lot of medications continuously very often loses the control of what medications were already taken and what was not taken, besides that they forgetting to take medications at the specific time, recommended by doctors / pharmacists

The goal:

Design an solution/s that allows participants who uses medications on a constant base – convinient use of medical reminder with information synchronization for Desktop, iPad and Mobile phones, along with some other additional features.

Project Overview

My role:

UX designer - designing an Desktop, iPad and Mobile phones solution (website and dedicated app) for Patients. From concept development to delivery of the project.

Responsibilities:

Conduct researches, interviews, digital wireframing, low and high-fidelity prototyping, usability studies (including accessibility regulations), making iterations on design, delivering project to engineering and programming teams.

Understanding the user

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

User Research: Summary

I conducted interviews and created empathy maps to understand the users pain points

As a primary targeted user audience identified during conducting research

was patients who uses lots of different medications on a constant base.

The research confirmed our initial assumption about human factor that patients are forgetting take some medications, and at the same time we discovered that the human factor was not the only one of the limiting factors users have, but also the convenience of feeling out the reminder from different devices with synchronization of information, accessibility options limitation and potential use of medical appointments schedule.

User Research: Pain Points

1

Forgetting to take all or some medications

Patients very often forgetting to take medications, they loosing control of what they already took and what's not

2

Losing time track of taking medications

Patients are tend to take medications not a specific time/s assigned by doctors, but at the time when they are remember

3

Accessibility

Existing platforms are partually lock of assistive technology for feeling out the reminder

4

Convinience of work with Reminder

Users are losing the information they filed out when they work from different devices.

Personas: Jane R and Allis L

Problem statement 1:

Jane is **retired person with busy social life** she **need a medication reminder solution** because **sometime she is forgetting to take her own medications and she needs to remind her husband to take his medications.**

"I am constantly busy my social life, enjoy to spend time with my family, grandkids and friends"

Jane R

Age: 72
Education: MBA
Hometown: Miami, Fl
Family: Married
Occupation: Retired

Goals
- More Travel
- Spend more time with my family, grandkids and friends
- Stay active and healthy

Frustrations
- Because of my busy social life sometime I am forgetting to take my medications
- My husband very often forgetting to take his medications and I have to constantly remind him.

Retired person with busy social life who enjoys time with family, grandkids and friends, sometime forgetting to take her own medications and constantly needs to remind her husband to take his medications.

Problem statement 2:

Alis is **family oriented busy professionals with family and two kids** she **need a medication reminder solution** because **sometime she is forgetting to remind her son and husband to take their medications that should be taken daily, she even forgetting sometime to take her vitamins.**

"Constantly busy at work and with almost no time for home duties."

Alis L

Age: 44
Education: MBA
Hometown: West Bloomfield, MI
Family: Husband and two kids
Occupation: Project Manager

Goals
- More Social Life
- Keep myself healthy and active
- Spend more time relaxing at home or on vacations
- Have less warries about stuff that i might forget

Frustrations
- Always need not to forget about reminding my son and my husband to take medications for their high cholesterol
- Sometime I am forgetting to take my vitamins to stay active

Busy professional wit family and two kids. Alis son and husband have high cholesterol and they need to take their medications regularly. Alis also takes her vitamins to stay active during the day.

User Journey Map

Mapping Jane's user journey demonstrate how convinient it would be for users to have an access to a Medical Reminder Solution.

Persona: Jane R

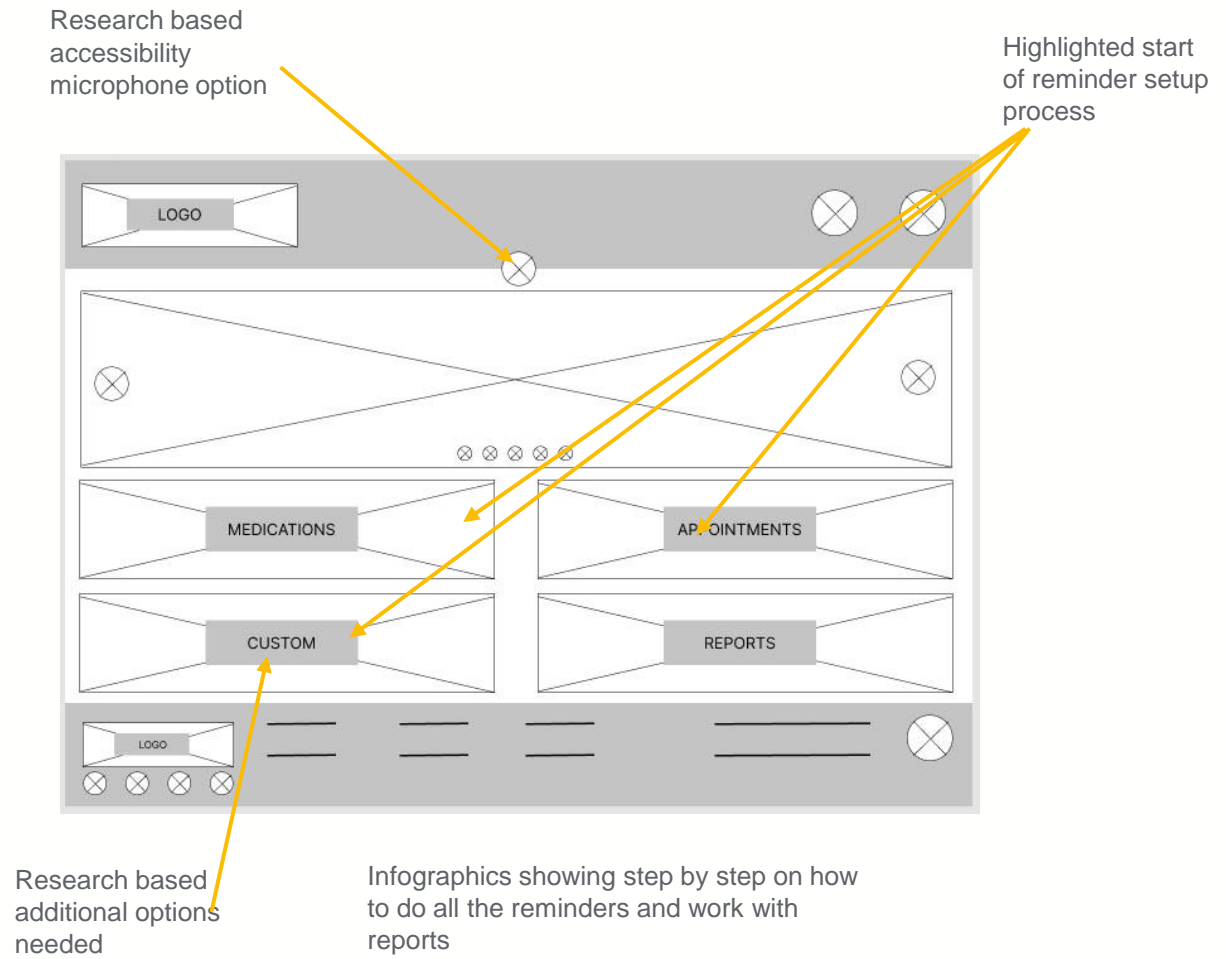Goal: have some type of reminder about medications for myself and my husband

ACTION	Prepare all the medications for me and my husband, check the lists (morning)	Take my medications and remind my husband	Get the lists of medications for me and my husband, check the lists (evening)	Take my medications and remind my husband
TASK LIST	A. Sort bottles for me B. Sort bottles for my husband	A. Take medications B. Remind my husband C. Control that husband will take his medications	A. Sort bottles for me B. Sort bottles for my husband	A. Take medications B. Remind my husband C. Control that husband will take his medications
FEELING ADJECTIVE	1. Tired from this daily rutine 2. Optimistic for the day	1. Warried 2. Running out of time 3. Relieved	1. Tired 2. Oh well, once more ☹	1. Tired 2. Relieved 3. Satisfied
IMPROVEMENT OPPORTUNITIES	1. Automatic personolized reminder	1. Reminding message to my husband and reminder for myself to control him	1. Automatic personolized reminder	1. Reminder with check-marks about all the medications taken or needed to be taken

Starting the design

- Digital wireframes
- Low-fidelity prototype
- Usability studies

Digital Wireframes

As an initial design, I made sure the "home" screen design include well highlighted reminder setup process, accessibility options, start point and some additional features, based on the user research.

Research based accessibility microphone option

Highlighted start of reminder setup process

LOGO

MEDICATIONS

APPOINTMENTS

CUSTOM

REPORTS

LOGO

Research based additional options needed

Infographics showing step by step on how to do all the reminders and work with reports

Low Fidelity Wireframes

I created a low-fidelity digital wireframes. The main user-flow was based on connections for a setting up medical reminder process, so the prototype could be used in a usability study.

Usability Study: Findings

I conducted **unmoderated usability study**. This study allowed me to have updated insights, as well as some updates to the user-flow diagram, and made some adjustments to the setting up medical reminder process.

Findings

1. "Microphone" options should be placed on the top for Mobile and iPad devices and at the bottom for desktop version

2. Infographic with process explanation should be placed on the top for the mobile phones, at the bottom for the desktop version and no need on "home" screen for iPad device

3. All of the main user-flows pages should include not only the main user, but also and family member option to be switched back and force.

4. "Language" choice accessibility option should be added to all the screens

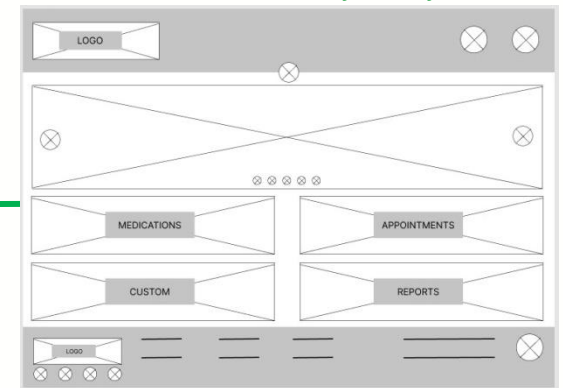# Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

Mockups

Initial design allowed me conduct some customization, and after the usability study, I added updated some features along with user-flow and adding some accessibility options to **make a reservation process design more user-centered**.

Before usability study
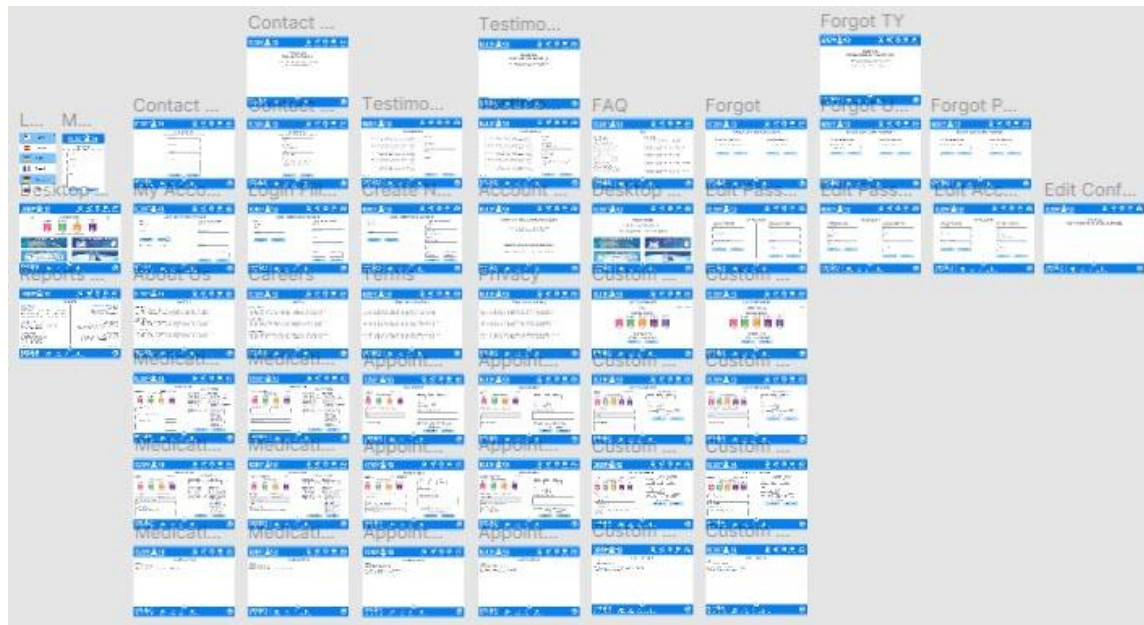

After usability study

Key Mockups

High Fidelity Prototype

The high-fidelity prototype present clear user flows for restaurant time reservation process, as well as other additional and accessibility features, based on conducted researches.

Desktop - with your Figma account high-fidelity prototype

Mobile general access from Adobe XD high-fidelity prototype

Accessibility Considerations

1

1. Designed and implemented features:
   For users who are vision impaired, by implementing icons along with the text description
2. Microphone option
3. Option for language choice for non-English speakers.
4. Infographics option for clear explanation of how everythign works

2

Designed and implimented icons to
make navigation easier to understand.

3

Used contrast ratio, based on WCAG recommendations, for users with vision loss equating 20/80 vision.

Going forward

- Takeaways

- Next steps

Takeaways

Impact:

The Medical Reminder solution makes general users and users with limited abilities feel like company who implemented this solution really think about how to meet their users needs.

One quote from participant user feedback: "I love this mobile app and the website, very intuitive, it is easy to use, and I spent only one time 20 minutes to fill out all the medications and appointments and another 10 minutes to look how to work with microphone option. **LOVE IT, much less manual work involved!!**"

What I learned:

While designing the this web and app solution, I learned that the initial ideas are only the beginning of the process. Ongoing Competitive Audit Reports and Usability Studies during different stages of the project with multiple iterations of the high-fidelity designs improves users' experience and brings the product on much higher competitive level.

Next Steps

1

Conduct additional of usability studies, after project development stage and another round of study after project kick-off, in order to validate whether the pain points of users experienced have been resolved.

2

Find new types of end-users' with all the additional researches and design new possible features to meet their needs.

Let's Connect!

Thank you for reviewing my work of Medical Reminder Website and App Solution!
Should you have any questions, concerns or new ideas to implement, please don't hesitate to contact me directly and I'll be happy to assist.

Best Regards,

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Thank You!