



Assignment



Introduction

Ideation and lo-fi prototyping

Interactive states

User flows

High fidelity professional prototype

Persona (include an explanation of how it was considered in the design process)

Design principles considered

Consistency and accessibility (WCAG AA, colour checker).

References

Introduction




Introduction

In this project, we were tasked with designing a mobile app that supports users recovering from shoulder injuries. The app, called **Healio**, helps users track their physical progress, log daily habits, complete physiotherapy exercises, and reduce stress through guided meditation.

Our goal was to create a user-centered experience that motivates recovery while also collecting valuable data for medical research. The design process included defining a detailed user persona, mapping out information architecture and user flows, and developing both low- and high-fidelity prototypes for key features.





Ideation and lo-fi prototyping

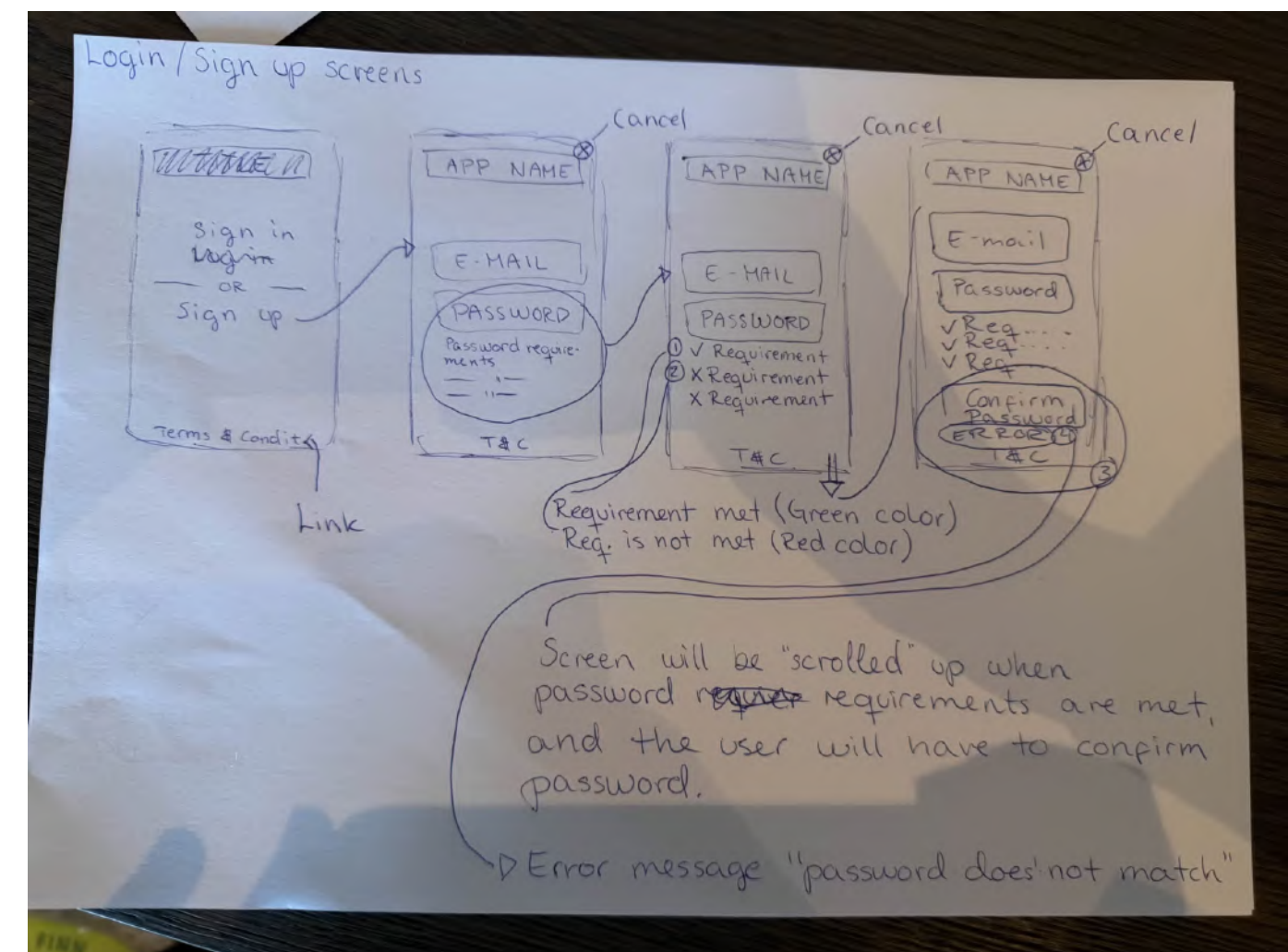
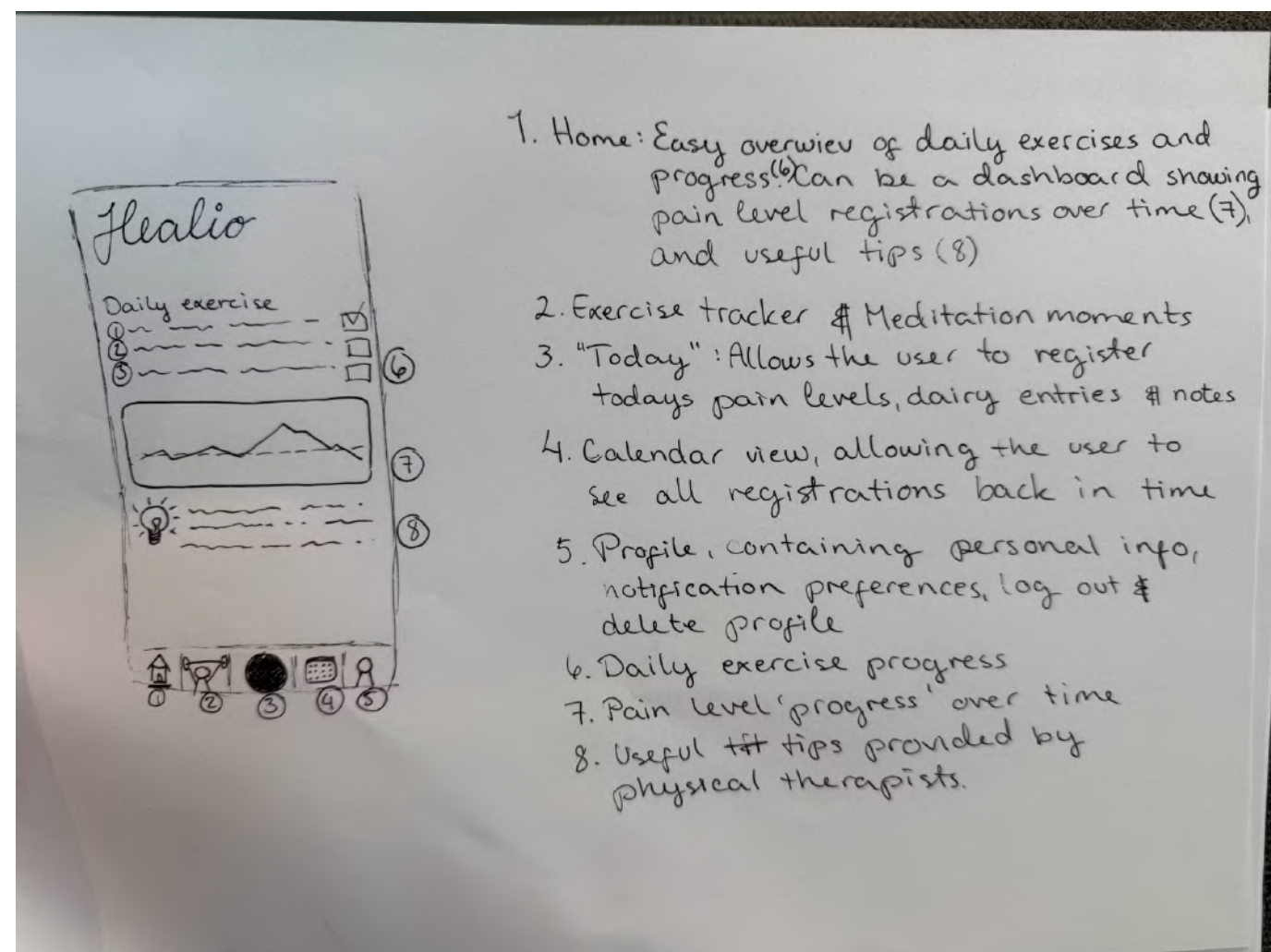
Ideation - Competitive Analysis

Name	Strenghts	Weaknesses	Opportunities	Threats	URL
Recover Athletics	<ul style="list-style-type: none">- Designed for athletes- Personalized recovery plans- Integration with Strava	<ul style="list-style-type: none">- Not tailored for non-athletes- Limited to lower-body injuries	<ul style="list-style-type: none">- Expand to broader injury types- Partner with clinics	<ul style="list-style-type: none">- Competing recovery apps- Niche target group	https://recoverathletics.com/
Injurymap	<ul style="list-style-type: none">- Developed by doctors- Adaptive exercise plans- Good for shoulder rehab	<ul style="list-style-type: none">- UI can feel clinical- Lacks motivation features	<ul style="list-style-type: none">- Improve UX/UI- Add gamification- Expand analytics	<ul style="list-style-type: none">- Low engagement from non-tech-savvy users- Duplicated by free YouTube content	https://injurymap.com/
Daylio	<ul style="list-style-type: none">- Simple mood & habit tracking- Customizable goals- Friendly UI	<ul style="list-style-type: none">- Not specific to injury recovery- Lacks medical guidance	<ul style="list-style-type: none">- Could expand into health/recovery tracking- Add physical therapy modules	<ul style="list-style-type: none">- Too generic compared to niche apps	https://daylio.net/
Physiotools	<ul style="list-style-type: none">- Used by professionals- Large exercise library- Custom rehab plans	<ul style="list-style-type: none">- Dated interface- Not designed for self-directed users	<ul style="list-style-type: none">- Improve user experience- Add progress tracking for patients	<ul style="list-style-type: none">- Limited appeal to casual users- Competes with modern consumer apps	https://www.physitrack.com/physio tools
Kaia Health	<ul style="list-style-type: none">- AI-driven physical therapy- Clinically validated- Focus on chronic pain	<ul style="list-style-type: none">- Requires commitment- Not designed for injury-specific recovery	<ul style="list-style-type: none">- Expand into post-injury recovery- Partner with insurance & clinics	<ul style="list-style-type: none">- High competition from AI/telehealth apps	https://kaiahealth.com/

Overall, the market shows a gap for a personalized, motivating, and user-friendly app focused on injury recovery, especially for shoulder rehabilitation. This insight shaped Haelio’s value proposition: to empower users with clear visual feedback, simple routines, and consistent motivation throughout recovery.

Ideation

After identifying the needs of the target group—people recovering from shoulder injuries who want a simple way to track their healing journey—we began the ideation phase by brainstorming and sketching out different solutions for how recovery data could be visualized clearly and encouragingly.



Low-fi prototypes

[CLICK HERE TO SE **LOGIN** LOW-FI PROTOTYPE](#)

[CLICK HERE TO SE **SIGN IN** LOW-FI PROTOTYPE](#)

[CLICK HERE TO SE **DIARY** LOW-FI PROTOTYPE](#)

[CLICK HERE TO SE **PAIN LEVEL PROGRESS** LOW-FI PROTOTYPE](#)

[CLICK HERE TO SE **MEDITATION** LOW-FI PROTOTYPE](#)

[CLICK HERE TO SE **EXERCISE** LOW-FI PROTOTYPE](#)

[CLICK HERE TO SE **CALENDAR** LOW-FI PROTOTYPE](#)

Interactive states



Default

Injury type



Focus

Injury type

Sholder

Hand/wrist

Hip

Knee

Email

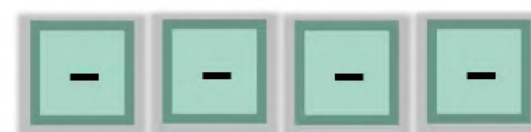


Email

Username



Username



To ensure good usability and visual consistency, we have defined interactive states for key UI components in the app. These states provide clear feedback to the user and make navigation easier.

Standard input field (reusable component)

This field is consistently used throughout the app for email, username, password, and other text inputs.

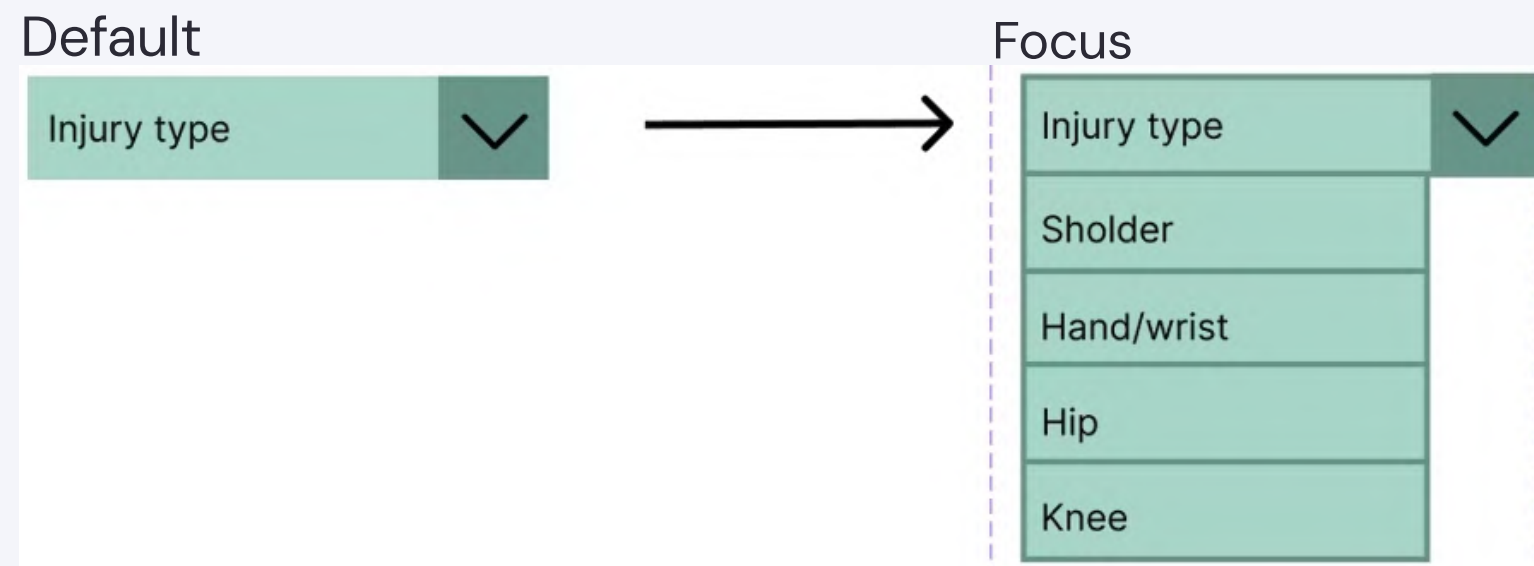
- **Default:** Light green background with a clear label.
- **Focus:** A darker border appears to indicate that the field is active.
- **Error:** The field displays a yellow background to indicate a validation error (e.g., invalid email).



Dropdown menu and code fields

Dropdown menu is used for selecting predefined options.

- **Default:** Compact view with an arrow indicating that the field can be expanded.
- **Focus (open state):** Displays a dropdown list of selectable options, outlined with a dotted line to indicate active status.



Code fields are used in steps where the user needs to enter multiple digits or characters.

- **Default:** Multiple uniform square fields with a subtle shadow.
- **Focus:** A clear border highlights the field the user is currently typing in.



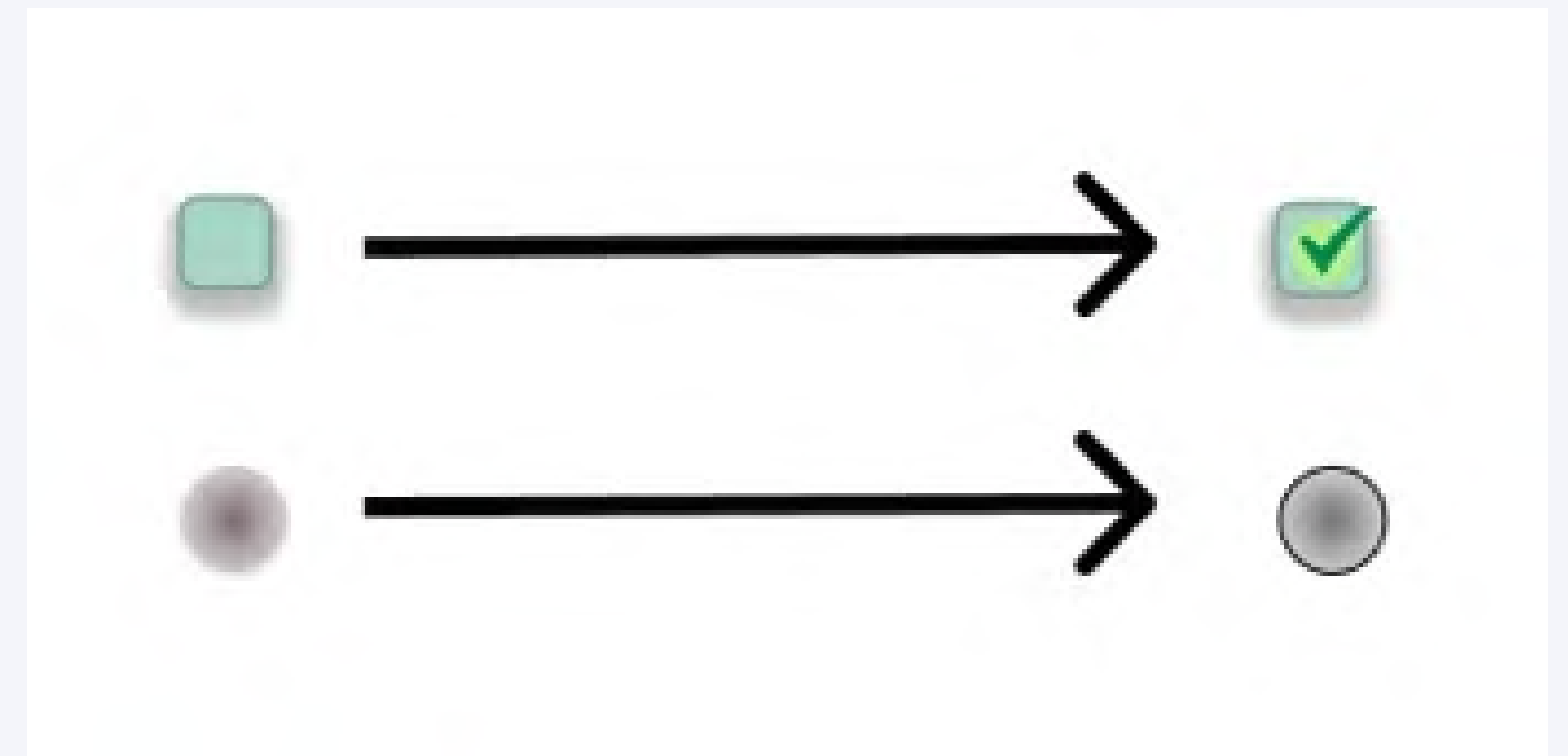
Checkbox and buttons

Checkbox is used for consent or selections that can be toggled on or off.

- **Default:** Empty square.
- **Selected:** Displays a green checkmark when selected.

This gray little button is used when the user needs to drag a button horizontally along a fixed line to indicate satisfaction.

- **Default:** Circle with a radial gradient fading to gray and then black in the center.
- **Selected:** Circle with a radial gradient fading to gray and then black in the center, with a black border around the circle.

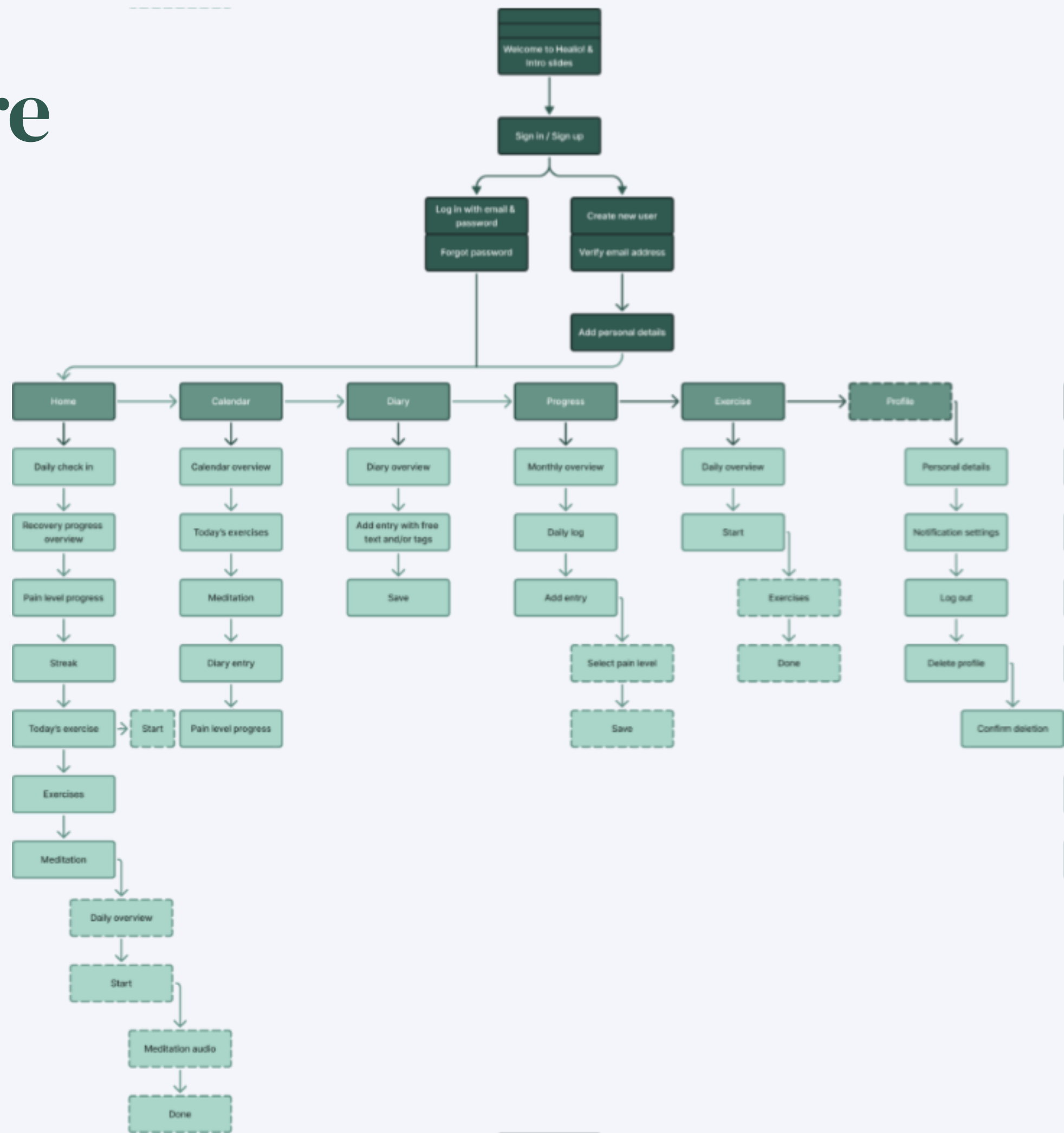


User flows



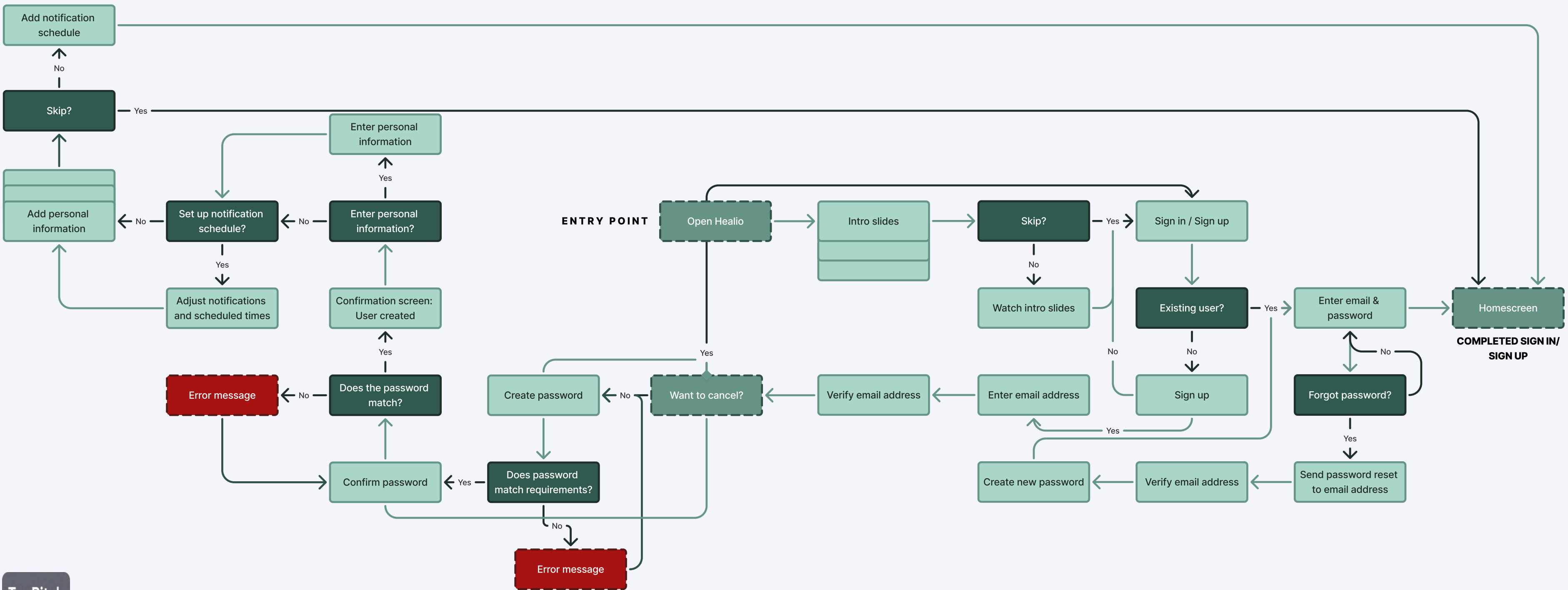
Information architecture

To ensure a clear and intuitive user experience, we created an Information Architecture (IA) for the Healo app. The IA outlines how the app’s key features and content are structured and connected. This helps guide both navigation design and content prioritization, making it easier for users to move seamlessly through the app — whether they are signing up, tracking their progress, or managing their daily recovery routines.



User flow: Sign in/Sign up

We created this user flow to visualize the steps a user takes when accessing the app for the first time, as well as returning later as an existing user. The flow helps us understand the full login and onboarding experience, ensuring a smooth and intuitive journey for both new and returning users.



High fidelity



professional prototype

Click here to see our prototype

Persona

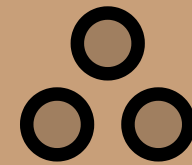


Digital literacy



- Tech-savvy
- Likes to try out new apps

Habits



- Uses apps for daily mood
- Exercises regularly

Personality



- Motivated and goal-oriented
- Can get frustrated by lack of progress but tries to stay positive

Goals & motivations:

- Recover full shoulder function as quickly as possible
- Have a simple and clear way to track his progress
- Receive reminders to help him remember his physiotherapy exercises

Challenges & frustrations:

- Often forgets to do exercises in a busy daily routine
- Feels frustrated by the uncertainty of how fast he is recovering
- Shoulder pain makes it difficult to work efficiently
- Stressed by the long rehabilitation process

Chris Harper

Age: 37 years old

Occupation: Designer

Background: Former national competitive swimmer, recently suffered a shoulder injury and underwent surgery



"I wish I had a simple way to keep track of my exercises."



Design principles considered

Design principles considered

... in Healio

Accessibility (POUR & WCAG AA)

- Perceivable, Operable, Understandable, Robust
- Passed color contrast checks (WebAIM)
- *Supports users with motor or visual impairments*

Clarity & Simplicity

- Minimal, calm design
- Clear actions and intuitive navigation

Empowering UX

- Track progress, set reminders, establish routines
- Designed to motivate and support independence

Consistency

- Unified icon style, fonts, and color palette
- Predictable layouts improve usability

Emotional Design

- Friendly illustrations and positive language
- Encouragement during difficult recovery stages

Mobile-First

- Touch-friendly elements
- Optimized for small screens and accessibility

Consistency and accessibility

A circular teal overlay is positioned behind the text. Inside the circle, there is a blurred image of a laptop and a MIDI controller. The laptop screen shows a website with several images. The MIDI controller has various knobs and buttons.

Consistency

Consistency enhances usability by creating predictable interactions and familiar visuals. Healio maintains a cohesive and user-friendly experience throughout its full onboarding flow—from welcome screens to injury data input. Consistency across visuals, language, and layout allows users to focus on *content*, not figuring out how the app works.

01

Colors & Typography

A calming green palette, legible white and black font, and flat illustrations are consistently used across all screens.

02

Iconography

Visual cues like checkmarks, locks, sliders, and dropdowns use a consistent minimal style that matches the app's tone.

03

Bottom navigation bar

The bottom navigation bar is designed with clear icons and labels to ensure intuitive, consistent navigation throughout the Healio app.

04

Input Fields

Text fields, dropdowns, and validation messages have consistent styles and spacing, supporting form clarity.

Consistency

01

Colors & Typography

We tested color contrast with a WCAG AA checker to ensure readability, especially for buttons, text fields, and warnings. While most screens meet the required standards, a few input fields and placeholder texts need slight contrast adjustments.

INTRO SCREEN

Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground

Hex Value

#FFFFFF

Color Picker

Alpha

1

Lightness

Background

Hex Value

#30594F

Color Picker

Lightness

Contrast Ratio

7.87:1

[permalink](#)

Normal Text

WCAG AA: Pass

WCAG AAA: Pass

The five boxing wizards jump quickly.

Large Text

WCAG AA: Pass

WCAG AAA: Pass

The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: Pass

★

Text Input

SIGNUP / FORGOT PASSWORD

Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground

Hex Value

#000000

Color Picker

Alpha

1

Lightness

Background

Hex Value

#A9D6C8

Color Picker

Lightness

Contrast Ratio

13.13:1

[permalink](#)

Normal Text

WCAG AA: Pass

WCAG AAA: Pass

The five boxing wizards jump quickly.

Large Text

WCAG AA: Pass

WCAG AAA: Pass

The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: Pass

★

Text Input

Passed

HOME SCREEN ++

Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground

Hex Value

#000000

Color Picker

Alpha

1

Lightness

Background

Hex Value

#66968A

Color Picker

Lightness

Contrast Ratio

6.29:1

[permalink](#)

Normal Text

WCAG AA: Pass

WCAG AAA: Fail

The five boxing wizards jump quickly.

Large Text

WCAG AA: Pass

WCAG AAA: Pass

The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: Pass

★

Text Input

ERROR / INCORRECT PASSWORD

Contrast Checker

[Home](#) > [Resources](#) > Contrast Checker

Foreground

Hex Value

#A71212

Color Picker

Alpha

1

Lightness

Background

Hex Value

#E8AA54

Color Picker

Lightness

Contrast Ratio

3.76:1

[permalink](#)

Normal Text

WCAG AA: Fail

WCAG AAA: Fail

The five boxing wizards jump quickly.

Large Text

WCAG AA: Pass

WCAG AAA: Fail

The five boxing wizards jump quickly.

Graphical Objects and User Interface Components

WCAG AA: Pass

★

Text Input

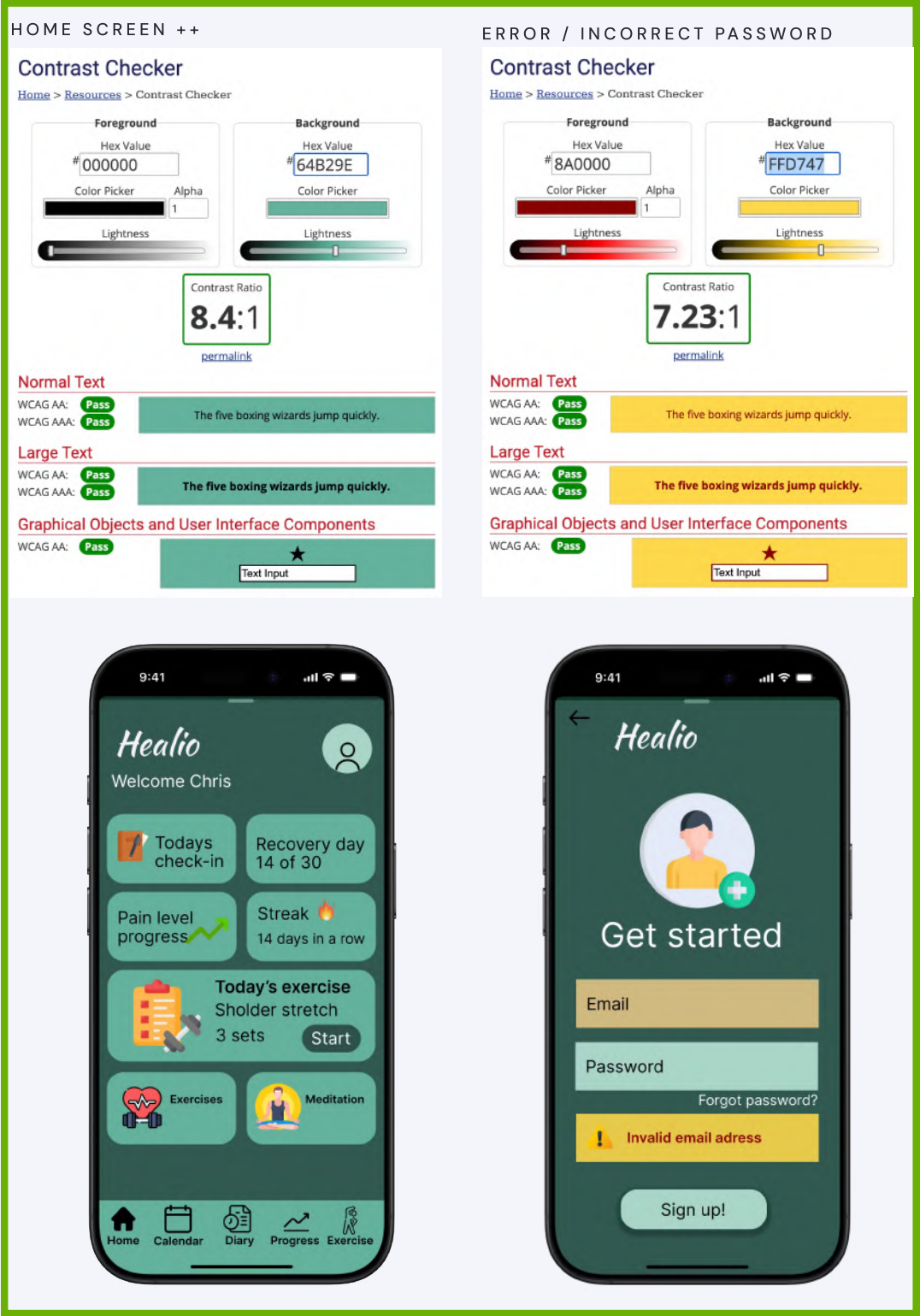
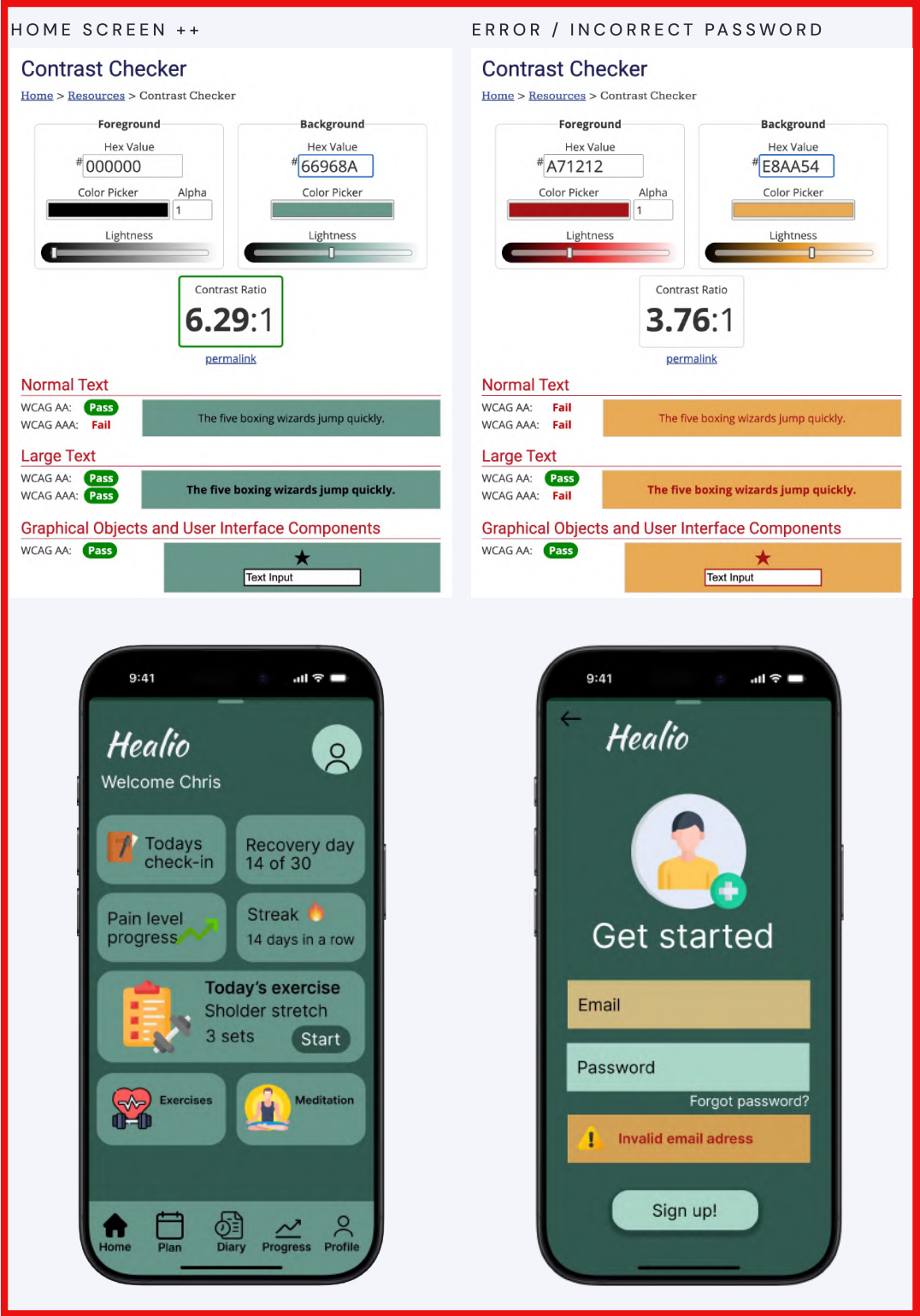
Failed

Consistency

01 Colors & Typography

Before

After



Consistency

02 Iconography

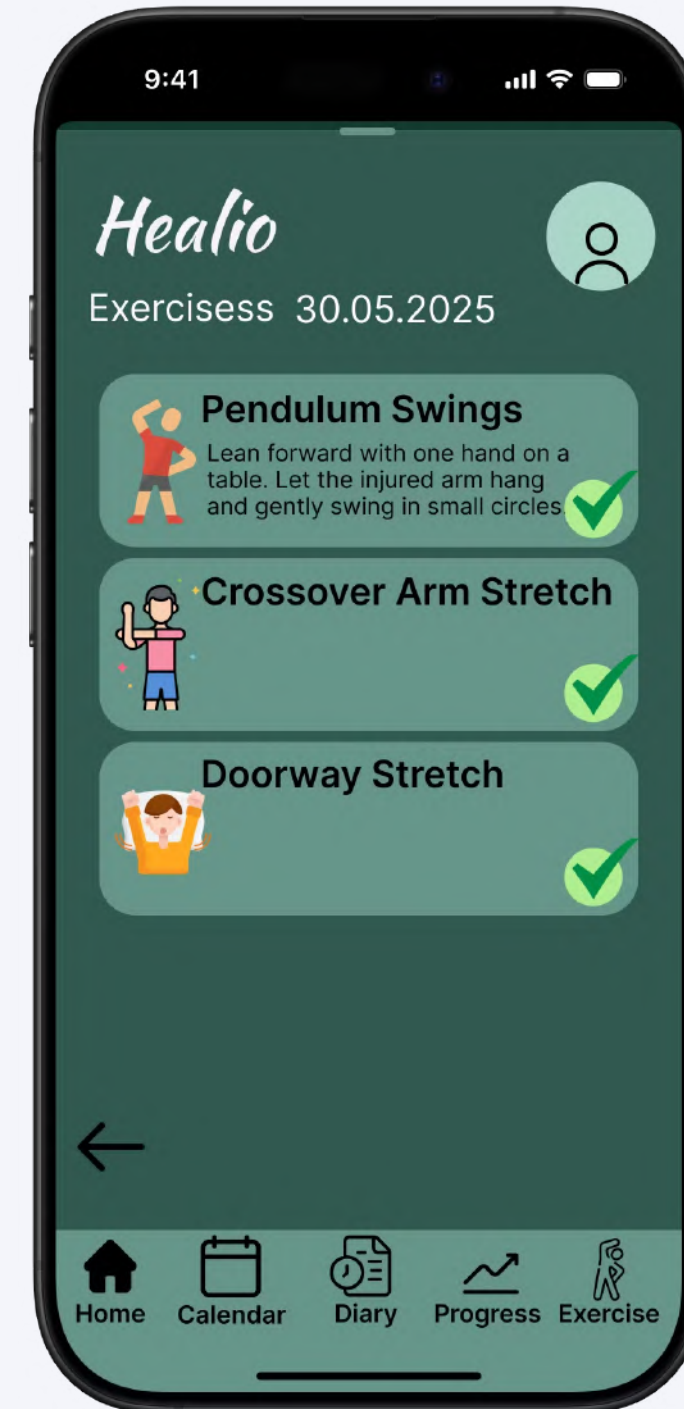
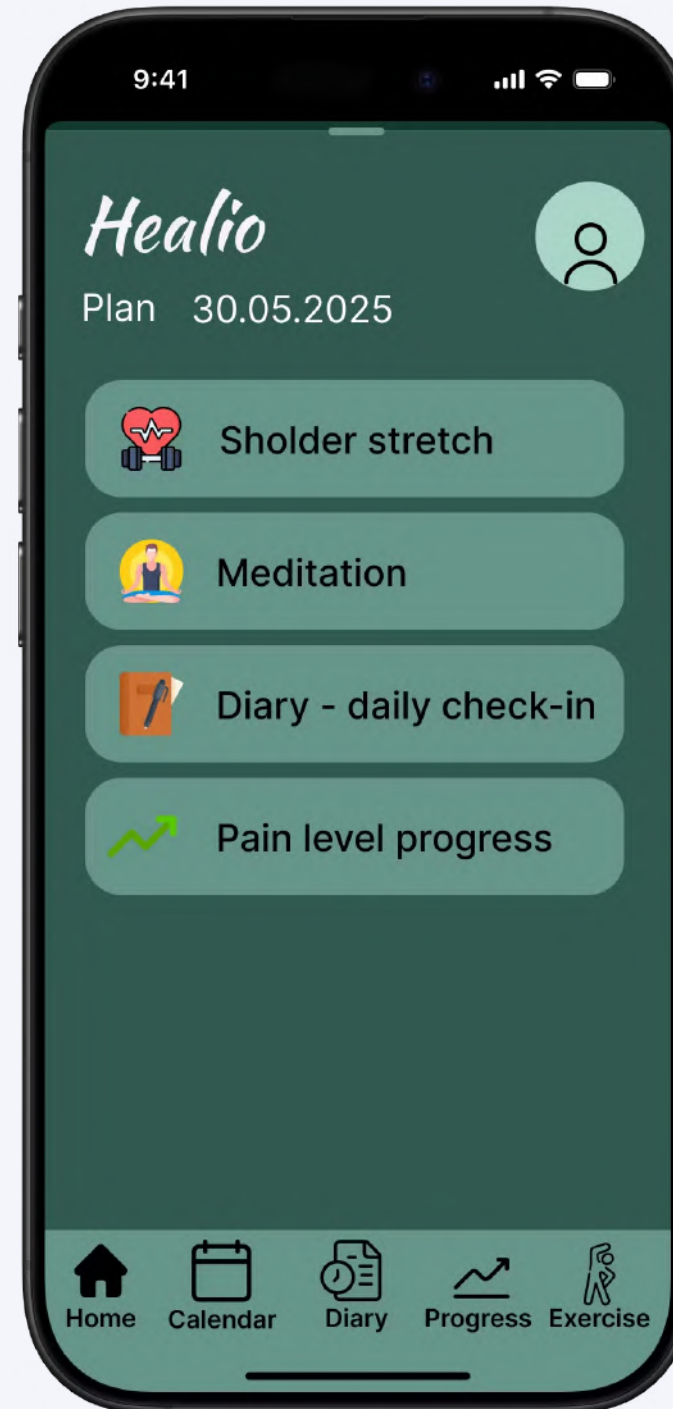
We chose this icon set to ensure visual consistency, clarity, and accessibility throughout the Healio app. All icons share a cohesive flat or semi-flat design style with bold outlines, rounded edges, and vibrant colors that are easy to distinguish—even for users with visual impairments. Their consistent visual language supports quick recognition and intuitive navigation, which is essential for users recovering from injury or pain. By aligning icon choices with accessibility best practices and maintaining a friendly, human-centered aesthetic, the icons contribute to a clear, motivating, and inclusive user experience.



Consistency

02 Iconography

Examples of how Healio use icons for motivating and engaging app content.

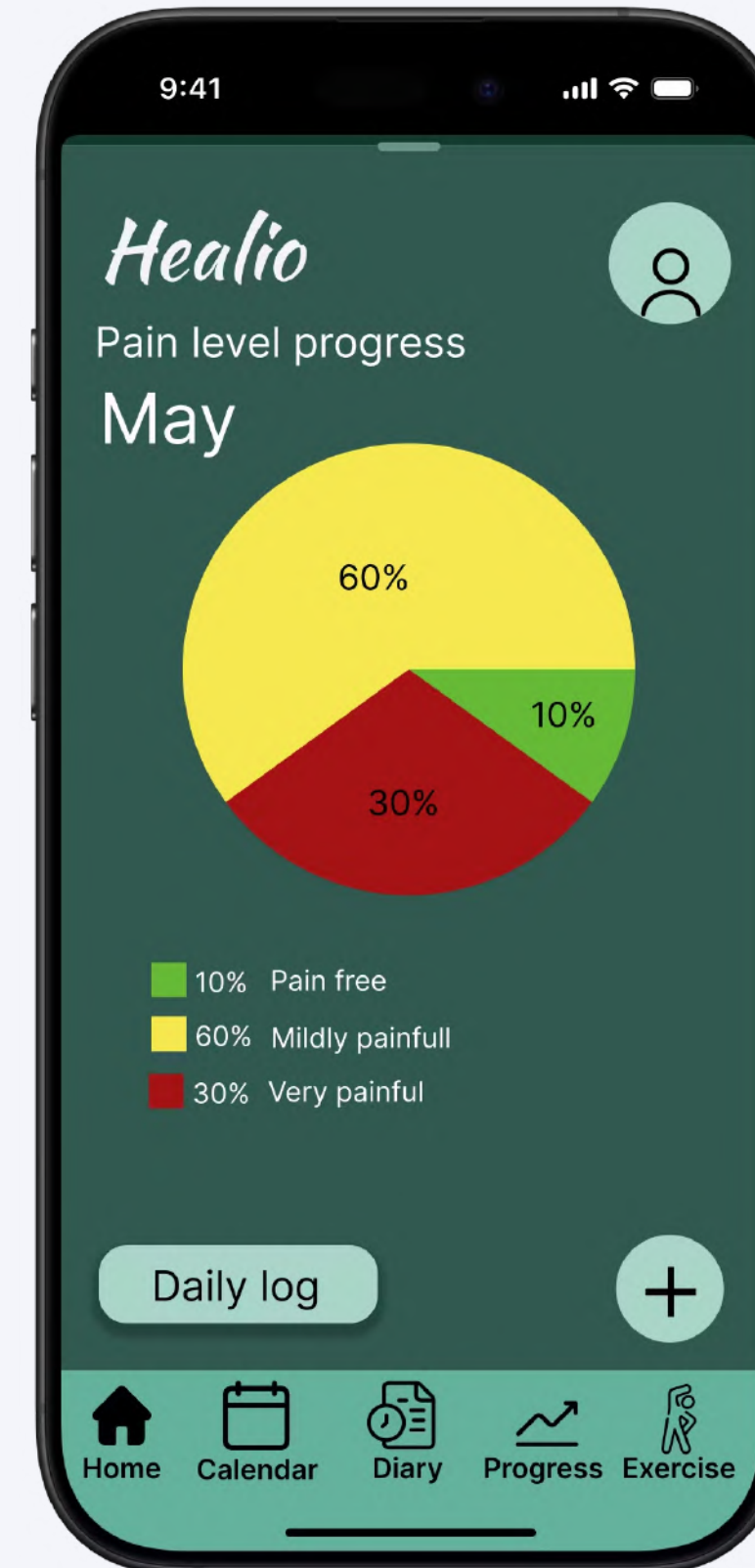
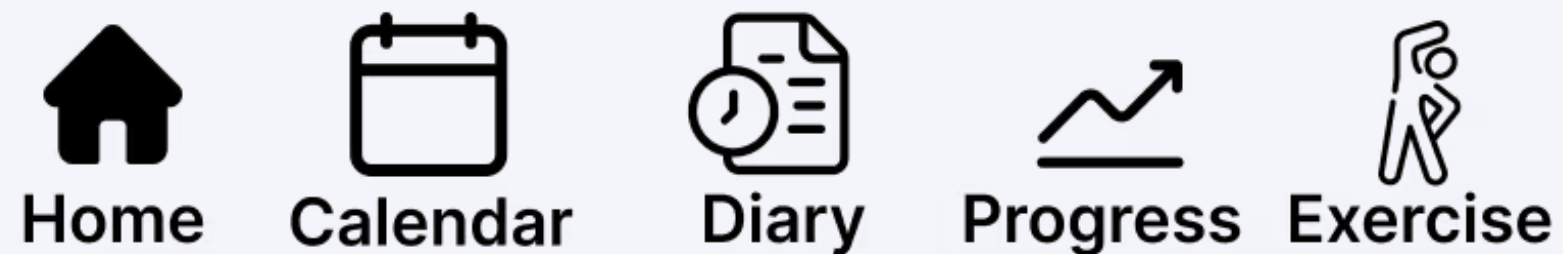


Consistency

03

Bottom navigation bar

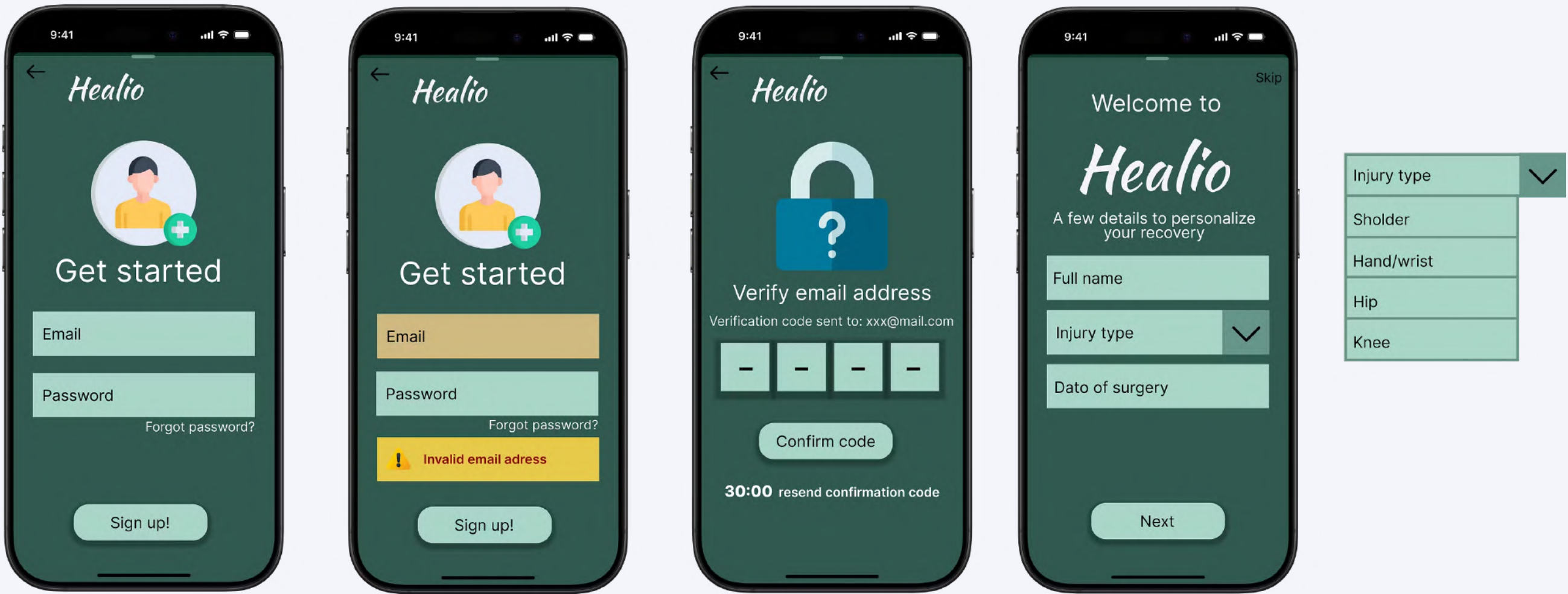
To ensure consistency throughout the Healio app, we designed the bottom navigation bar using universally recognized icons paired with clear, descriptive labels such as *Home*, *Calendar*, *Diary*, *Progress*, and *Exercise*. The soft green background and clean black icons maintain visual harmony with the overall color scheme, while the consistent placement of the tab bar at the bottom of the screen supports intuitive and predictable navigation across all sections of the app.



Consistency

04 Input Fields

Throughout the onboarding flow in Haelio, we maintained consistent styling for all input fields—whether entering an email, selecting injury type, or setting reminders. Field shapes, spacing, font sizes, and colors follow the same visual language to create a smooth and intuitive experience. We also implemented clear feedback states—such as error messages for invalid input and confirmation cues—so users always know where they stand. Drop-downs and sliders are styled for easy mobile use, with accessible contrast and touch-friendly targets. This consistent design builds trust and reduces friction for users starting their recovery journey.



Accessibility

Healio applies accessible design principles grounded in the WCAG’s POUR framework, ensuring the app is Perceivable, Operable, Understandable, and Robust.

Its onboarding experience strikes a thoughtful balance between friendly, approachable design and best practices in inclusive UX.

By prioritizing accessibility from the start, Healio creates an experience that works for everyone—making it easier for users to engage, stay motivated, and succeed in their recovery.

<i>POUR PRINCIPLES</i>	<i>HEALIO EXAMPLE</i>
PERCEIVABLE	High-contrast buttons, clear icons, and readable fonts support users with visual impairments.
OPERABLE	Tap targets are appropriately sized; navigation is linear and simple.
UNDERSTANDABLE	Clear field labels, inline validation (e.g., password warnings), and progress cues aid comprehension.
ROBUST	Designs are screen-reader friendly

References



References

Daylio. (n.d.) *Daylio – Mood Tracker and Journal App*. Available at: <https://daylio.net/> (Accessed: 2 June 2025).

Injurymap. (n.d.) *Injurymap – Digital Rehabilitation App*. Available at: <https://injurymap.com/> (Accessed: 2 June 2025).

Kaia Health. (n.d.) *Kaia Health – Digital Therapy for Musculoskeletal Conditions*. Available at: <https://kaiahealth.com/> (Accessed: 2 June 2025).

Noroff, (2025) *Prototyping – Module 1*. (Accessed: 18 May 2025).

Noroff, (2025) *Prototyping – Module 2*. (Accessed: 18 May 2025).

Noroff, (2025) *Prototyping – Module 3*. (Accessed: 25 May 2025).

Spoelma, T. (31.05.2021). *Man in white crew neck shirt* [Photography]. Unsplash. Available at: <https://unsplash.com/photos/ux2LvytLQ-A> (Accessed: 29 May 2025).

W3C. (2023). *How to Meet WCAG (Quick Reference)*. Available at: <https://www.w3.org/WAI/WCAG22/quickref/?versions=2.2> [Accessed 1 June 2025].

WebAIM. (n.d.). *Contrast Checker*. [online] Available at: <https://webaim.org/resources/contrastchecker/> [Accessed 31 May 2025].

Physiotools. (n.d.) *Physiotools by Physitrack – Exercise Prescription Software*. Available at: <https://www.physitrack.com/physiotools> (Accessed: 2 June 2025).

Recover Athletics. (n.d.) *Recover Athletics – Prehab App for Runners*. Available at: <https://recoverathletics.com/> (Accessed: 2 June 2025).



Want to make a presentation like this one?

Start with a fully customizable template, create a beautiful deck in minutes, then easily share it with anyone.

Create a presentation (It's free)