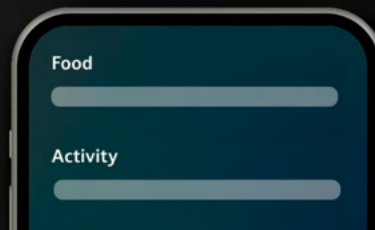
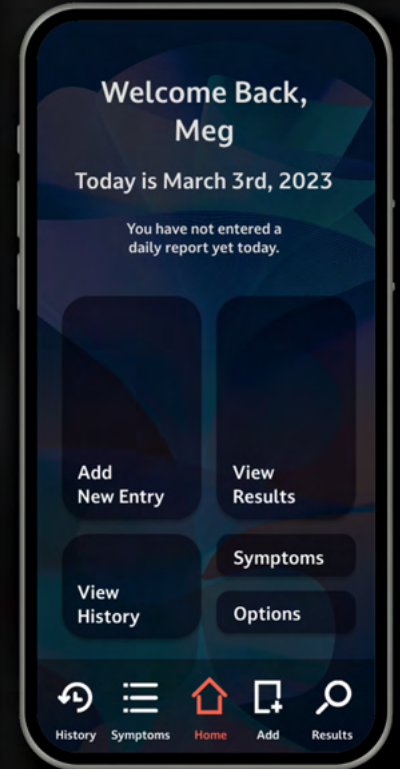
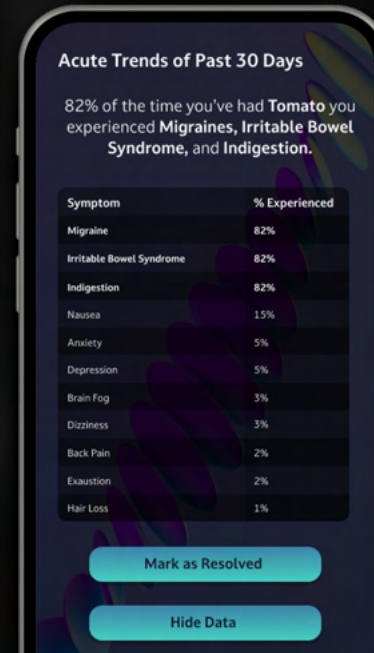
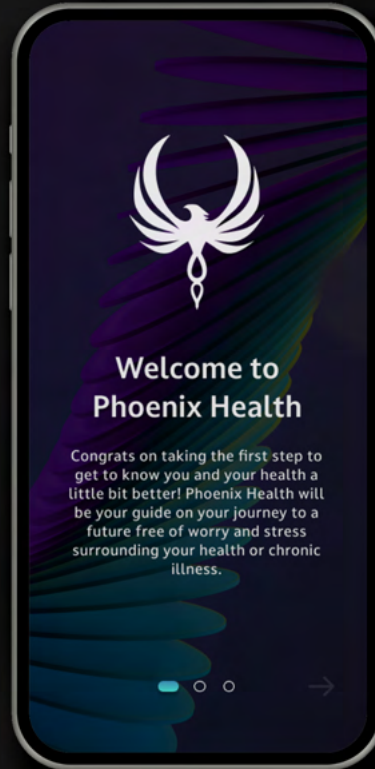
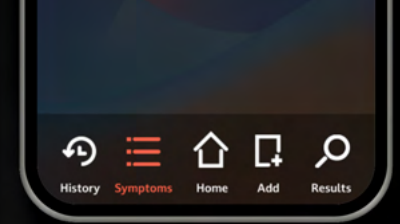
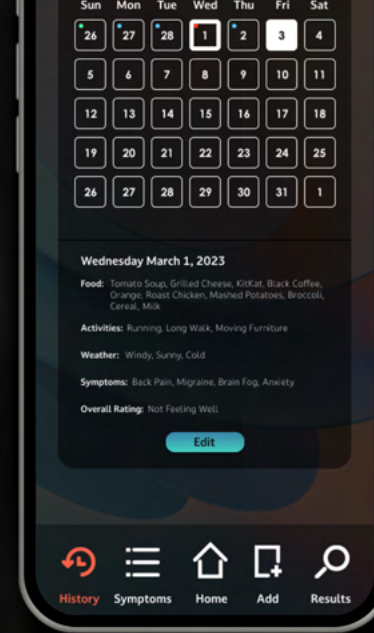
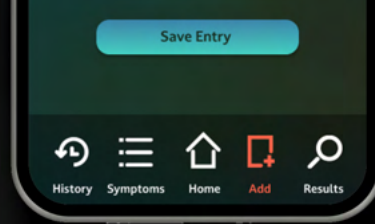


Phoenix Health

Take control back over your health.



About the Project

Phoenix Health is a symptom tracking mobile and desktop app to aid users with chronic illnesses.

The Challenge:

This project was part of a 14-week bachelor's thesis where we were tasked with examining a problem in which a user's needs were not being met, and create a tool that addressed these users' unmet needs.

My Roles:

- Product Design
- UI Design
- UI/UX Architecture
- Usability Testing
- User Research & Analysis
- UX Strategy
- UX Copy
- Visual Design

The Process

Discover. Define. Develop. Deliver.

The steps taken during the design process were:

- Hypothesize and validate
- Preliminary research
- Definition of problem and pain points
- Preliminary user testing
- Design exploration
- User interviews and testing
- Visual design and branding
- Prototyping and solution testing

Tools & Programs Used:

- Figma
- Adobe Illustrator

Hypothesis

The needs of people living with one or more chronic illnesses are not being met. People with chronic illnesses struggle with managing a collection of complicated symptoms and need a way to manage their health and symptoms accordingly. Consequences from not having an easy way to manage these illnesses can result in poor quality of life, poor mental health, and a sense of isolation or loneliness.

Project Goals:

- Discover the common barriers faced by those living with one or more chronic illnesses
- Understand and clarify what the consequences of having inadequate medical assistance are
- Research and discover what tools or services already exist within this market
- Uncover a potential solution that can take off some of the stress and burden from those living with a chronic illness

Preliminary Research

I interviewed 10 people living with a chronic illness about their typical day and turned my findings into a user journey map to help define key pain points of potential users.



From the interviews conducted, three main pain points were uncovered:

- Social isolation and loneliness
- Not receiving the proper care, help, or accommodations needed
- Flare ups of illness continuing with no clear pattern

Potential Solutions

Social Isolation

- Support group
- Online community
- Tool to plan around future flares

Not Receiving Proper Care

- Access to unbiased medical professionals
- Support with self-advocating
- Assistance understanding what to do during a flare

Flares Continuing

- A tool to track flares with potential triggers
- A tool to track history of flares
- A tool to identify what symptoms could mean

Preliminary User Testing

User Definition:

- Diagnosed with at least one chronic illness
- Currently living in Canada
- Over the age of 18

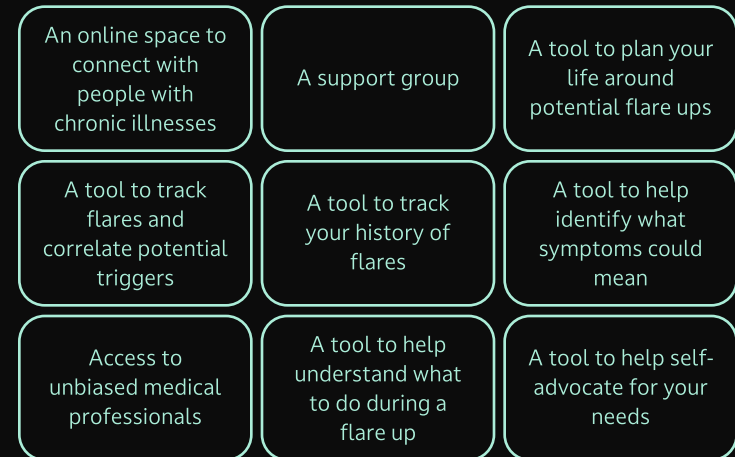
Task:

A group of 10 people who fell within the user definition were asked to independently sort 9 cards into 4 categories to understand the needs and wants within the intended user group. Each participant sorted on their own and anonymously as to avoid potential bias within a group setting or external influence.

The Categories:

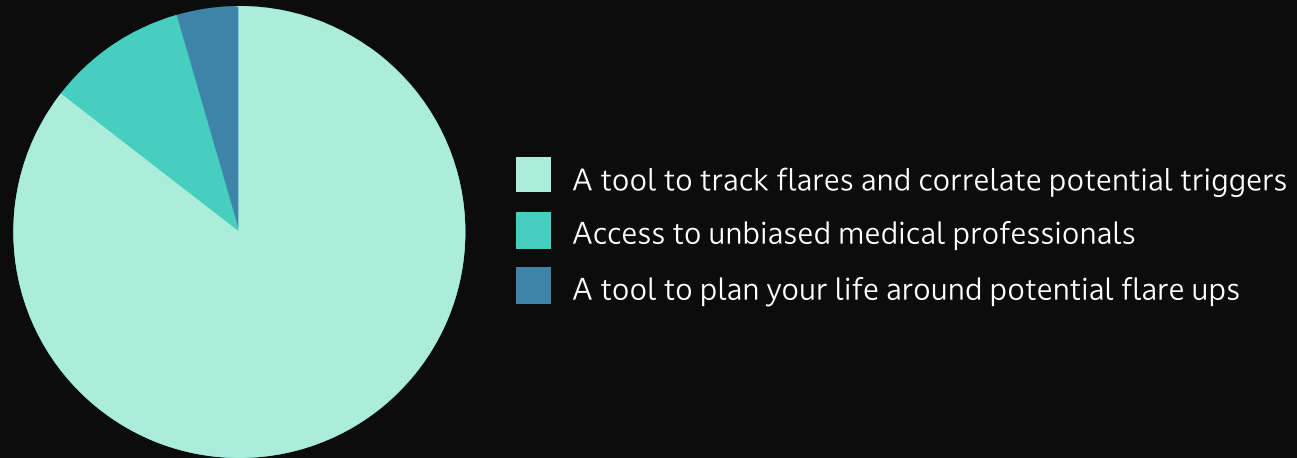


The Cards:

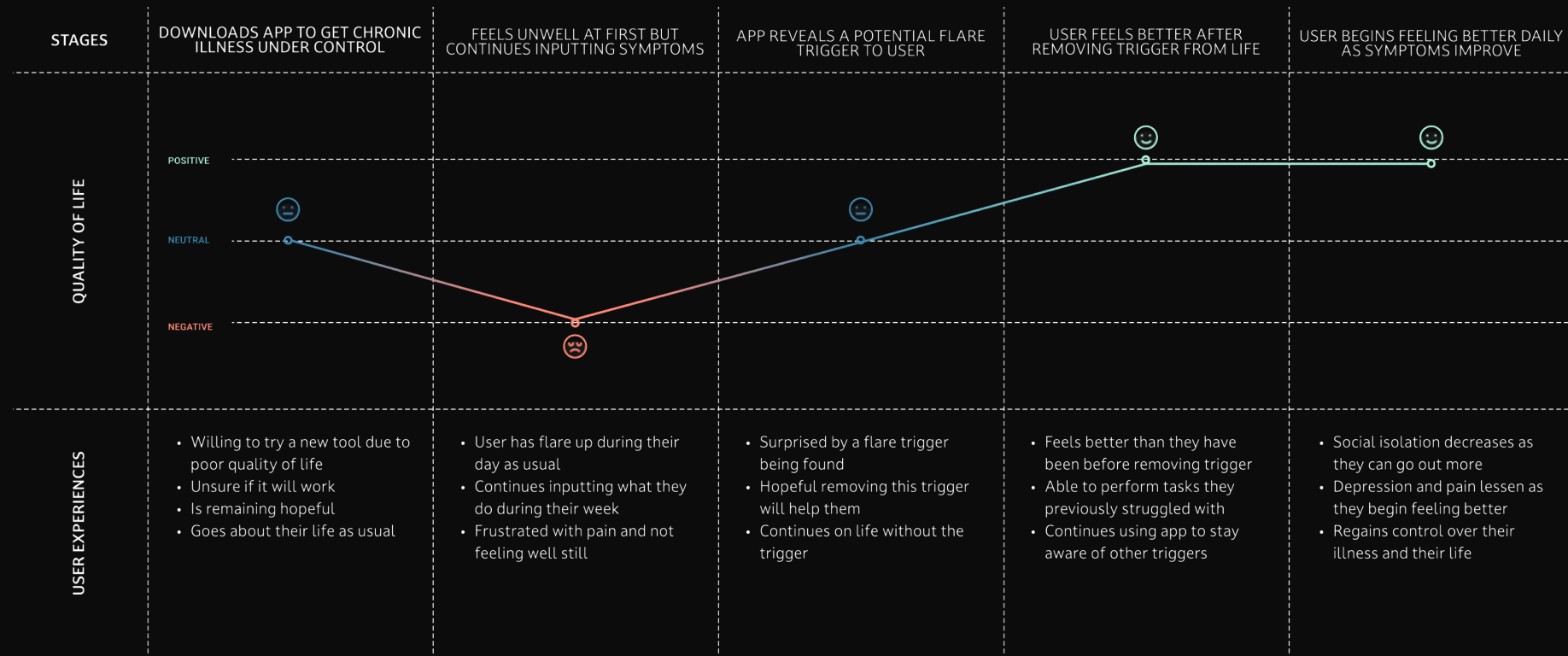


90% of users found “A tool to track flares and correlate potential triggers” as the most helpful potential solution for their chronic illness barriers.

Most Helpful



With the potential solution uncovered, I created a user journey map to show the relief of previous pain points through using this concept.



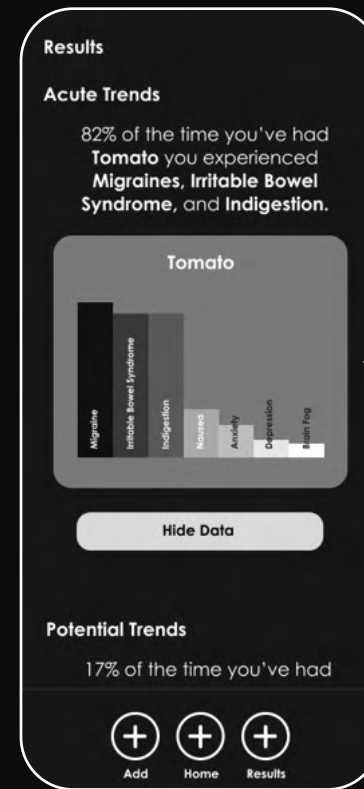
Design Exploration

A rough draft of wireframes for this potential solution was user tested with the following results:

Unclear on method of input, requires further user research to determine best option for inputting daily interactions

Colours are confusing, unsure if blue is "sad/depression" or if red is "high pain/bad pain"

Users desired the ability to view their past symptoms and input history

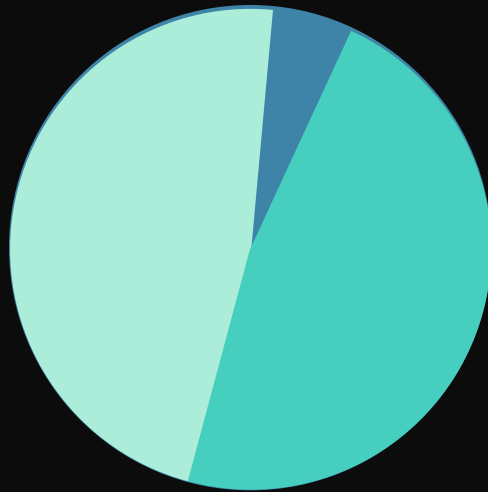


Graph is hard to read with a potential large number of symptoms, more user research is needed to determine best mode of data visualization

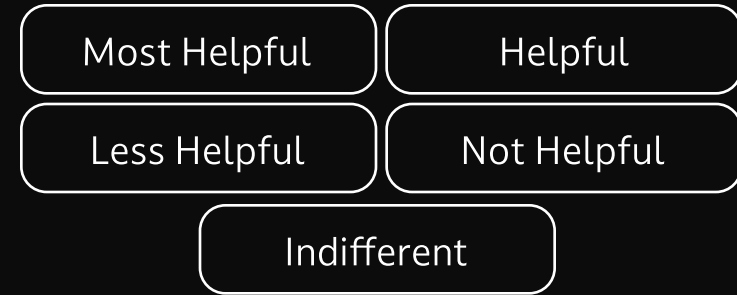
Task:

A group of 7 participants who fit the user definition were asked to sort cards of input methods to understand the most effective and helpful way for users to input information into the app daily.

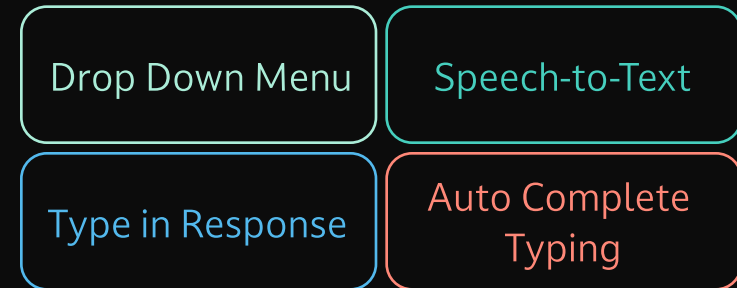
Most Helpful Results:



The Categories:



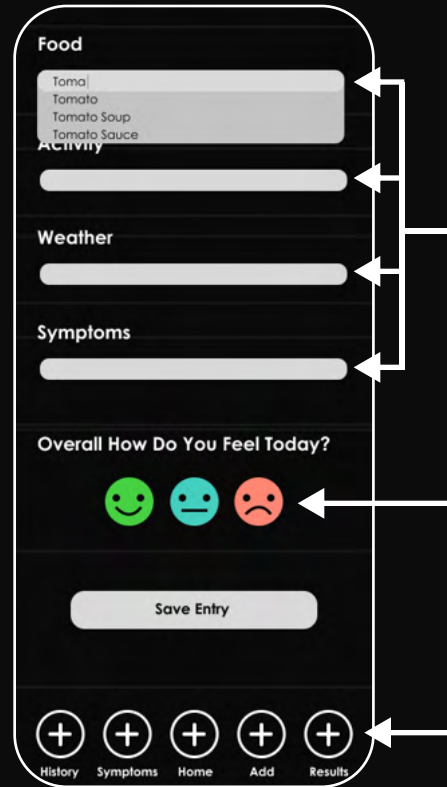
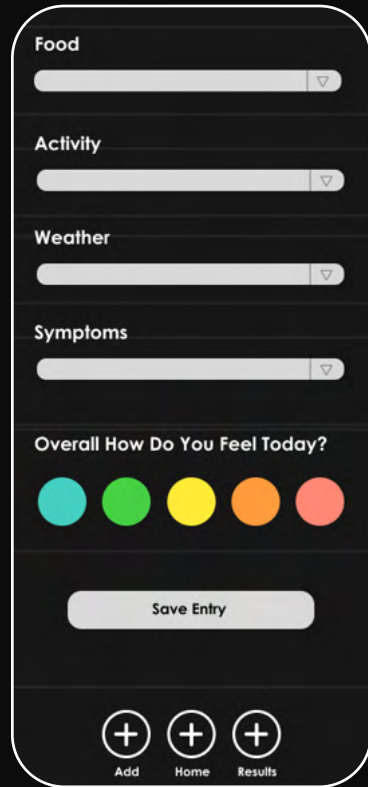
The Cards:



Final Decision:

A combination of typing in and a drop down menu will be used, as speech-to-text is enabled on a majority of smartphone keyboards already.

The design and function of the input screen was altered based on the user feedback from the user testing and the results of the card sorting.



The input method was changed to a drop-down menu that opens up and changes the results as you type in your response

The colours were changed to green (good), blue (neutral) and red (bad) to make the options more clear. To further clarify for those who may associate colour differently or have colour blindness, facial expressions were also added

Menu options were added to include history and symptom tracking for later in prototype production

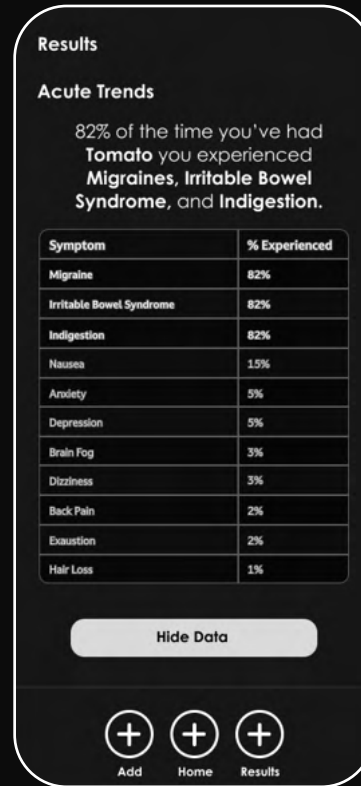
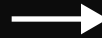
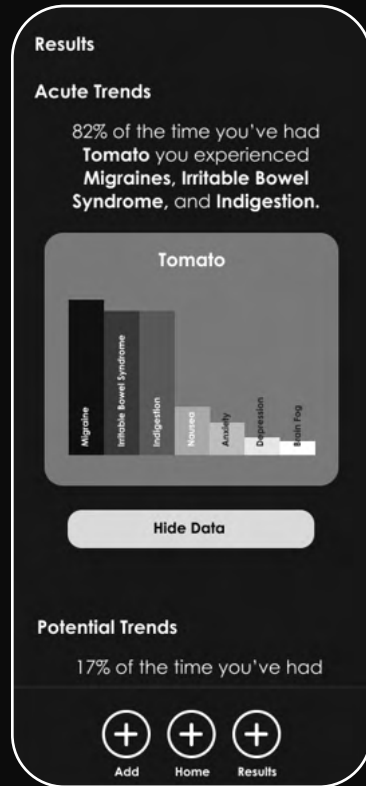
Task:

Several participants were interviewed individually and asked to rank a series of graphs and data visualizations in regards to data correlation between an activity and how often it induced a flare up.

The Results & Rankings:

Type	Ranking	Notes Taken Regarding Responses
Data Table	#1	Easiest to read at a glance, requires no previous background in reading data, converts well for accessibility, easy to understand
Bar Graph	#2	Most common graph participants interact with, easy to read the data, visuals help with understanding differences
Pie Chart	#3	Fine for reading, a bit complicated with many inputs or items, hard to tell the difference between things
Plot Chart	#4	Not a commonly read graph, requires more effort to read or a background reading data, harder to understand
Line Graph	#5	Presents like a trend of one information rather than multiple inputs, very hard to understand, misleading for the subject matter

The design and function of the results screen was altered based on the user feedback from the user testing and the results of the interviews.



The original bar graph was changed into a data table as it was the most preferred method of data visualization within the user testing group. It allows for more accurate information to be translated and understood quickly and easily by a user.

Inputting Variables

Food:

Activity:

Weather:

Symptoms:

Overall How Do You Feel Today?

😊 😐 😞

Save Entry

History Symptoms Home Add Results

Viewing Data

Results

Acute Trends

82% of the time you've had **Tomato** you experienced **Migraines, Irritable Bowel Syndrome, and Indigestion.**

View Data

Potential Trends

17% of the time you've had **Chocolate** you experienced **Migraines, and Anxiety.**

View Data

8% of the time you've had **Oranges** you experienced **Migraines.**

View Data

Results

Acute Trends

82% of the time you've had **Tomato** you experienced **Migraines, Irritable Bowel Syndrome, and Indigestion.**

Symptom	% Experienced
Migraines	82%
Irritable Bowel Syndrome	82%
Indigestion	82%
Nausea	15%
Anxiety	0%
Depression	0%
Brain Fog	0%
Dizziness	0%
Back Pain	2%
Exhaustion	2%
Hair Loss	1%

Hide Data

History Symptoms Home Add Results

Viewing and Editing History

History

March 2023

Sun Mon Tue Wed Thu Fri Sat

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

History

March 2023

Wednesday March 1, 2023

Food: Tomato Soup, Grilled Chicken, White Rice, Cucumber, Orange, Roast Chicken, Roasted Potatoes, Broccoli, Carrots

Activity: Running, Long Walk, Strong Exercise

Weather: Windy, Sunny, Cool

Symptoms: Back Pain, Migraine, Brain Fog, Anxiety

Overall Rating: Not Feeling Well

Edit

History Symptoms Home Add Results

Food

Activity

Weather

Symptoms

Save Entry

History Symptoms Home Add Results

Viewing and Editing Symptoms

Your Symptoms

- Back Pain
- Irritable Bowel Syndrome
- Migraines
- Brain Fog
- Exhaustion
- Hair Loss
- Indigestion
- Nausea
- Depression
- Anxiety
- Dizziness

Add New Symptom

Your Symptoms

Name:

Type of Symptom:

Notes:

Save Symptom

Your Symptoms

Name:

Type of Symptom:

Notes:

Started in 2010, caused by injury. Currently take naproxen. Worsened by Fibromyalgia.

Save Symptom

History Symptoms Home Add Results

Visual Design and Branding

HEADINGS

Phoenix Health

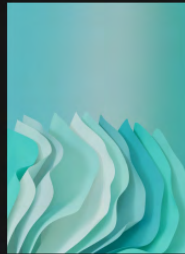
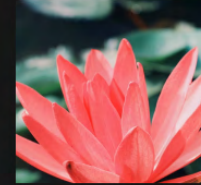
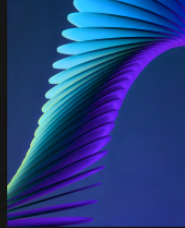


BODY TEXT

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vivamus blandit nisl nibh, eu fermentum dolor ornare facilisis. Vivamus et feugiat odio. Curabitur et pharetra magna. Donec id diam et lectus faucibus tempor in non.

KEYWORDS

Soft **Bright**
Healing **Soothing**
Kind **Hopeful**



DEEP
INDIGO
#261458



PALE
BLUE
#3D84A8



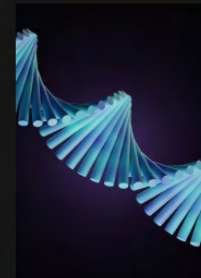
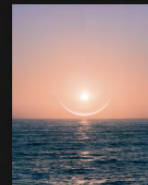
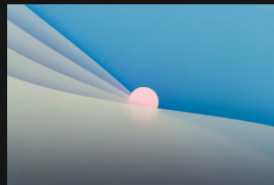
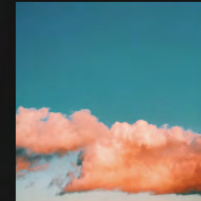
PINK
SALMON
#FF8372



SEA
FOAM
#46CFBF



PASTEL
GREEN
#ABEDD8



Buttons and menus were checked to match up with WCAG AA and AAA compliance.

Buttons:

Get Started Filter Save Entry

Foreground Color #282239 Background Color #46CFBF Contrast Ratio 7.94:1

WCAG Compliance Results

ELEMENT TYPE	AA	AAA
Small Text	✓ Pass	✓ Pass
Large Text	✓ Pass	✓ Pass
UI Components	✓ Pass	✓ Pass

SMALL sample text: 14pt (18.5px)
LARGE sample text: 18pt (24px)

WCAG AA and AAA Results

Get Started Filter Save Entry

Foreground Color #282239 Background Color #5389ED Contrast Ratio 6.92:1

WCAG Compliance Results

ELEMENT TYPE	AA	AAA
Small Text	✓ Pass	✗ Fail
Large Text	✓ Pass	✓ Pass
UI Components	✓ Pass	✓ Pass

SMALL sample text: 14pt (18.5px)
LARGE sample text: 18pt (24px)

WCAG AA and AAA Results

Navigation Menu:

History Symptoms Home Add Results

History Symptoms Home Add Results

Foreground Color #ffffff Background Color #1b152e Contrast Ratio 17.60:1

WCAG Compliance Results

ELEMENT TYPE	AA	AAA
Small Text	✓ Pass	✓ Pass
Large Text	✓ Pass	✓ Pass
UI Components	✓ Pass	✓ Pass

SMALL sample text: 14pt (18.5px)
LARGE sample text: 18pt (24px)

WCAG AA and AAA Results

Foreground Color #ff8a7a Background Color #1b152e Contrast Ratio 7.68:1

WCAG Compliance Results

ELEMENT TYPE	AA	AAA
Small Text	✓ Pass	✓ Pass
Large Text	✓ Pass	✓ Pass
UI Components	✓ Pass	✓ Pass

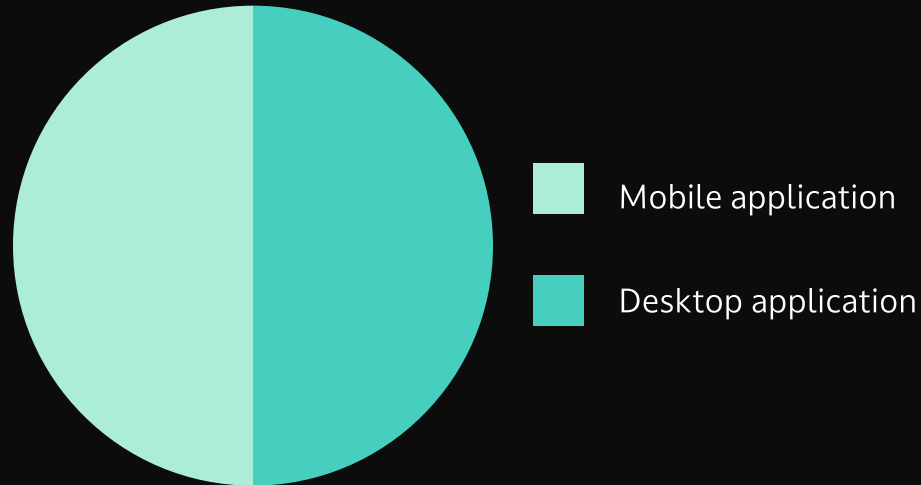
SMALL sample text: 14pt (18.5px)
LARGE sample text: 18pt (24px)

WCAG AA and AAA Results

Solution Testing

While continuing to test iterations, many participants began mentioning they would prefer the option of using this solution on a desktop or laptop over a mobile device. This prompted further user testing with card sorting.

Platform Preference

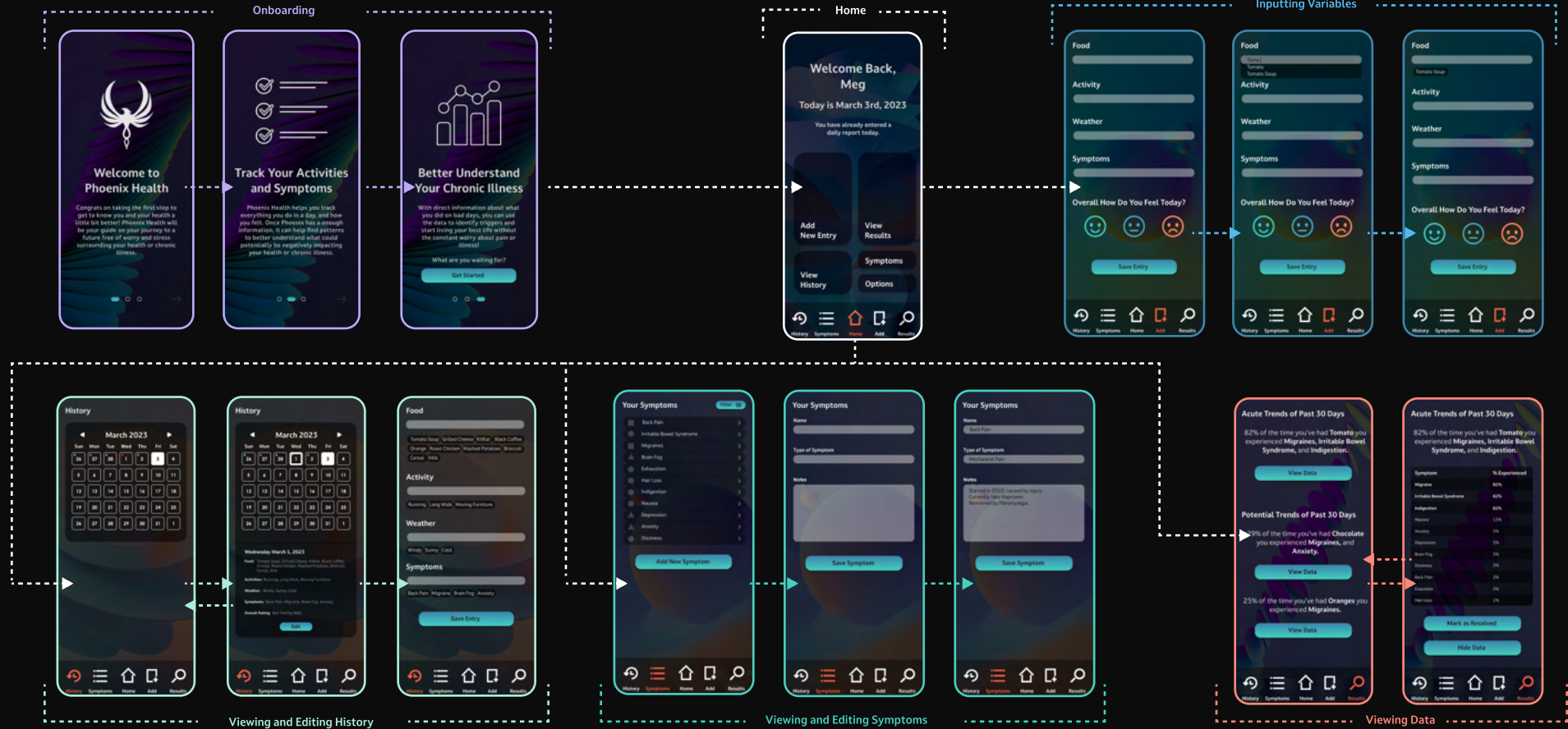
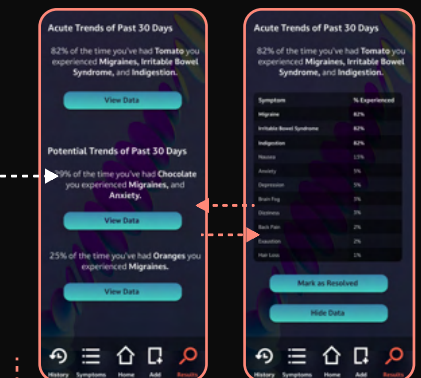
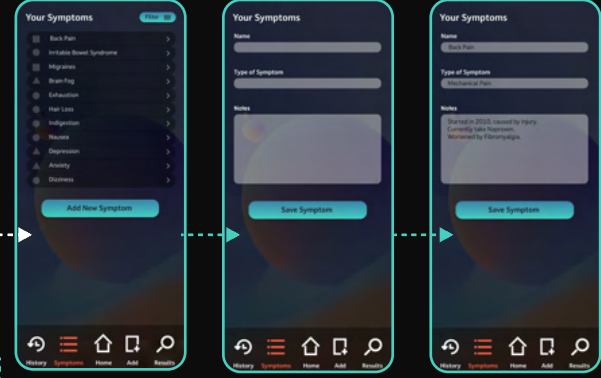
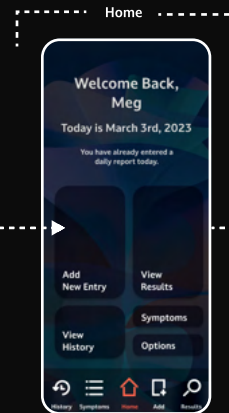
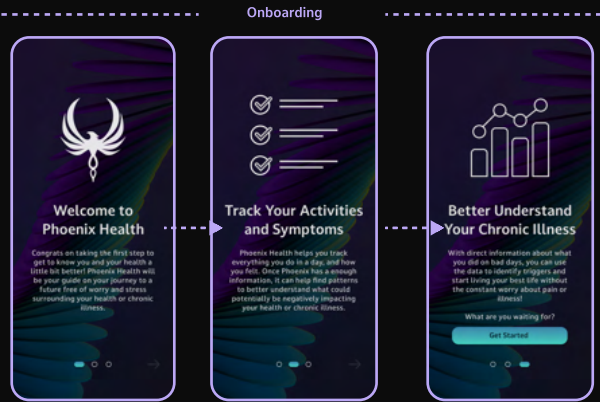


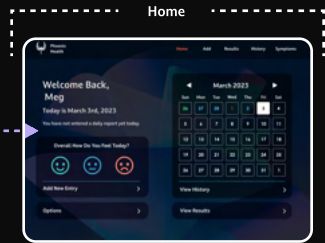
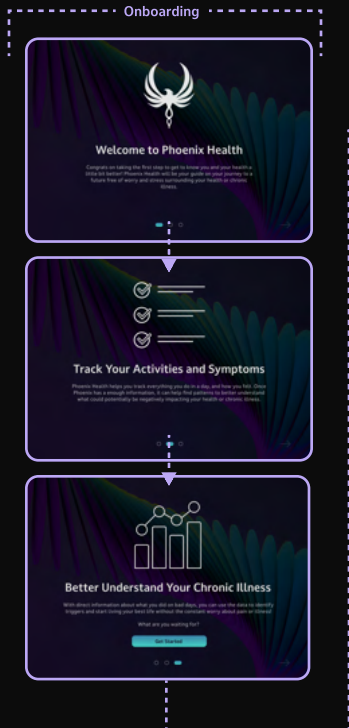
Task:

A group of 10 participants who fit the user definition were asked to sort cards to determine whether they would prefer this solution be available primarily on a mobile device or a desktop/laptop.

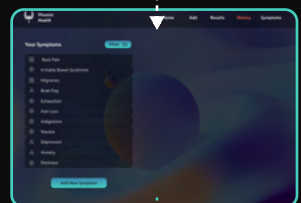
Results:

Exactly 50% of users wanted a mobile application while the other wanted a desktop application. This led to the development of both platforms.

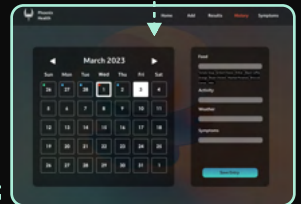
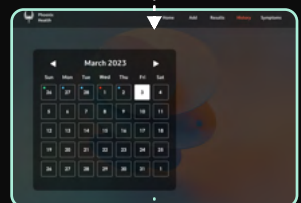




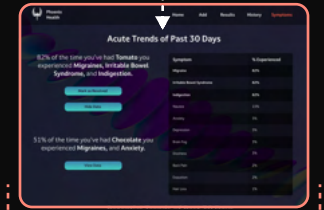
Inputting Variables



Viewing and Editing Symptoms



Viewing and Editing History



Viewing and Editing History

Designed to make health management easier.

After further visual design refinement, Phoenix Health entered its end stage at the end of the 14 weeks allotted. The end result reflects the project goals set for this project, and is something that has the potential to grow beyond this thesis project with more time and resources.

Takeaways & Next Steps

This project allowed me to really explore user research testing and further developed my awareness and skills within accessible design. Creating a tool intended to meet as many needs as possible for a target demographic with a plethora of accessibility needs was a rewarding but difficult challenge. If given the time, the next steps for Phoenix Health would be:

- Explore accessibility settings for users
- Integrate sharing for healthcare professionals
- Explore security practices to protect user data

