

# InjuryMate

W30.POT03

Thea Hatlevold

Eirik Eik

02/04-2023

# INTRODUCTION

In this assignment we were asked to design a mobile app that tracks the progress of people recovering different injuries. We decided to keep our focus on a native iOS design.

We started the assignment off by considering the persona, Chris, and his shoulder injury. With the persona in mind, and the requirements in the assignment, we set off on making a suitable information architecture and user flow. This allowed us to get an overview of the content that needed to be included in the design.

Now that we had the structure and content set, we started with some hand drawn sketches. The sketches were made through smaller brainstorming intervals until we were satisfied with the design. These sketches were used as guidelines when transitioning to digital wireframes.

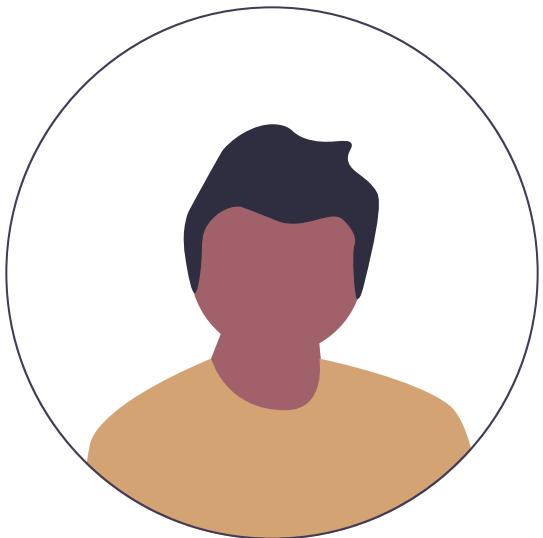
We then made the transition to low-fidelity wireframes, which had some smaller changes compared to the sketches.

In the high-fidelity wireframes is where we seriously started adjusting our design to fit the design principles. We will show our considerations later in the presentation.

We had now made it to the making of the prototype.

It was very fun to see the design come alive and become interactive in such a high-fidelity way. Working together also allowed us to learn from each other and explore more of the functionality.

# CHRIS



**Age:** 37 years

**Occupation:** Designer, swimmer

**Location:** Oslo, Norway

**Devices:** Smartphone, laptop

I often get frustrated and stressed when I think about how long my healing process is.

Chris is a 37-year-old swimmer. He exercises regularly, but recently hurt his shoulder. The injury was severe and he had to get surgery, limiting his ability and range of motion. He works as a designer, which means he sits still a lot and often forgets to do the exercises his physiotherapist gave him. Chris is tech-savvy and very interested in trying new apps in order to remember his exercises and track his progress.

## **Chris wants**

- ... a digital way to track his healing process.
- ... a way to remember to do his exercises.
- ... a calendar to view his history and track his progress.

## **Goals**

- To heal his injury.
- Achieve full range of motion.
- Do exercises regularly.

## Tech



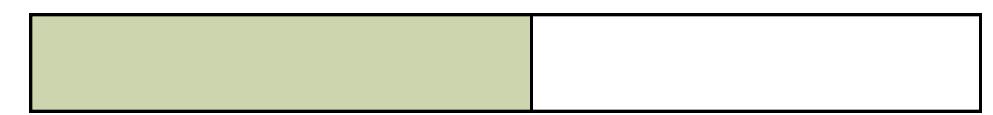
## Motivation



## Drive



## Focus



## Devices

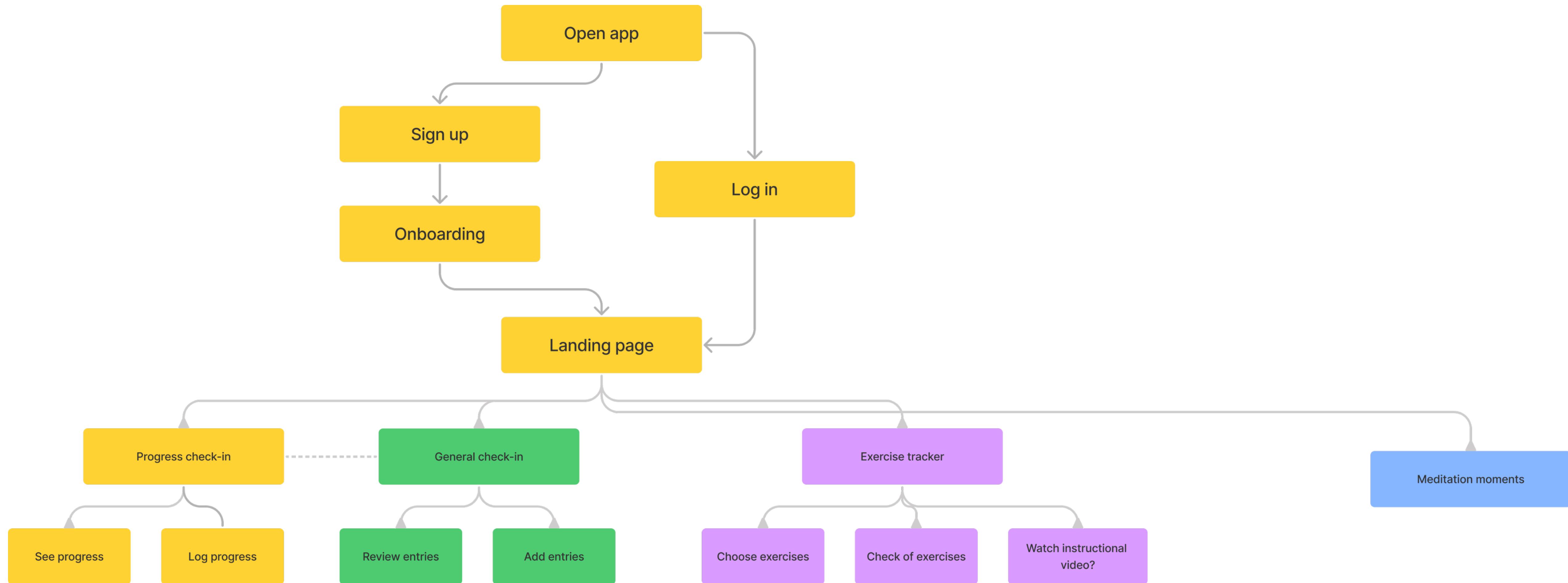


## Platforms



# INFORMATION ARCHITECTURE

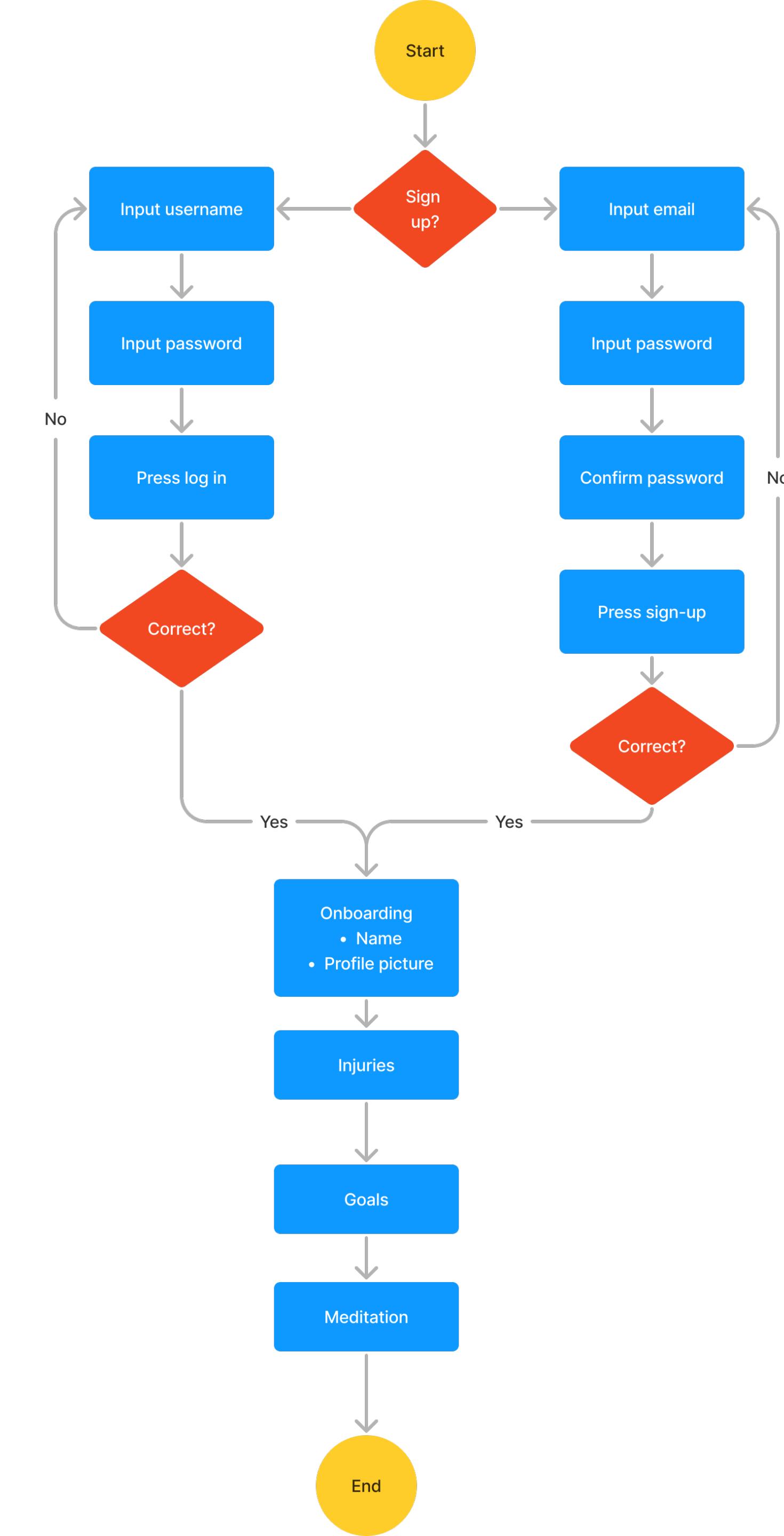
We started off by making an information architecture to get an overview of the content and navigation of the mobile app.



# User flow

How would Chris, our persona, use the log in and sign-up page? What should or should not be included? In what order should the sign-up and onboarding be done?

We made a user flow of the log in and sign-up process to decide on the structure.



# VISUAL DESIGN

5 visual design principles (Gordon, 2020)

- Scale
  - Using relative sizes to signal importance and rank composition
- Visual hierarchy
  - Guiding the eye in order of importance
- Balance
  - Equally distributed visual signals
- Contrast
  - Convey that two elements are different
- Gestalt
  - Perceive the whole instead of individual elements



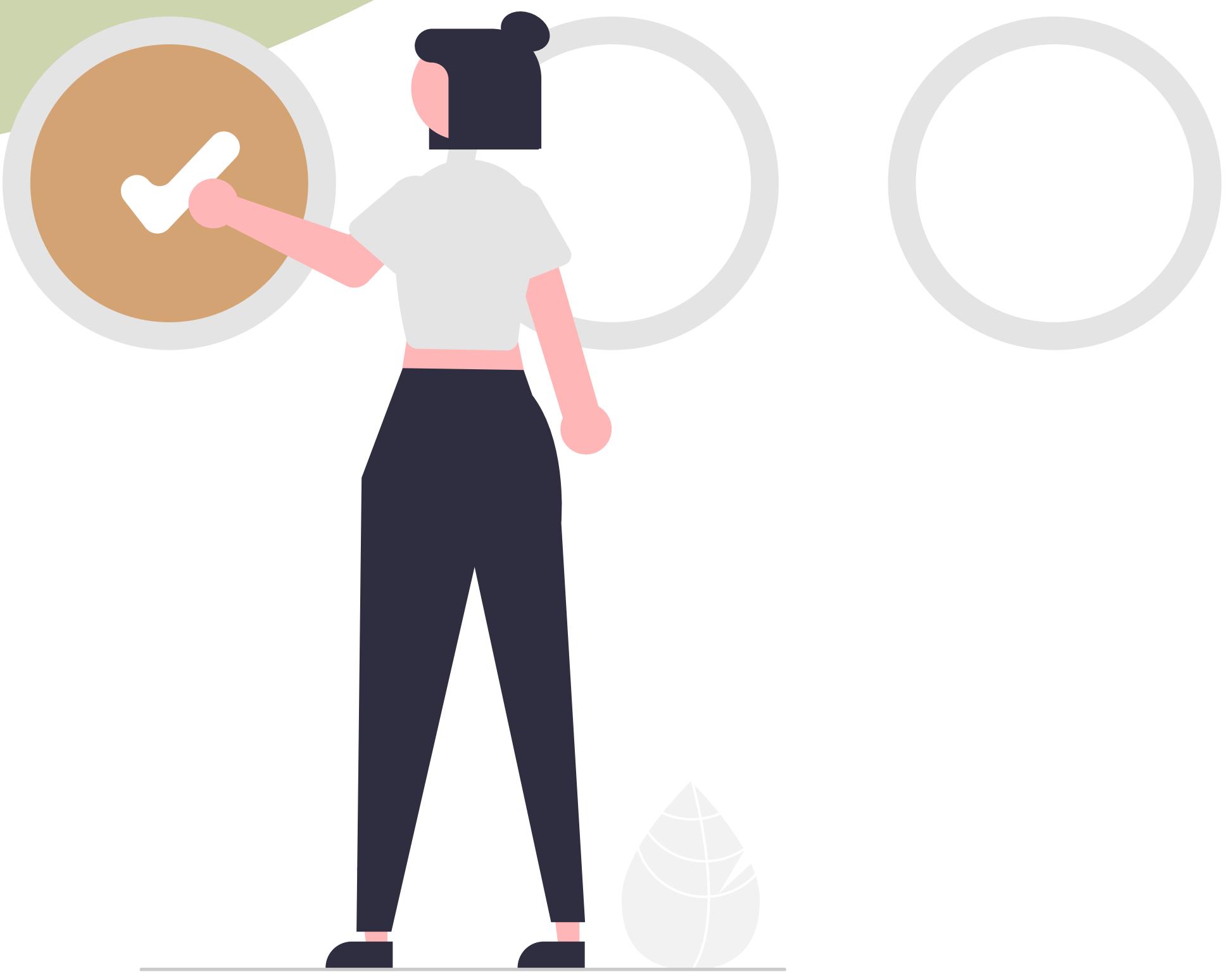
# DESIGN PRINCIPLES

Nielsen's 10 Usability Heuristics for User Interface Design (Nielsen, 2020)

- Broad rules of thumb and not specific guidelines

7 fundamental UX design principles (UX Design Institute, 2022)

1. User-centric
2. Consistency
3. Hierarchy
4. Context
5. User control
6. Accessibility
7. Usability (Learnability, efficiency, memorability, errors, satisfaction)



# DESIGN PRINCIPLES

## 1: Visibility of system status

- Indicators of how long the onboarding is.

## 2: User control and freedom

- Several ways to navigate between pages and back-button.

## 3: Consistency and standards

- Several design standards, such as no more than 5 options on the navigation bar

## 4: Error prevention

- Buttons instead of text input where possible, to limit wrong text/words.

## 5: Recognition rather than recall

- List the injuries and moods, instead of making the user list them from memory.

## 6: Aesthetic and minimalist design

- Limit the colours, pictures and animation to keep it simple.

## 7: Recognise, Diagnose and recover from errors

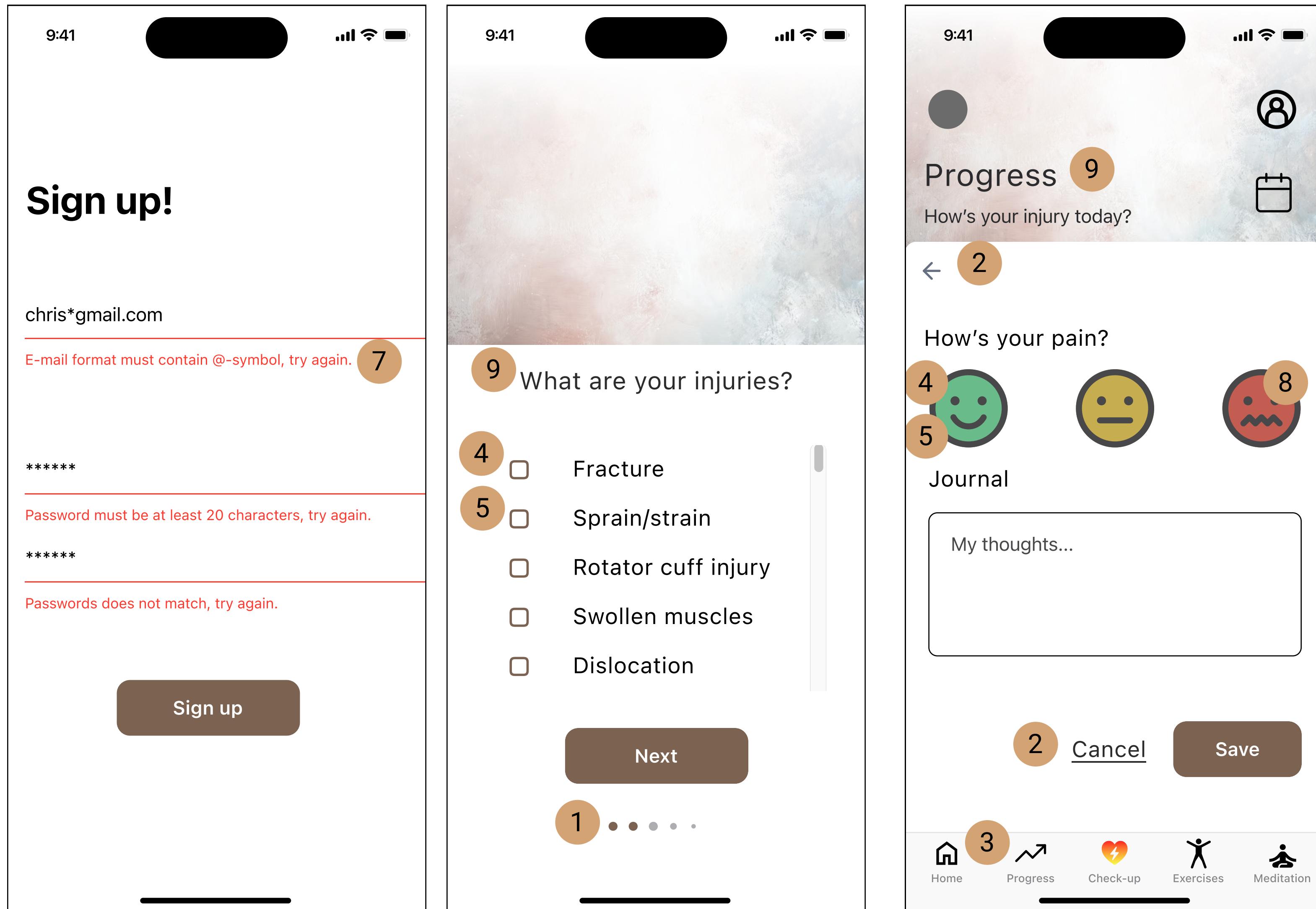
- Sign-up and log-in errors give explanations and solutions.

## 8: Context

- Always have title and other helping text to make the users understand the purpose.

## 9: Hierarchy

- Most important to least important, all important information above fold as long as possible.



# BEST DESIGN PRACTICES

1. Consider the users.
2. Make it accessible (colourblindness etc)
3. Keep it consistent
4. Make a sitemap
5. Make clear navigation
6. Use copy clear
7. Test, and test again
8. Context
9. KISS - keep it simple, stupid
10. Understand importance of typography

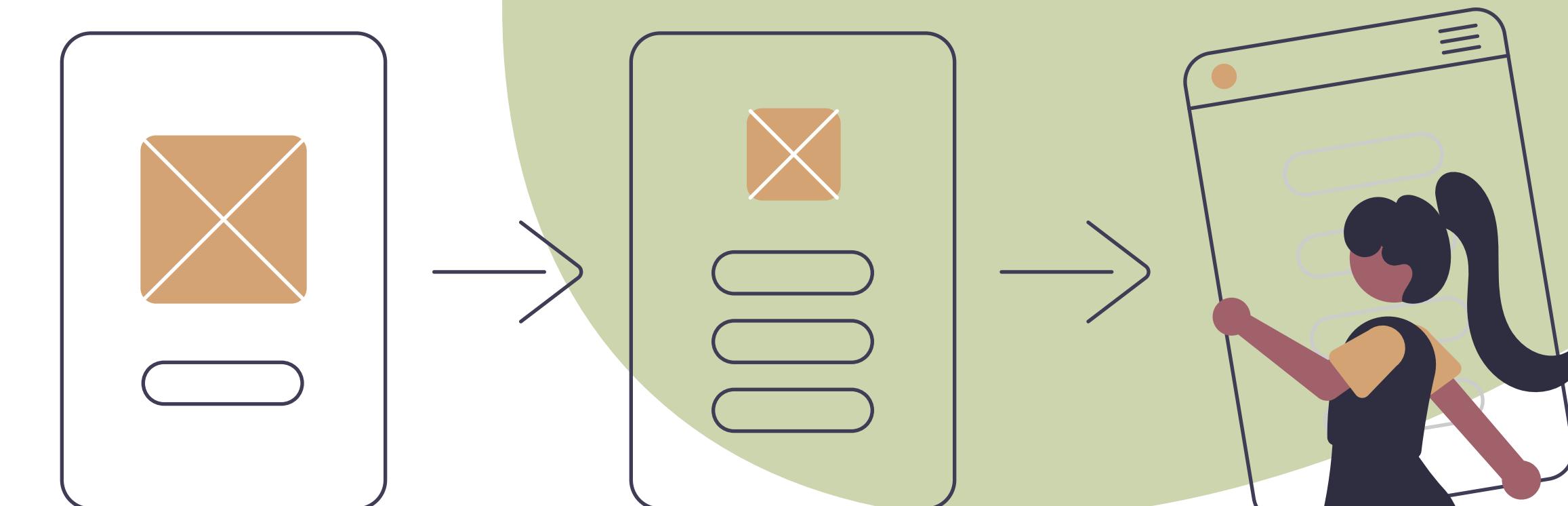


We considered all the best design practices above (Lucidspark, n.d) in our design process, as well using Apple design systems (Luch, n.d). We made an information architect for the whole product, to make the navigation easier and check the contrast with this [contrast checker](#). Through a persona, Chris, we considered the users in our design choices and included what we thought was necessary, in order to keep the product simple and easy to use.

# PROTOTYPING

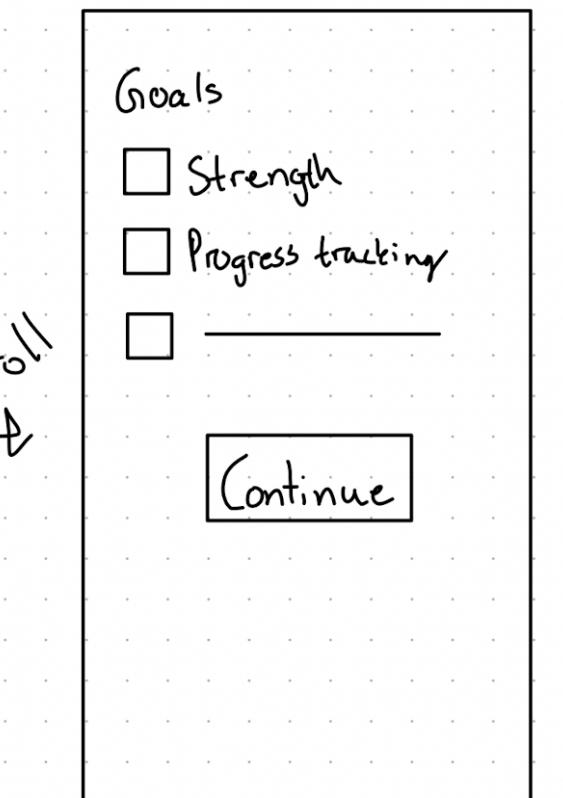
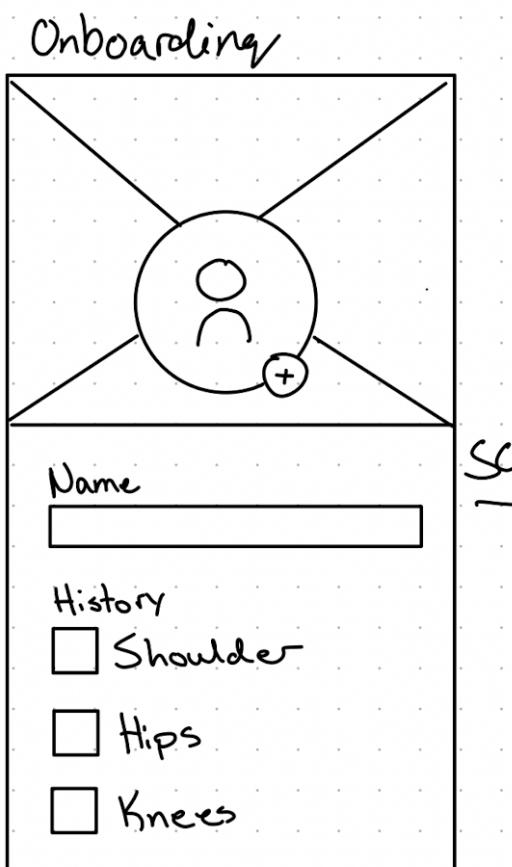
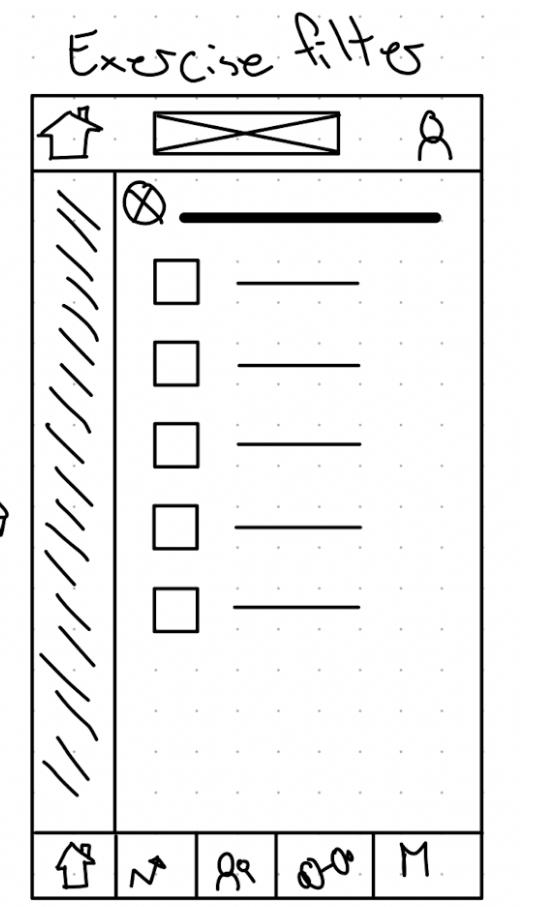
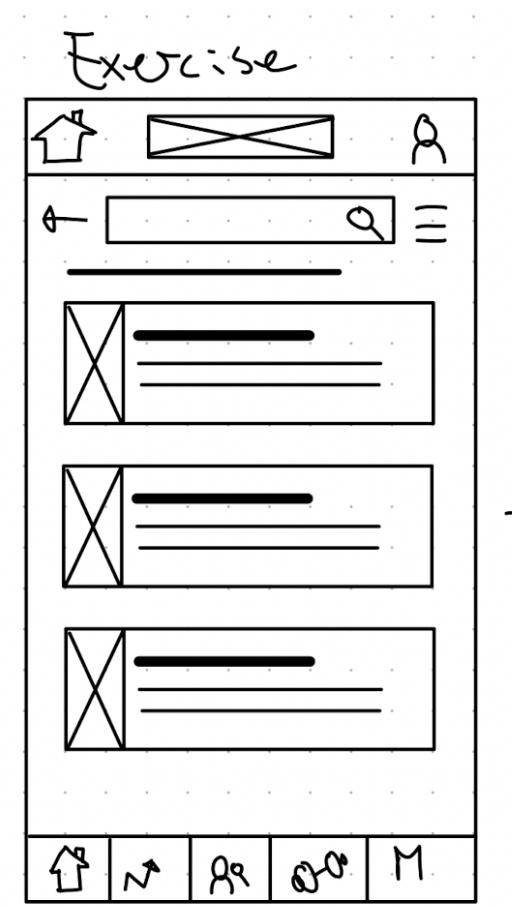
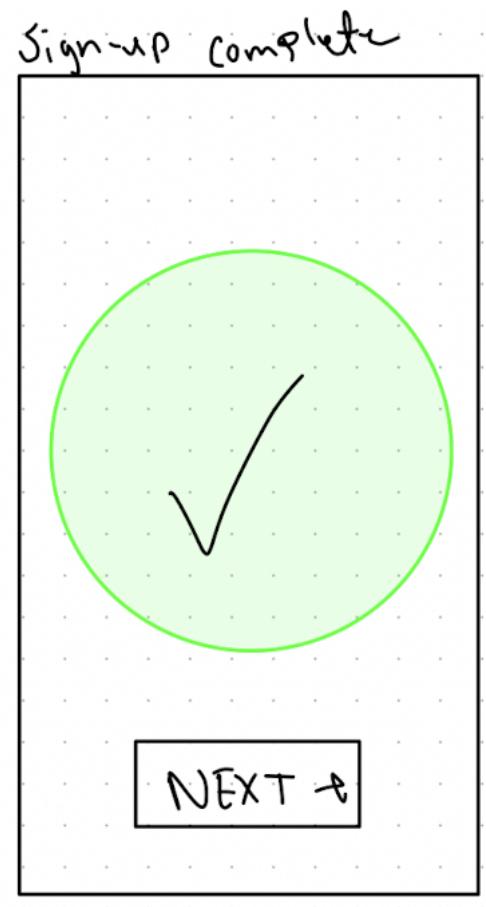
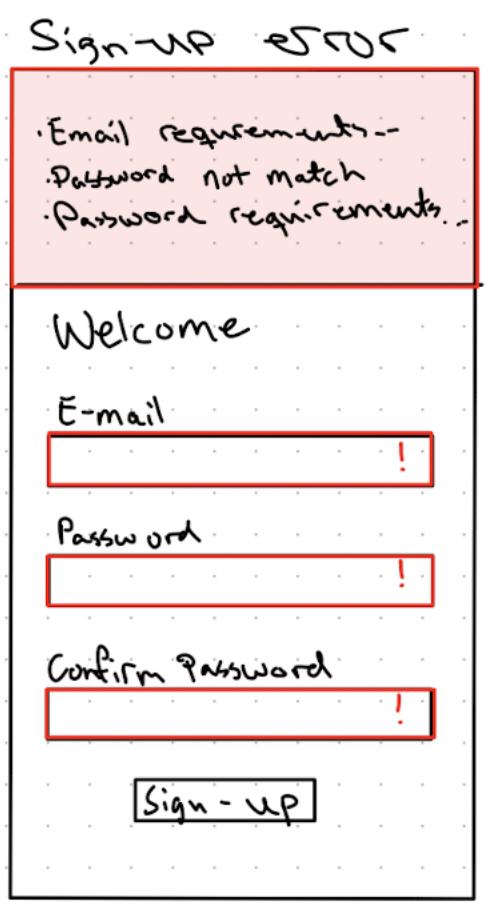
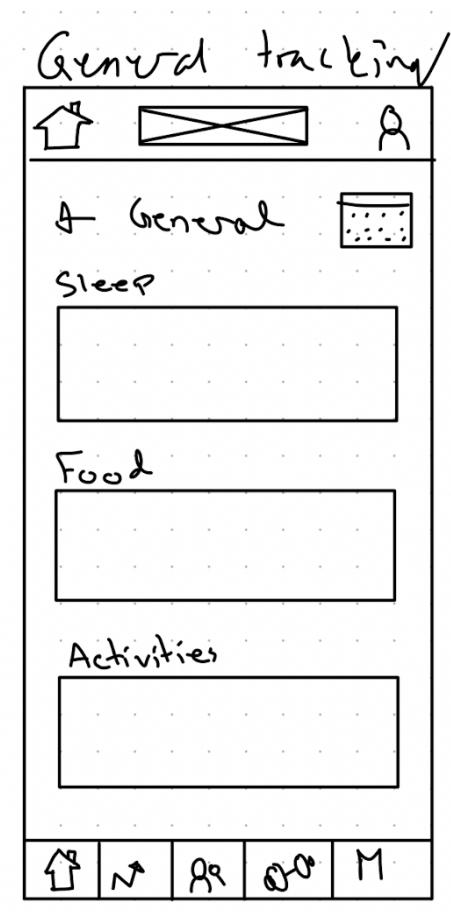
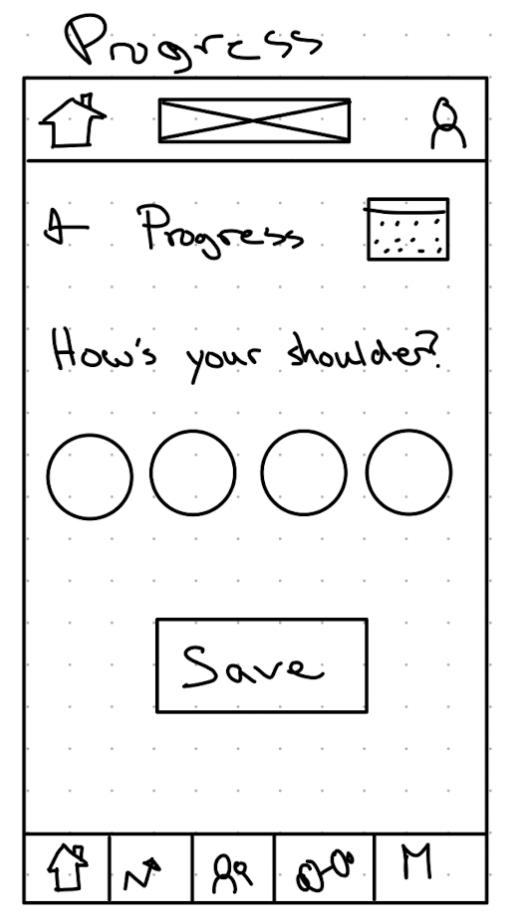
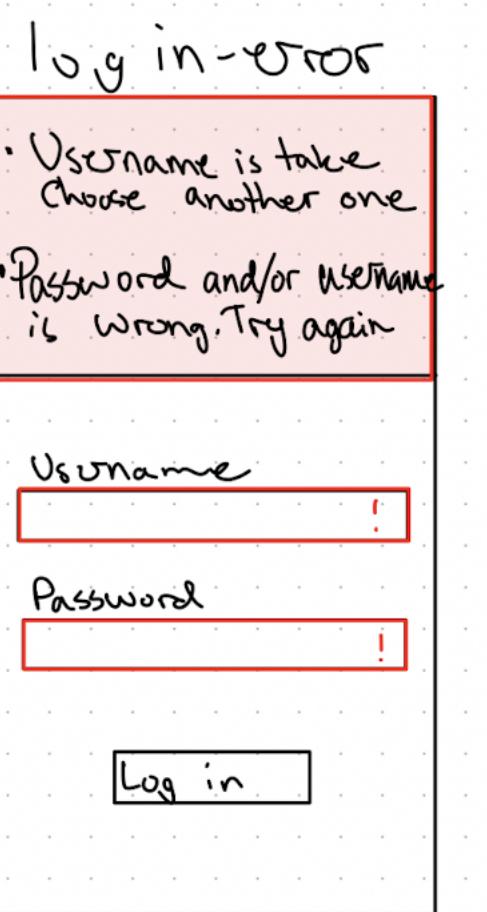
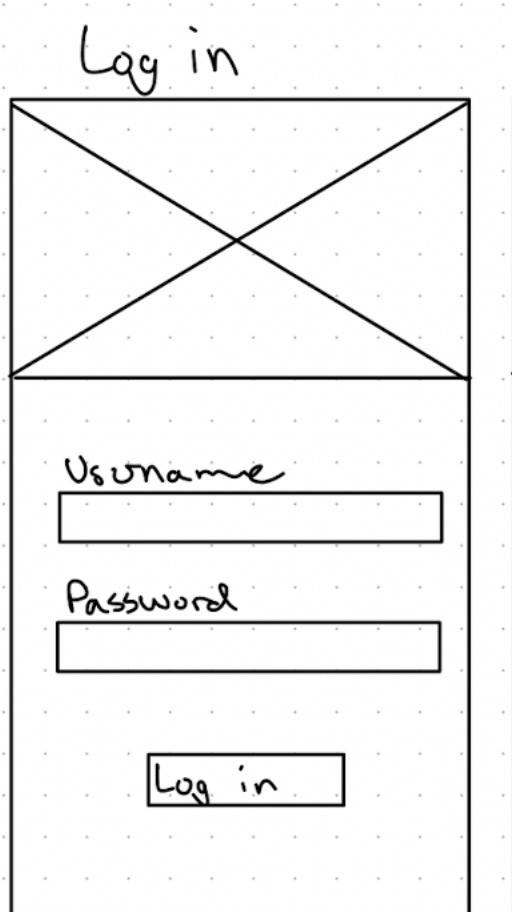
*Prototype is an early sample of design used to get feedback and rapid experiments with new ideas (Palliyaguru, 2018)*

Prototyping is the creation of a preliminary version of a mobile app to test and refine its design and user experience before development. It helps identify potential issues and allows for feedback from stakeholders and end-users. [Link?](#)



# Sketches

The design started off with some brainstorming while making hand-drawn low-fidelity sketches. This is the sketches that we decided to take furthers into digital low-fidelity wireframes.



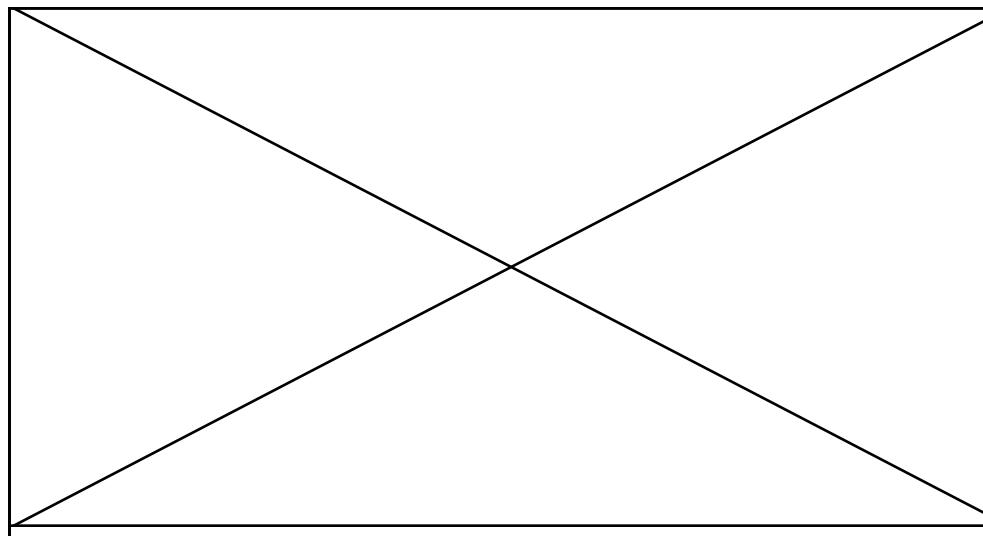
# Low-fidelity design

Log in

The image shows a low-fidelity wireframe of a login interface. At the top, there is a large red 'X' symbol. Below it, the word 'Log in' is centered above two input fields. The first field is labeled 'Username' and the second is labeled 'Password'. Both fields are represented by simple rectangular boxes. At the bottom center is a 'Log in' button.

The image shows a low-fidelity wireframe of a login interface, identical in structure to the one on the left. It features a large red 'X' at the top, followed by the text 'Log in', 'Username' with an input field, 'Password' with an input field, and a 'Log in' button at the bottom. The entire interface is set against a light gray background.

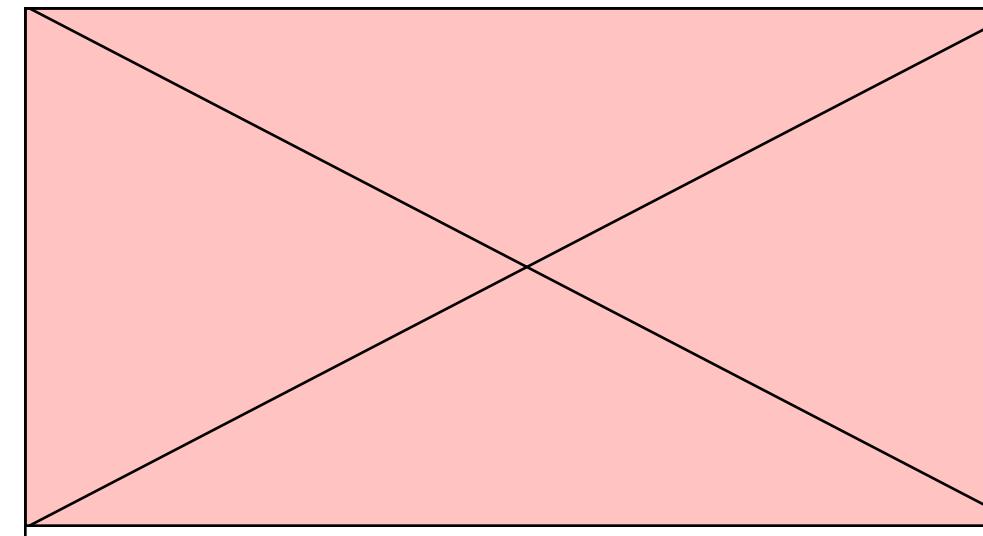
## Sign-up



Username

Password

Confirm password

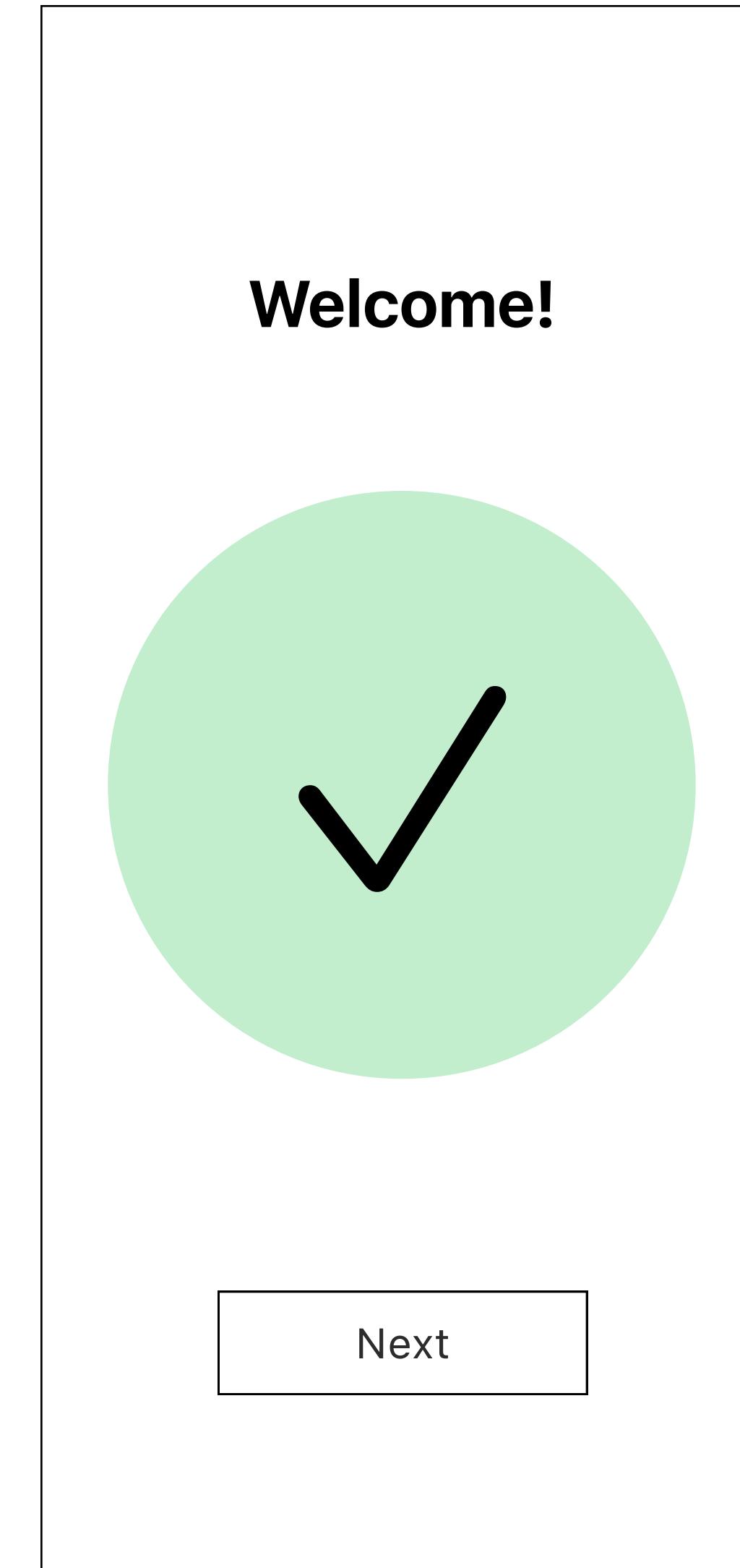


Username

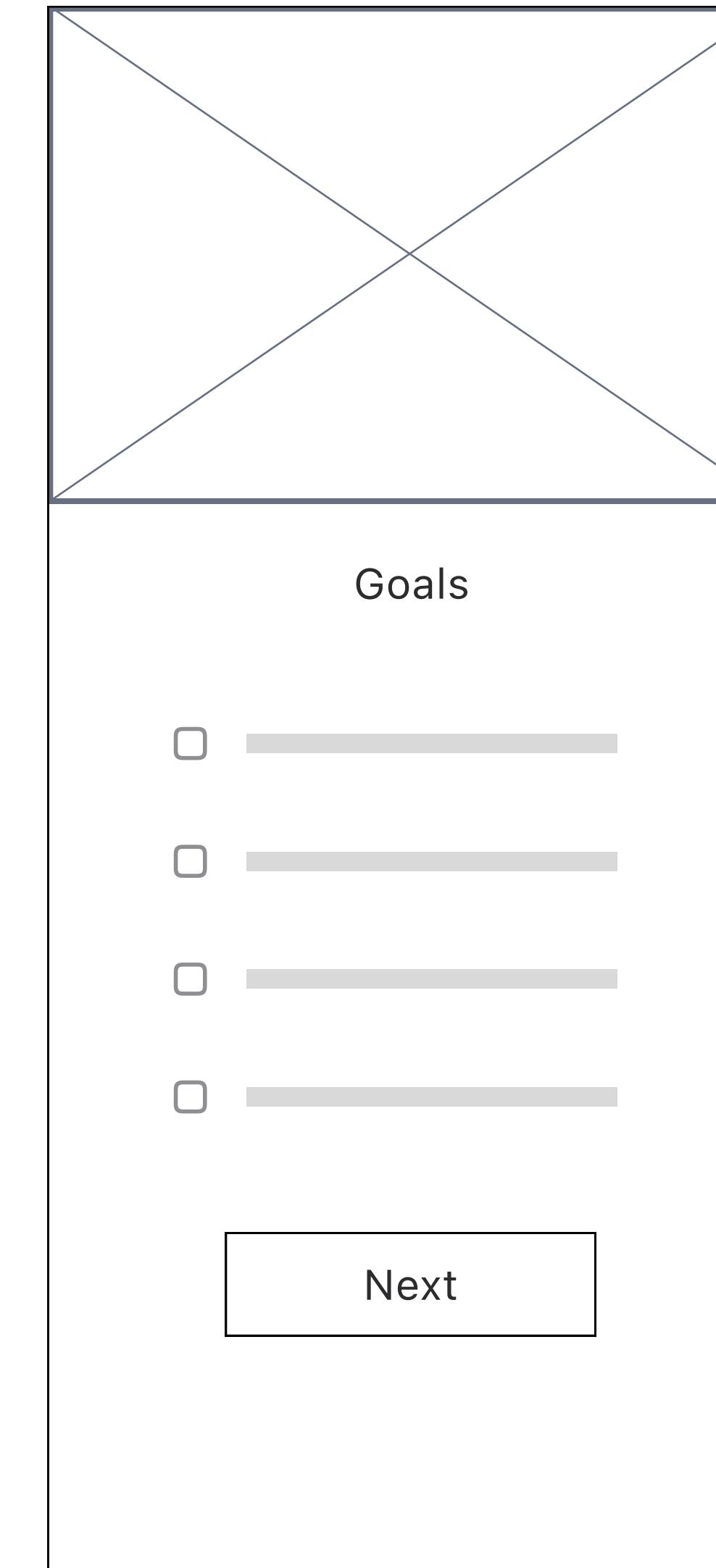
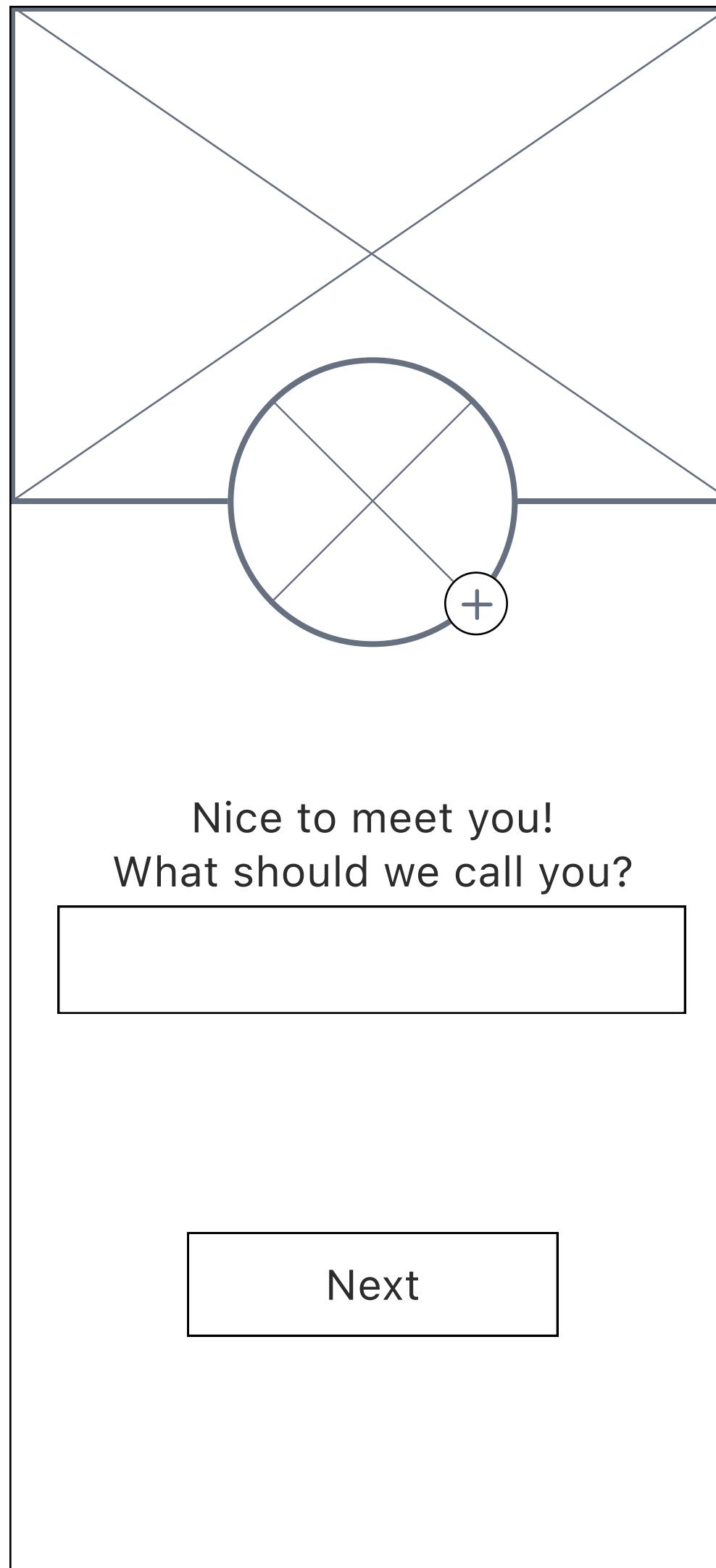
Password

Confirm password

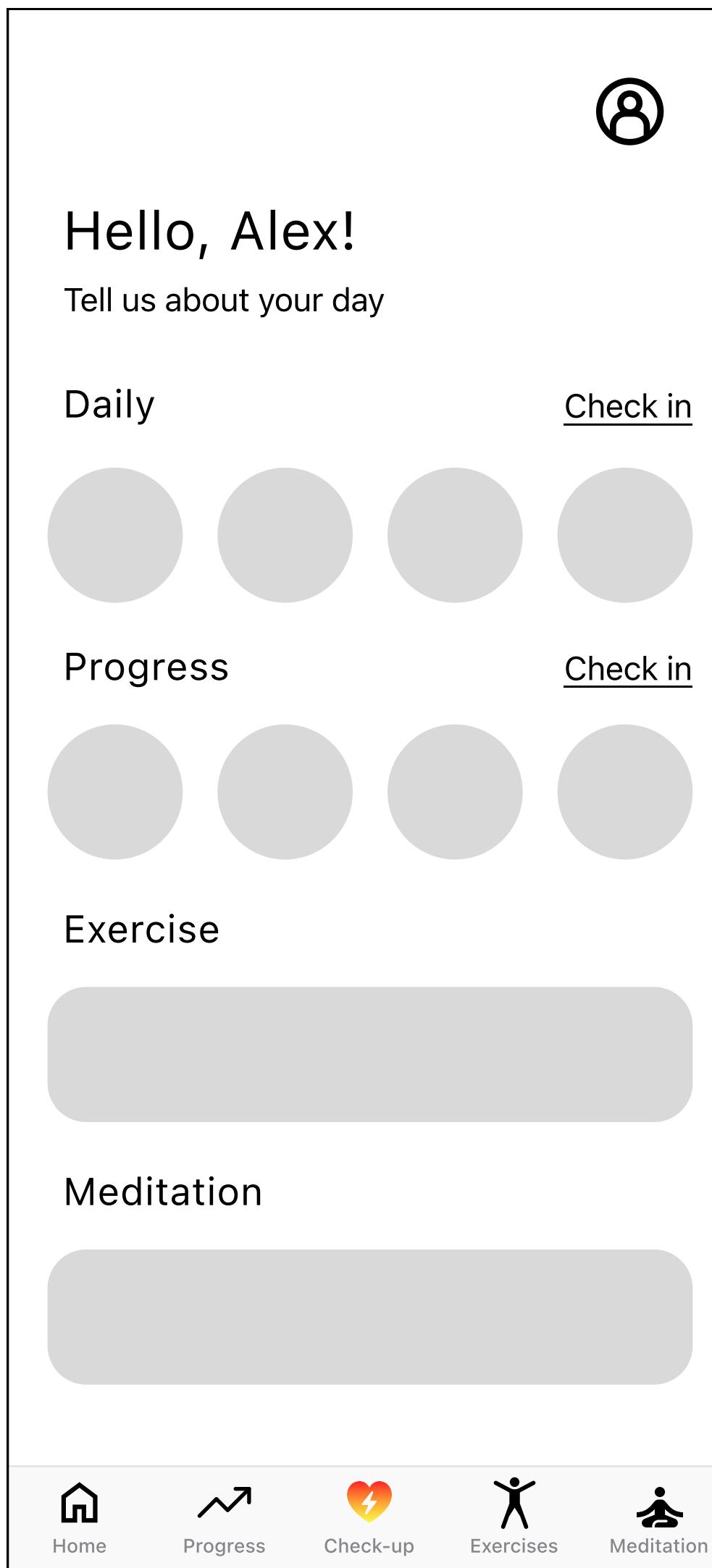
## Confirmation



## Onboarding



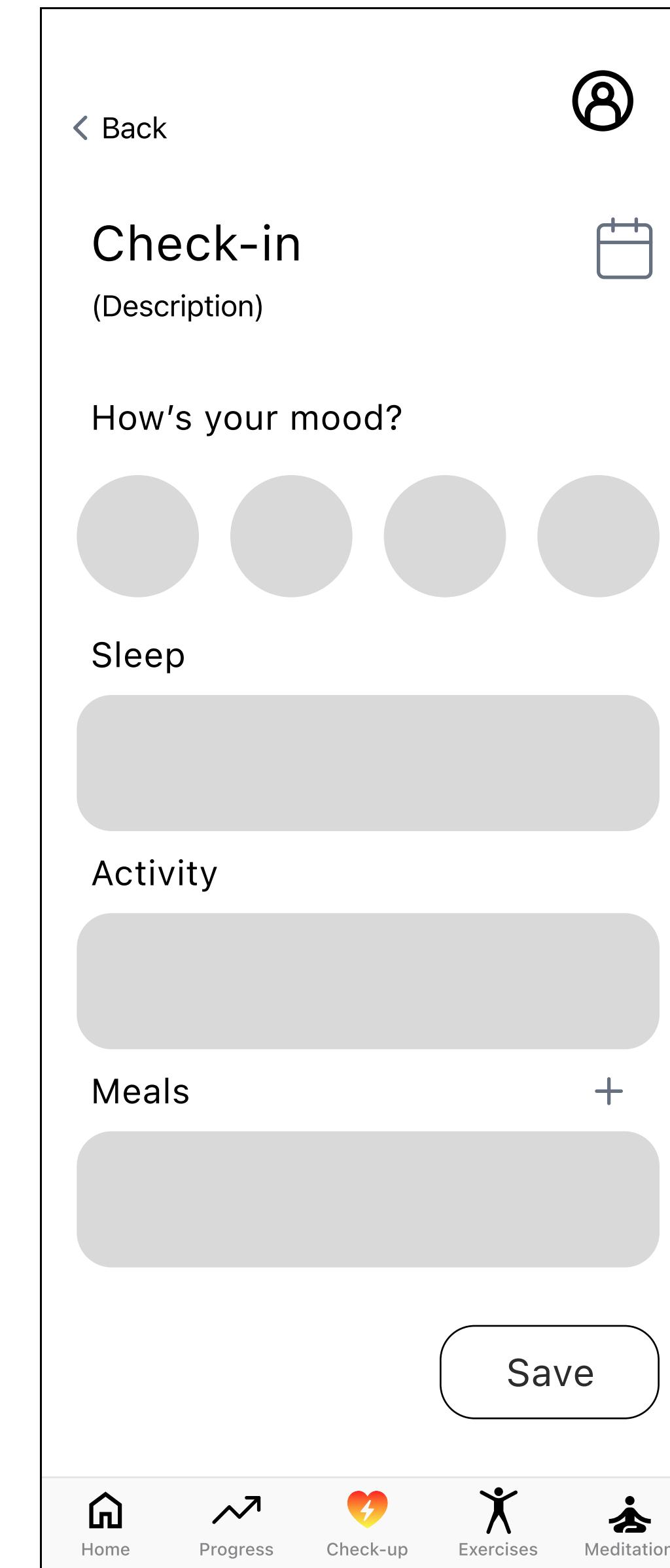
Welcome/home page



Progress checker



General check-up



## Exercise

< Back 

### Exercise

Three large rectangular cards, each containing a small icon and a progress bar, with a right-pointing arrow at the end of each bar.

Home Progress Check-up Exercises Meditation

< Back 

### Exercise

A large rectangular card with a camera icon in the center. Below it is a smaller horizontal progress bar and a row of five empty lines for notes. At the bottom is a "Finish" button.

Home Progress Check-up Exercises Meditation

## Calendar

< Back 

### March

A large gray rectangular area labeled "Calendar". Below it is a detailed view for "March 27" showing activity levels for Sleep, Activity, Meals, and Exercise.

March 27 

Sleep  
Activity  
Meals  
Exercise

March 27 

Sleep  
Activity  
Meals

< Back 

### March 27

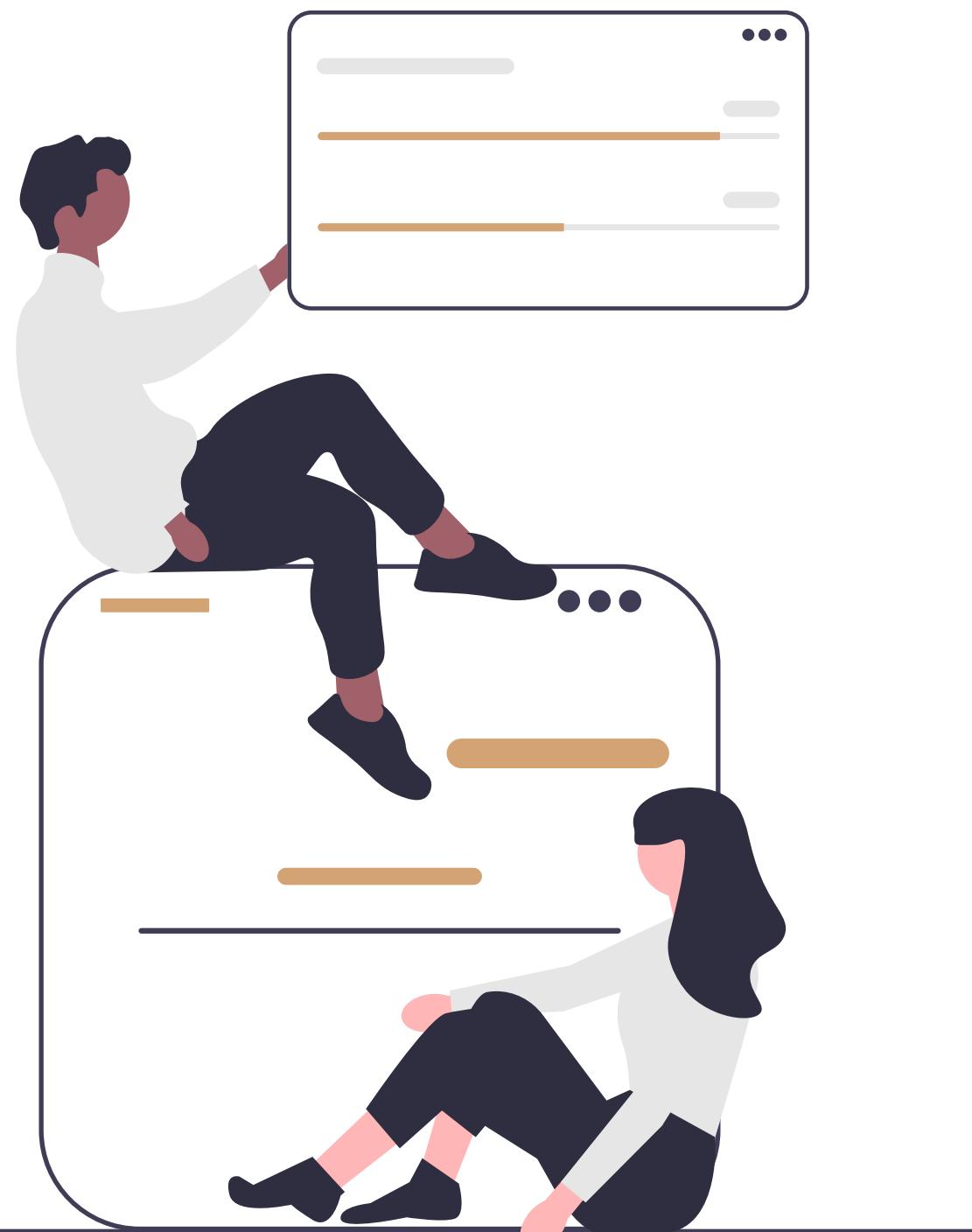
A detailed view for "March 27" showing activity levels for Sleep, Activity, Meals, and Exercise. Each category has a horizontal progress bar indicating its level.

Sleep  
Activity  
Meals  
Exercise

# Our prototypes

Here you can access our finished prototype.

[Link to prototype](#)



# Appendix

Components

Workspace

Prototype

# References

Gordon (01/03-2020) *5 Principles of Visual Design in UX*  
<https://www.nngroup.com/articles/principles-visual-design/> (28/03-2023)

Limpitsouni, K., (2022) *Undraw*  
<https://undraw.co/search> (01/04-2023)

Lucidspark (n.d) *Best practices for rocking UX design*  
<https://lucidspark.com/blog/ux-design-best-practices> (28/03-2023)

Nielsen (24/04-1994) *10 Usability Heuristics for User Interface Design*  
<https://www.nngroup.com/articles/ten-usability-heuristics/#poster> (28/03-2023)

Noroff, School of Technology and Digital Media (n.d) *PROTOTYPING - MODULE 1*  
<https://noroff.bravais.com/s/3gGcoKAFcXnqsd4y4x29> (31/03/2023)

Noroff, School of Technology and Digital Media (n.d) *PROTOTYPING - MODULE 2*  
<https://noroff.bravais.com/s/YIWew5SWdpPafhns2dA6> (31/03/2023)

Palliyaguru (24/08-2018) *Basics of prototyping*  
<https://uxplanet.org/basics-of-prototyping-1a4106e12c0e> (31/03-2023)

UX Design Institute (22/06-2022) *7 fundamental UX design principles all designers should know*  
<https://www.uxdesigninstitute.com/blog/ux-design-principles/> (28/03-2023)