The White Lung Climbing App Design

Brought to you by Jonny Moir

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Project overview

The product:

The White Lung is an app for rock climbers who have a wall at home and would like to track their progress over time. The app would help users make problems, record ascents, review their strengths and weaknesses, and is accessible from anywhere.

Project duration:

October 2022 to February 2023.

Project overview

The problem:

Home gym climbers lack motivation to train and a location to track progress that isn't in a ratty journal from kindergarten.

The goal:

Design an app that allows users to track their training progress and receive feedback to stay motivated.

Project overview

My role:

UX designer designing an The White Lung Climbing app from conception to delivery.

Responsibilities:

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

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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 I'm designing for and their needs. A primary user group identified through research was working adults who have their own training wall in their homes (a growing population).

This user group confirmed initial assumptions about users, but research also revealed that motivation was not the only factor limiting users from training at home. Other user problems included organization, connection to a community, and other distractions make it difficult from home climbers (aka homies) to stay on top of their training.

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User research: pain points

1

Motivation

Users often lack motivation for training on their own

2

Organization

Users struggle to track meaningful data that ensures improvement

3

Catalogue

Many users struggle to make their own climbs that they believe will get them to the next level

Persona: **Sara**

Problem statement:

Sara is an avid climber with her own home climbing wall. She wants to use it more but struggles to stay motivated.

motivated. **Sara**

Age: 22
Education: University
Hometown: Calgary, AB
Family: 2 sisters
Occupation: Entrepreneur for their own business

"I am a stay-at-home entrepreneur and climbing lover. I would love to use my wall more but I am not sure if I am even improving."

Goals

- Get better at climbing
- Use an app to track their progress
- Stay motivated

Frustrations

- Overwhelmed with tracking on their own
- Unsure they are training properly
- Not using an expensive tool

Sara owns her own ebusiness and loves working from home. They would like to train on their home climbing wall more but lack the motivation to use it. She is unsure if it is an effective tool for improvement and feels guilty for investing so much money into the wall and not use it. Finding an app that offers a way to track and measure progress would be ideal for Sara.

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User journey map

Mapping Ying's user journey revealed how helpful it would be for users to have access to a dedicated Zia's Pizza app.

Persona: Ying

Goal: An easy and quick way to order healthy food for pickup.

ACTION	Select restaurant	Browse menu	Place order	Complete order	Pick up order
TASK LIST	A. Decide on food type B. Search nearby restaurants in browser C. Select a restaurant	A. Browse online menu B. Select menu items	A. Locate phone number B. Call restaurant C. Place order	A. Confirm order B. Provide payment information C. Get directions to restaurant	A. Drive to restaurant B. Pick up food and tip employee C. Inspect items D. Drive home E. Eat meal
FEELING ADJECTIVE	Overwhelmed by number of restaurant options Excited to find a restaurant that they like	Annoyed at large amounts of text with limited visuals	Dissatisfied with scrolling to find phone number Anxious about having to remember order	Frustrated at having to read card number out loud Annoyed at time it takes to drive to restaurant and back	Happy to eat after a long day
IMPROVEMENT OPPORTUNITIES	Create a dedicated mobile app for Zia's Pizza	Provide search filters Include images Optimize app for screen reader technologies	Provide a simple checkout flow	Provide option to tip in-app	Include a rewards program

Persona: Sara

Goal: Use their home training wall more.

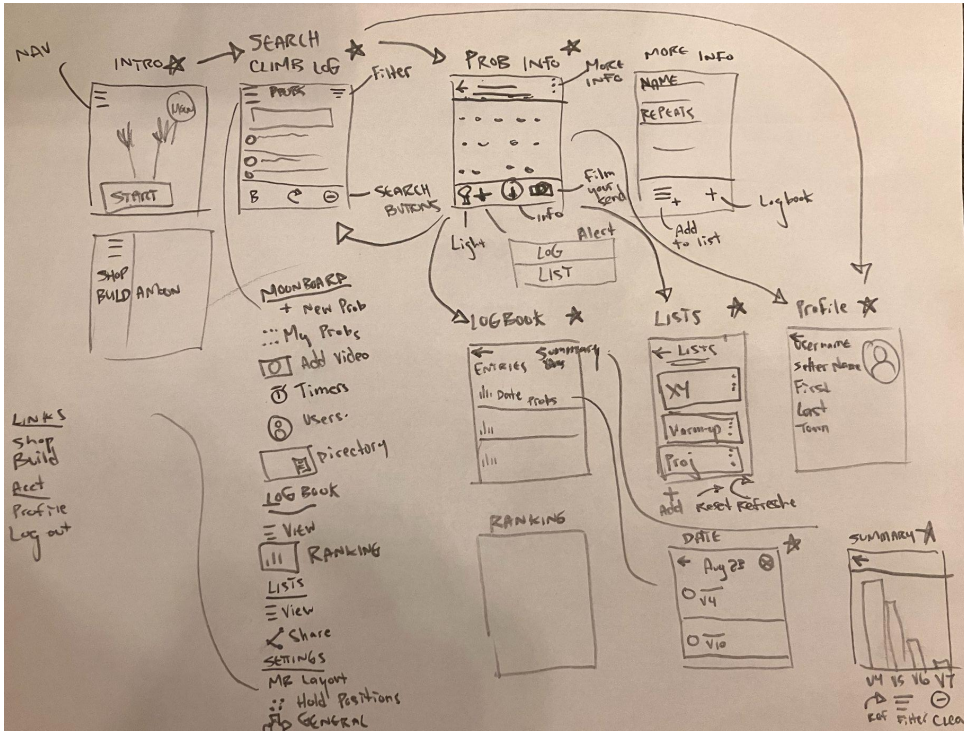
ACTION	Decide to train	Warm-up	Climb Hard	Cool down
TASK LIST	Tasks A. Change B. Pick music for the session C. Go to the garage	Tasks A. Stretch and airbike B. Start climbing easier problems and work up to harder ones	Tasks A. Choose increasingly difficult problems B. Climb until failure C. Write down climbing log in a paper journal	Tasks A. Pick easier problems to cool down B. Stretch
EMOTIONS	Frustrations with knowing if her time is being used well Overwhelmed with making challenging problems	Self-conscious about not knowing if she is warming up properly Nervous the problems she does are too hard and may cause injury	Nervous of climb difficulty accuracy Unsure if climbing to failure is wise Annoyed with tracking progress on paper and never looking back	Excitement when they believe they did well. Disappointment if it is less clear. Self-conscious about cool-down methods due to being self-taught
IMPROVEMENT OPPORTUNITIES	App reminder to train Music function Connect with community of climbers Make climbing problems for the users	Guided warm-up with timers in app Connect with other users who are training at the same time Climbing problem creation with accurate difficulty	Guided session Problem generator Digital tracking	Session Guide Session Analysis - Strengths and areas to focus on

Starting the design

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

Paper wireframes

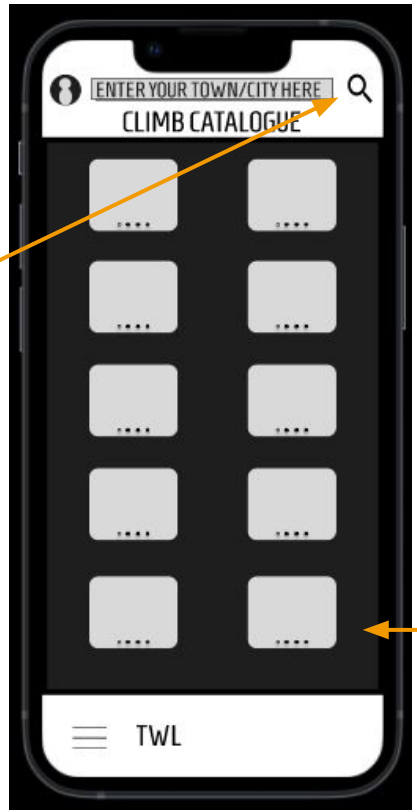
Taking the time to draft iterations of each screen of the app on paper ensured that the elements that made it to digital wireframes would be well-suited to address user pain points. For the home screen, I prioritized a **quick and easy login process** to help users save time and find climbs immediately.



Digital wireframes

As the initial design phase continued, I made sure to base screen designs on feedback and findings from the user research.

Users will be able to search for problems based off difficulty and other inputs.



These will be a list of the climbs that the app will generate for the user..

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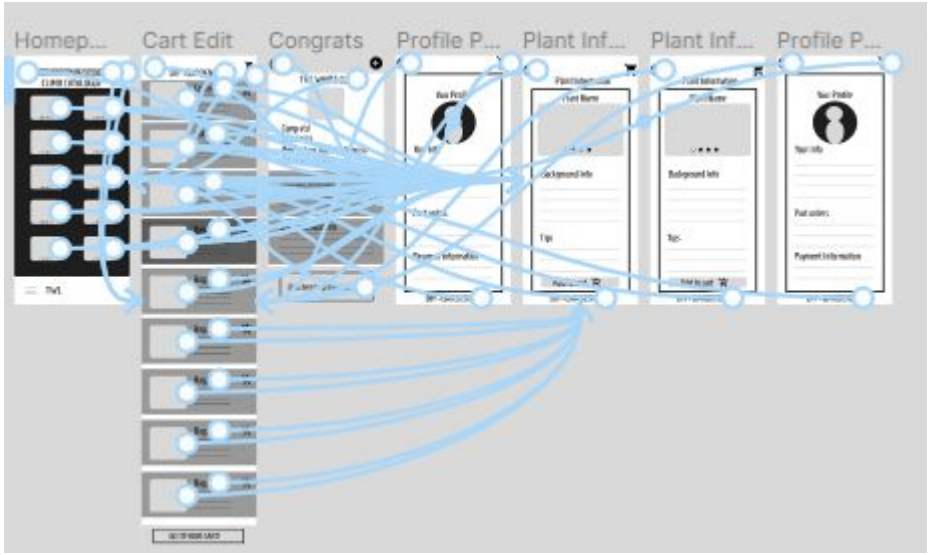
Digital wireframes

Guided sessions with feedback for the user appeared to remove multiple pain points with one feature.

After successfully completing a climb, users will be analyzed and given suggestions for their next challenge

Low-fidelity prototype



Using the completed set of digital wireframes, I created a low-fidelity prototype. The primary user flow I connected was selecting a problem, and successfully logging it into the users journal, so the prototype could be used in a usability study.

View the White Lung
low-fidelity prototype

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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. The second study used a high-fidelity prototype and revealed what aspects of the mockups needed refining.

Round 1 findings

1. Users often lack motivation for training on their own
2. Users struggle to track meaningful data that ensures improvement
3. Many users struggle to make their own climbs that they believe will get them to the next level

Round 2 findings

1. The landing page login is unclear
2. Users would like to add photos and videos to their profiles

Refining the design

- Mockups
- High-fidelity prototype
- Accessibility

Mockups

Early designs allowed for some customization, but after the usability studies, I added additional options to **customize the users profile with a photo/video album**. I also revised the design so users can easily **navigate the app** when they first land on the screen.

Before usability studies

After usability studies

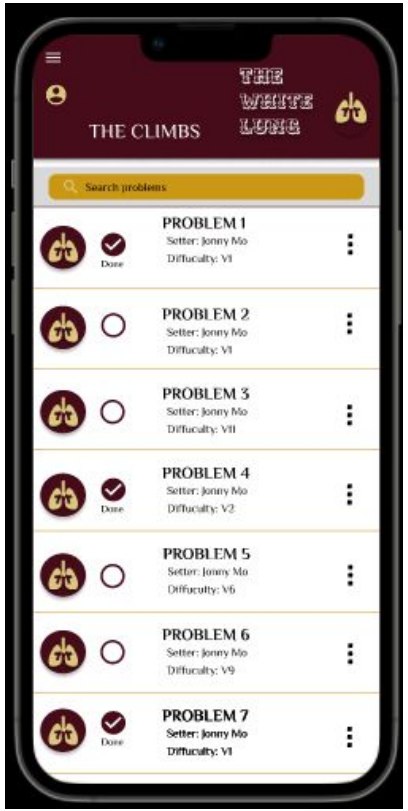
Mockups

The second usability study revealed frustration with the login page and whether users needed an account. So, I added an **overlay "Login" screen.**

Before usability study 2

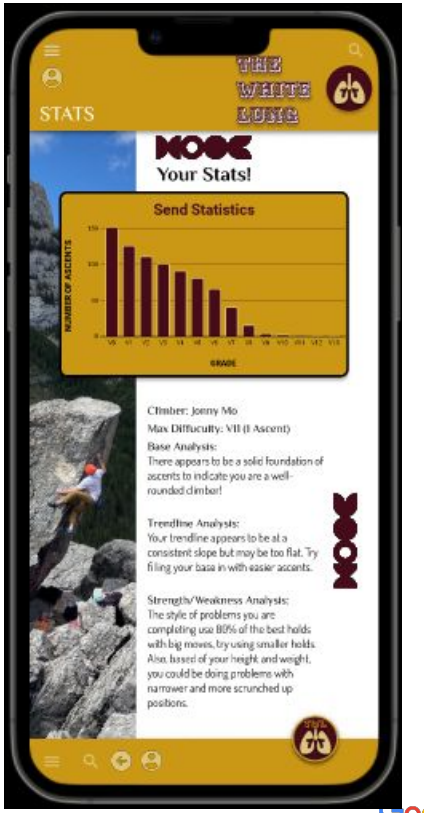
After usability study 2

Key mockups


THE CLIMBS
THE WHITE LUNG
Search problems
PROBLEM 1
Setter: Jonny Mo
Difficulty: V1
Done
PROBLEM 2
Setter: Jonny Mo
Difficulty: V1
PROBLEM 3
Setter: Jonny Mo
Difficulty: V11
PROBLEM 4
Setter: Jonny Mo
Difficulty: V2
Done
PROBLEM 5
Setter: Jonny Mo
Difficulty: V6
PROBLEM 6
Setter: Jonny Mo
Difficulty: V9
PROBLEM 7
Setter: Jonny Mo
Difficulty: V1
Done


PROBLEM XX
THE WHITE LUNG
PROBLEM XX
Setter: Jonny Mo
Difficulty: V1
Using the hold indicated above, complete the problem without falling and log ascent below with the left icon. If you want to come back to it, add it to a project list with the icon on the right.

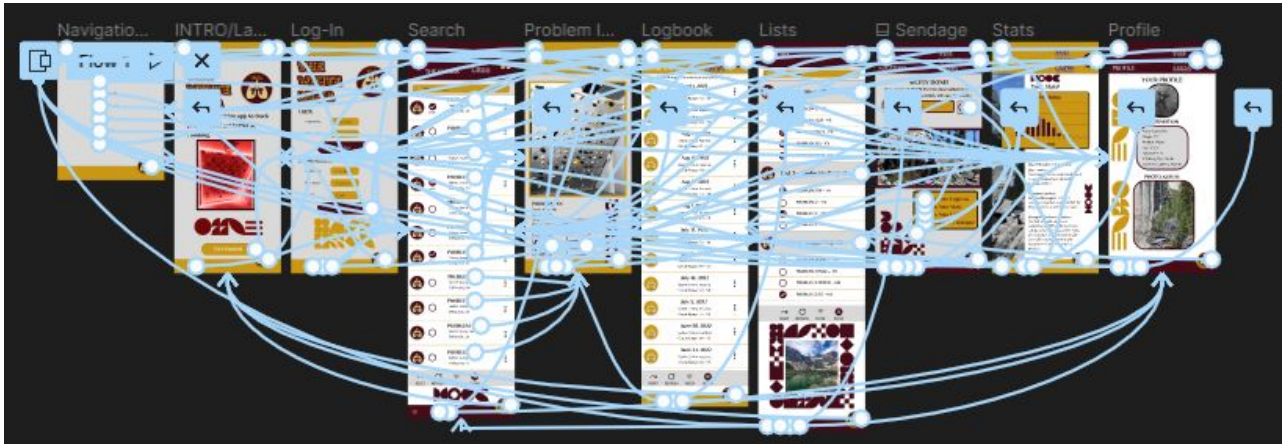

SUCCESS!
THE WHITE LUNG
NICELY DONE!
Your ascent of PROBLEM 1 has been added to your logbook! Fill in the box below with any comments:
Type your comments here...
View Your Logbook
View Your Stats
View Your Lists
Go Back To Catalogue


STATS
THE WHITE LUNG
Your Stats!
Send Statistics
NUMBER OF ASCENTS
GRADE
Climber: Jonny Mo
Max Difficulty: VII (1 Ascent)
Base Analysis:
There appears to be a solid foundation of ascents to indicate you are a well-rounded climber!
Trendline Analysis:
Your trendline appears to be at a consistent slope but may be too flat. Try filling your base in with easier ascents.
Strength/Weakness Analysis:
The style of problems you are completing use 80% of the best holds with big moves, try using smaller holds. Also, based of your height and weight, you could be doing problems with narrower and more scrunched up positions.

High-fidelity prototype

The final high-fidelity prototype presented cleaner user flows for login and progress tracking. It also met user needs for an app that has training guidance and customizable profile content.

View the White Lung's [high-fidelity prototype]



Accessibility considerations

1

Provided access to users who are vision impaired through adding alt text to images for screen readers.

2

Used icons to help make navigation easier. Along with text below the icon in case the function was unclear.

3

Used higher contrast colours to allow for easier viewing of each section on a screen.

Going forward

- Takeaways
- Next steps

Takeaways

Impact:

The app makes users feel like they can easily improve and stay consistent with their training., thus more motivated.

One quote from peer feedback:

“The app made it so easy and fun to find problems and try them. I might never stop!”

What I learned:

While designing the White Lung app, I learned that users love when they can customize features in the app. Having a location in the profile to do this may just be the beginning. Usability studies and peer feedback influenced each iteration of the app’s designs.

Next steps

1

Conduct another round of usability studies to validate whether the pain points users experienced have been effectively addressed.

2

Conduct more user research to determine any new areas of need.

Let’s connect!

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

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