

# EMA

An Emotion Management Assessment Application for  
early intervention of Mental Health in Children

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# Project Overview



## The Product:

An app available to parents, children, educators, and health care professionals to monitor and access Childrens emotional well being for the early intervention of mental health.



## Project Duration:

May 2022 - June 2022



# Project Overview



## The Problem:

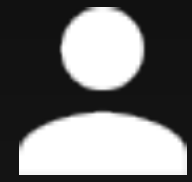
With the growing number of issues facing many populations (the pandemic, gun violence, war) the mental health of our population is of the utmost importance, especially in children who will be the adults of tomorrow.



## The Goals:

By monitoring the emotional well being of children on a regular basis we can access if early intervention is required for mental health wellness.

# Project Overview



## My Role:

UX Researcher & Designer throughout the entire scope of the project from ideation to design.



## Responsibilities:

Research, Interviewing, Paper and Digital Wire framing, Usability Studies, Low and High Fidelity Prototyping, & Design Iteration. Responsive web design for multiple screen sizes for use cases.



# Understanding the Users

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





# User Research Summary

I conducted interviews with parents from diverse backgrounds. I created empathy maps to understand their thought process, needs and goals. Through my research I found that the product needs needed to focus on not only the parent group but the children who will be using the product primarily. Additional user groups include educators and healthcare professionals.

Through my research it was evident that parents wanted to ensure their children's mental health was optimal but needed accessible options, the assistance of others, or resources to help them through the process. This was of great importance in situations dealing with current events, or trauma, but equally important to them on a random or regular basis as a measurement of current status.



# Persona - Natasha Brown

## Problem Statement:

Natasha is a single mom, working multiple jobs who wants to ensure her children are coping with current traumatic events in their community, but does not have the time or resources to do it herself due to her schedule.



**Natasha Brown**

**Age: 40**

**Education: Some College**

**Hometown: Chicago, IL**

**Family: Single mom, 4 children**

**Occupation: Unemployed**

*“The last year has been really hard on our family, I just want to make sure my kids are coping and that they feel safe”*

### Goals

- I want my children to feel safe at school and at home.
- I want my children to be able to speak to someone if they are having a hard time processing things that have happened within our community.

### Frustrations

- The recent events in our community are scary.
- I don't know have the time or resources to help my children manage their mental health.

Natasha lost her service industry job last year and is working odd jobs to make ends meet. She is struggling to manage all the mental health needs of her children as they process their emotions to the recent gun violence in their community.

# Persona - Jin Yen Lee

## Problem Statement:

Jin is a parent and teacher who needs a way to monitor the emotions of both his children and students ensuring they are coping in a healthy manner given some racial tensions that have arisen at school.



**Jin Yen Lee**

**Age: 38**

**Education: College Degree**

**Hometown: San Francisco, CA**

**Family: Married, with 2 children**

**Occupation: Teacher/Parent**

*“My family and some of my students have received many racial threats and my children especially need a way to cope with the reality of it ”*

### Goals

- I want my children and students to have an outlet for how they are feeling.
- I want to be able to know if I need to get additional help or resources to support my children and students.

### Frustrations

- I thought my kids would not have to deal with racism as I did, but its been even worse for them the last couple of years.
- I know I cant solve racism but I want my kids to have an outlet.

Jin has noticed an uptick in racially centered crimes in his neighborhood, both as a teacher and parent. He wants to be able to give his kids a safe space to deal any emotions they have in response to targeted racially remarks made by other students.



# User Research - Pain Points

Based on user Journey Maps the following pain points were identified

## 1. Time

Users biggest pain point was time to connect with or discuss emotional health regularly.

## 2. Accessibility

The access to more convenient mental health options was identified.

## 3. Lack of Resources

Accessibility to affordable resources for basic personal monitoring or resources for monitoring larger groups within budget constraints such as a classroom.



# Starting the Design

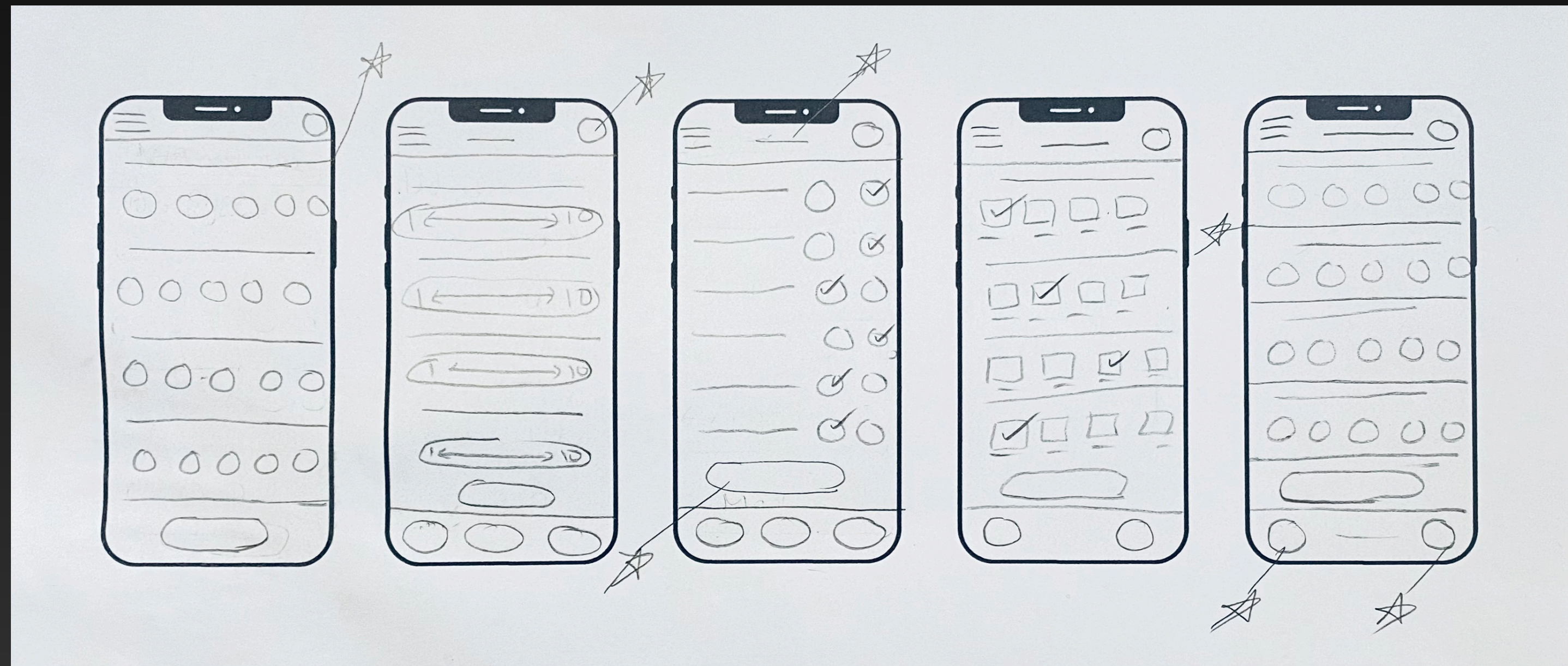
- Ideation through “crazy eights” & “HMW” methods
- Paper wireframes
- Digital wireframes
- Low-fidelity prototype
- Usability studies





# Paper Wire frames

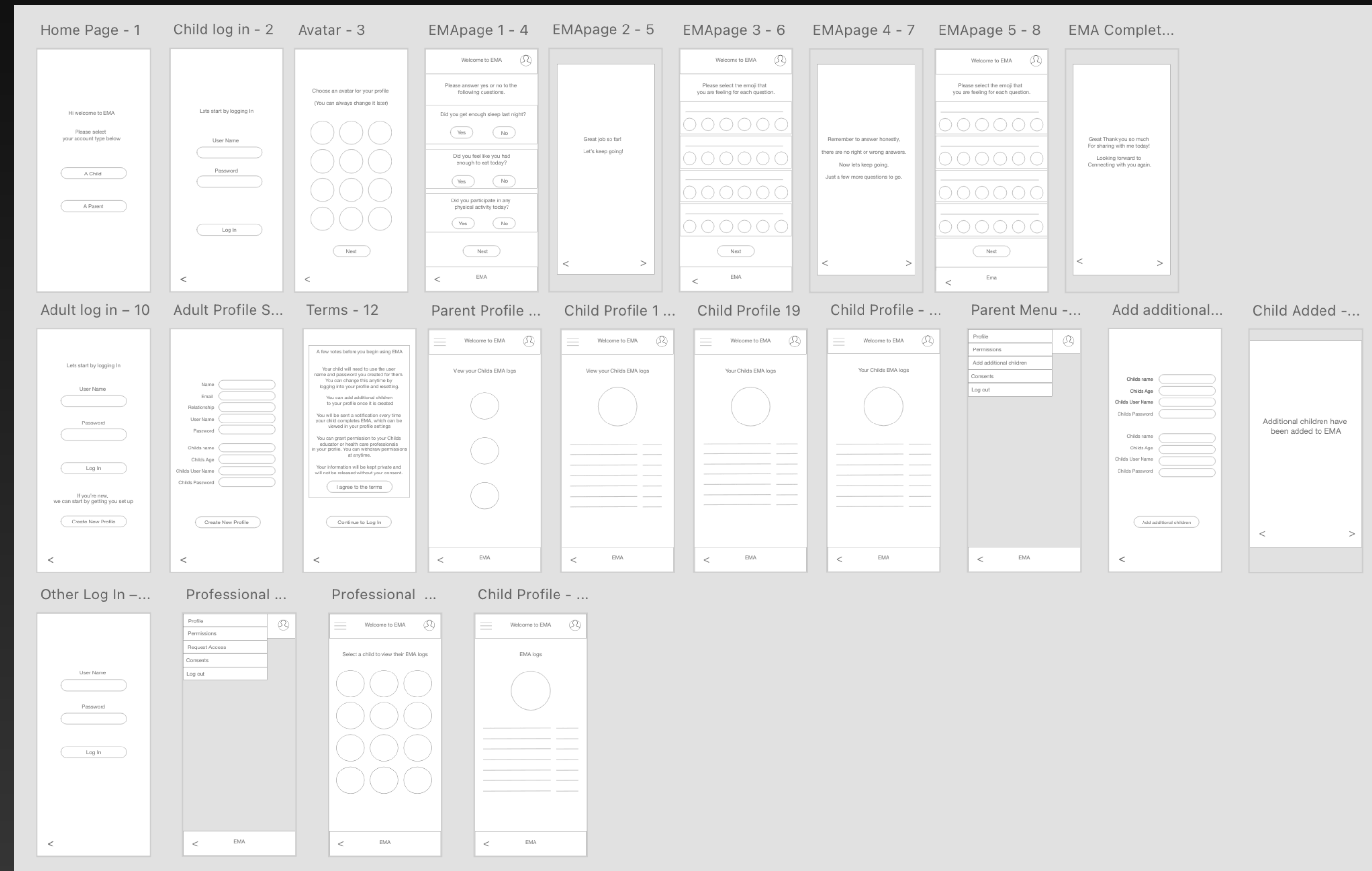
I started with the basic ideation of how children would answer assessment questions in the app. I made note of common elements that were needed after coming up with multiple versions of a screen. I further developed screens needed for other features for functionality and flow.





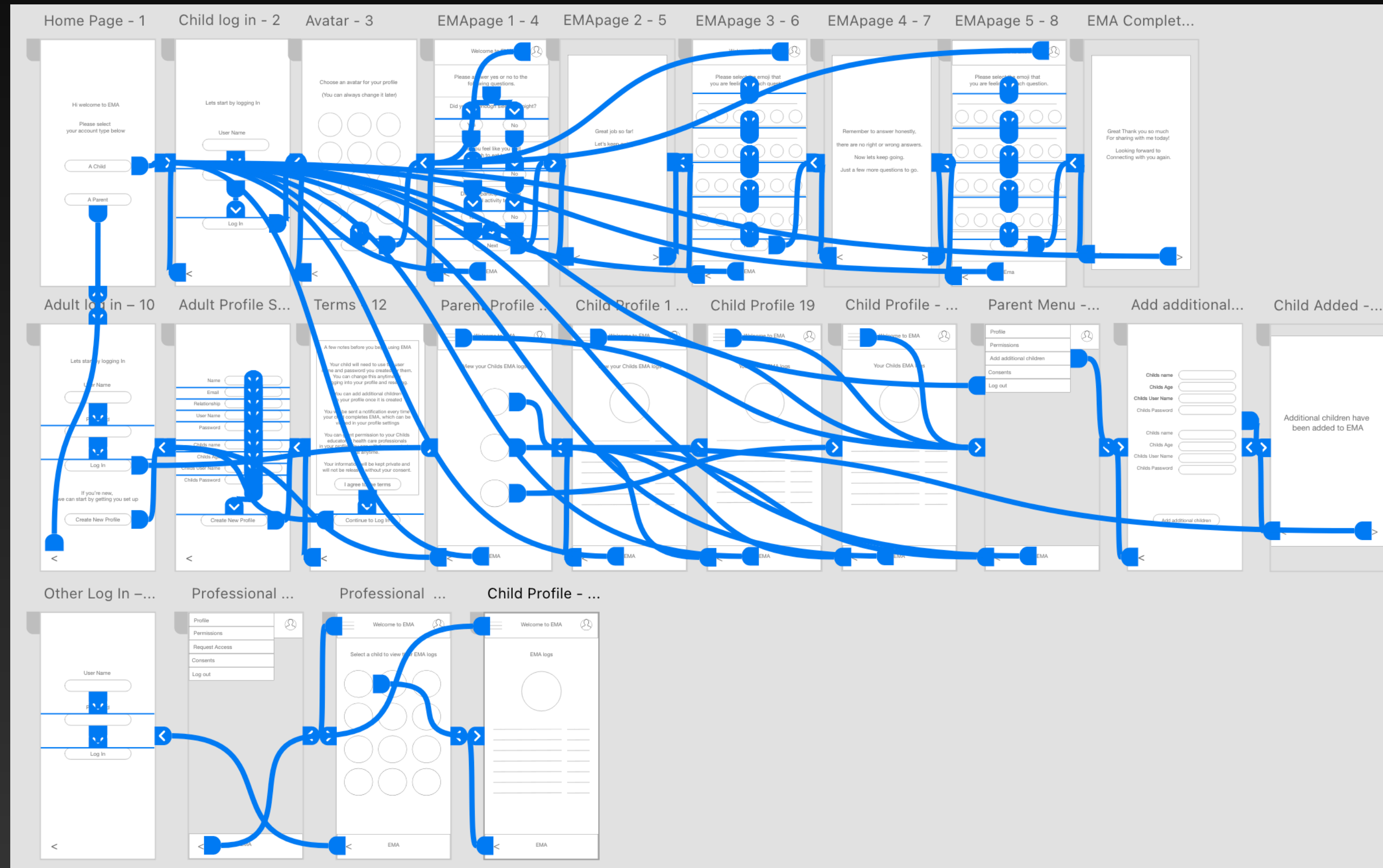
# Digital Wire frames

Initial Lo-Fidelity Wireframes with multiple user flows dependent on user were designed out for each specific group. Flows were designed for children, parents, educators, and healthcare professionals. Due to the use of personal health care information the need for consents, and permissions was taken into consideration when designing the product frames.





# Lo-fi Prototype



# Usability Studies - Findings

Two usability studies were conducted. The first usability study was conducted with the lo-fidelity wireframes and the second study was done using the mock ups which were further iterated to refine the design.

## Round 1 Findings:

- Navigation cues to move backward and forward need to be accessible by both text and symbols so that all ages using the app can clearly move through the product with ease.
- Password settings require an additional password field to ensure users do not make an error when setting up passwords.

## Round 2 Findings:

- The language in the assessment needs to be more positive in tone to better engage with children.
- Professionals need more security and viewable content due to the quantity of children they may be caring therefore a responsive website/ desktop version rather is better suited.



# Refining the Design

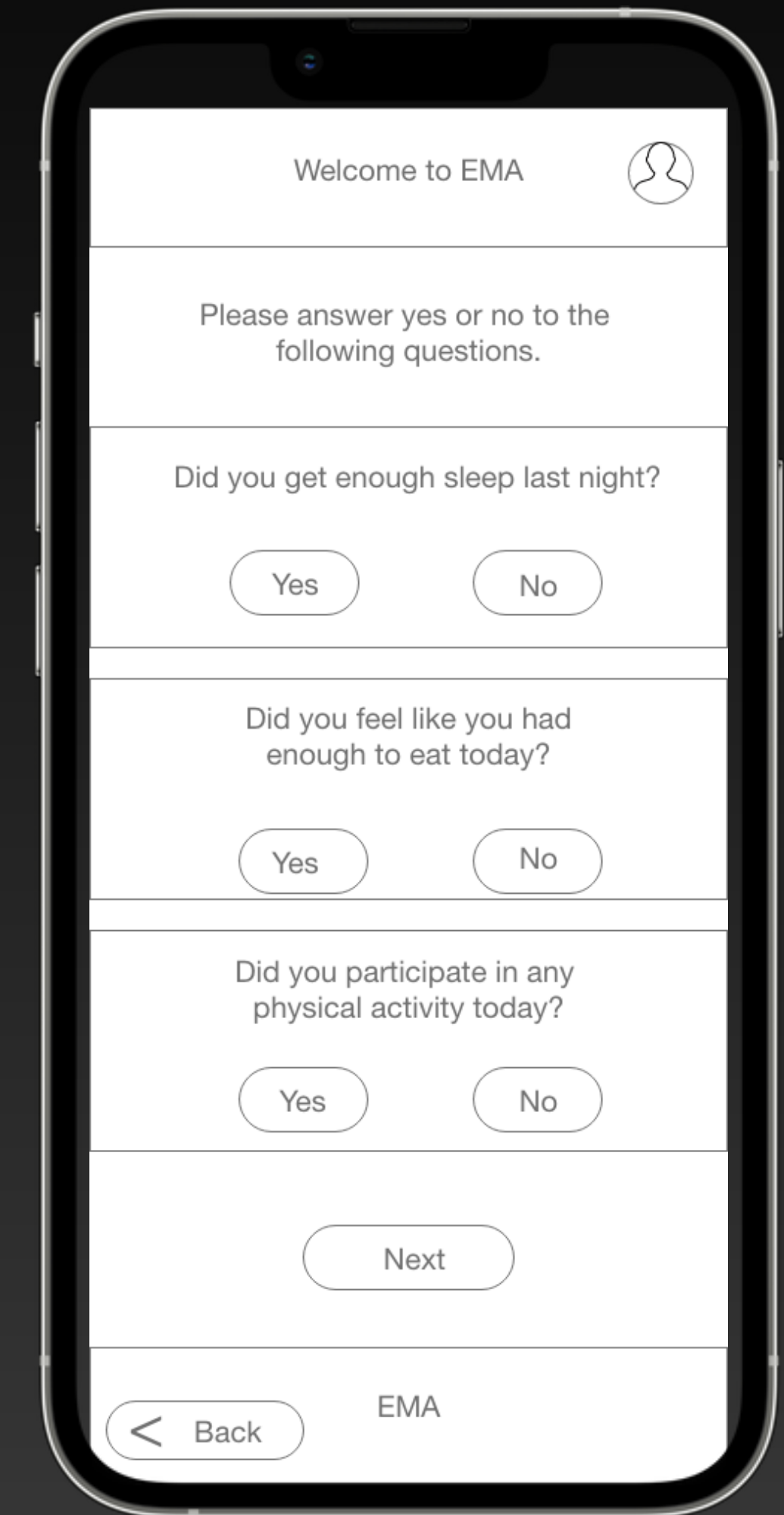
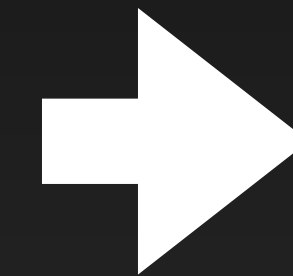
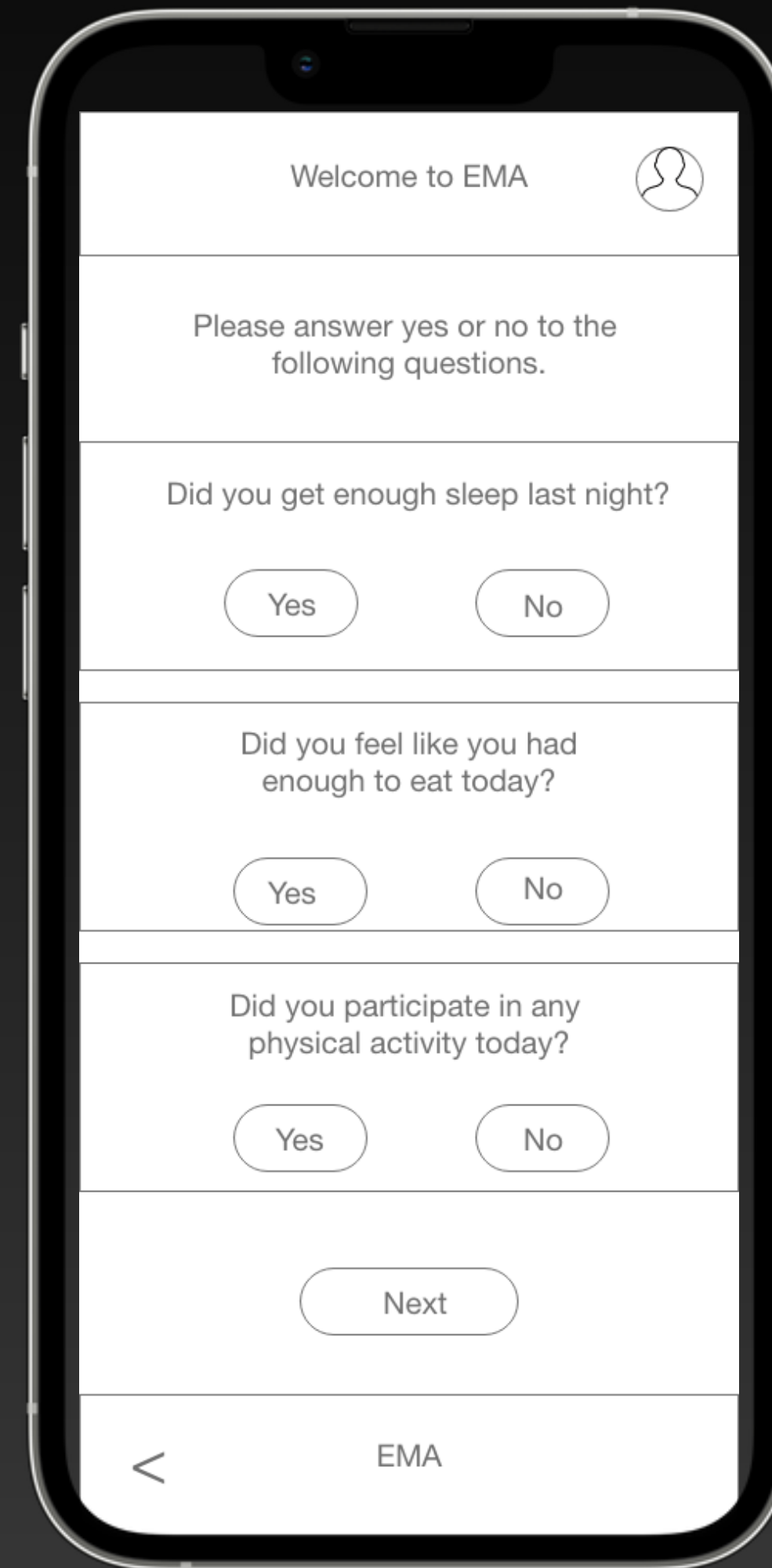
- IterationsMockups
- Mockups
- High-fidelity prototype





# Lo-fidelity Iterations

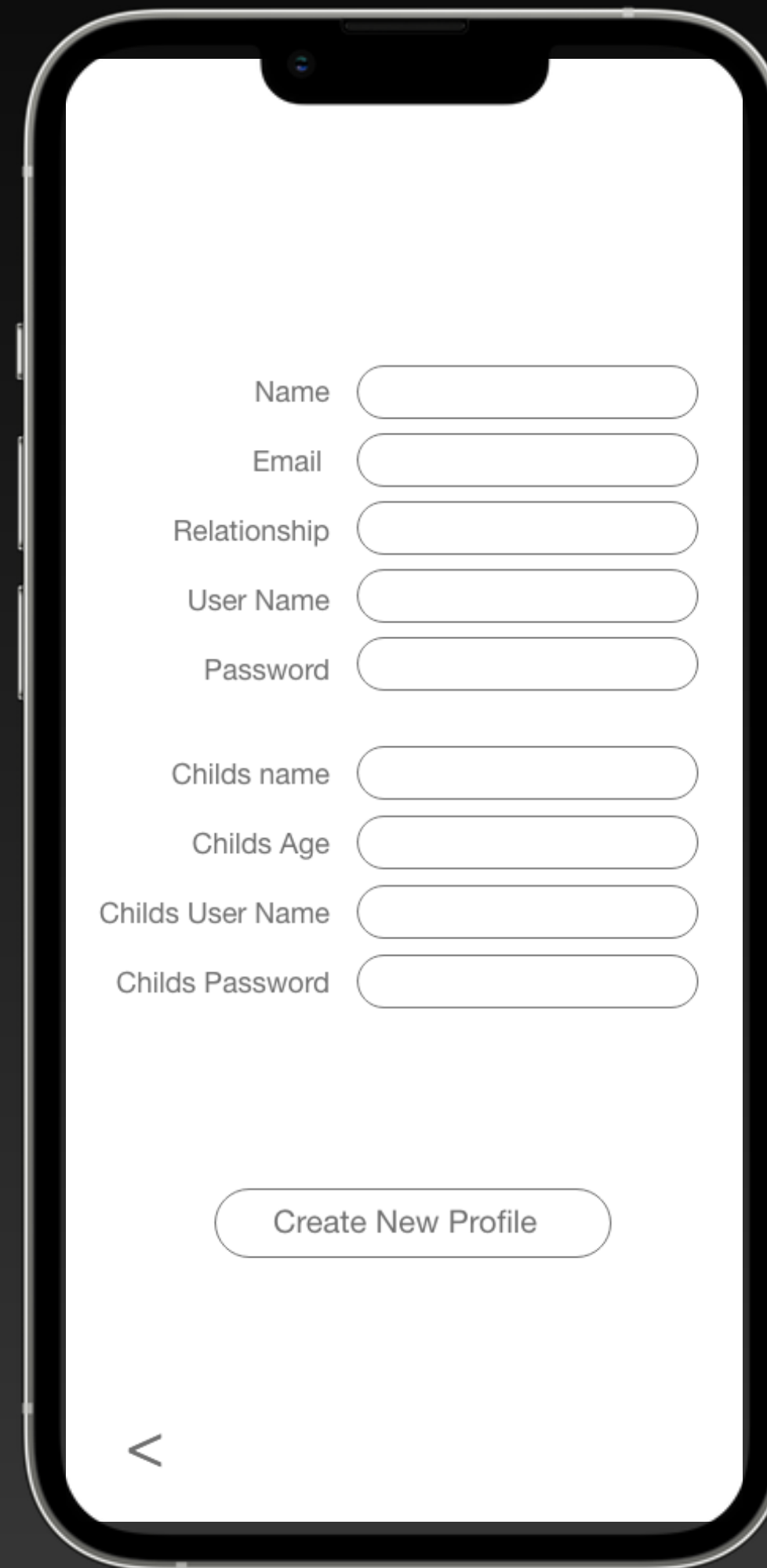
Design reflected to showcase the word back on a button as well as a back arrow.



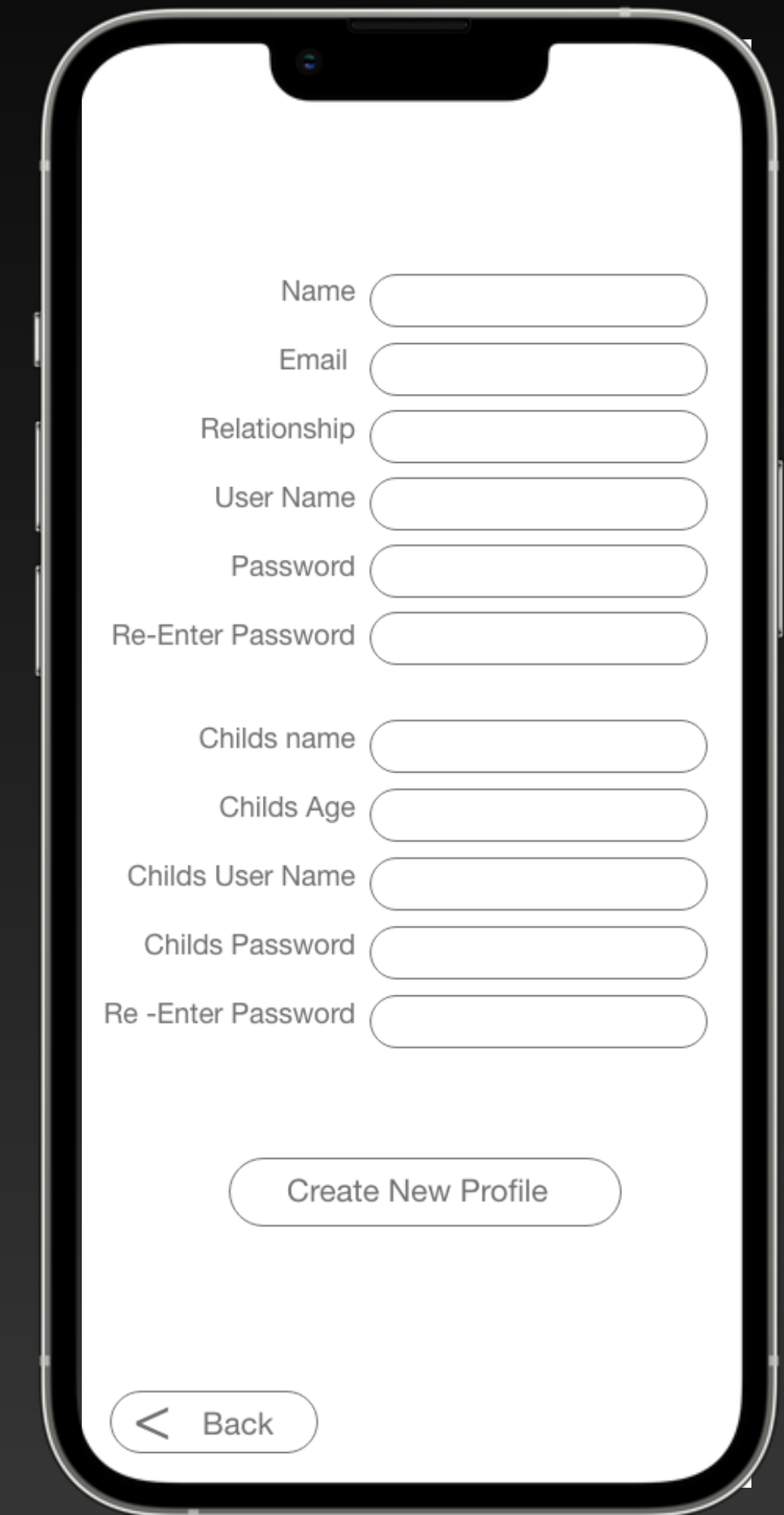
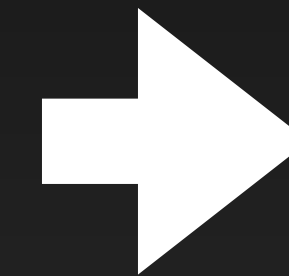


# Lo-fidelity Iterations

An addition field was added to re-enter password so errors in entering passwords would be less likely.



A mobile app form iteration showing a registration screen. The form includes the following fields: Name, Email, Relationship, User Name, Password, Childs name, Childs Age, Childs User Name, and Childs Password. A "Create New Profile" button is located at the bottom center. A back arrow is visible in the bottom left corner.

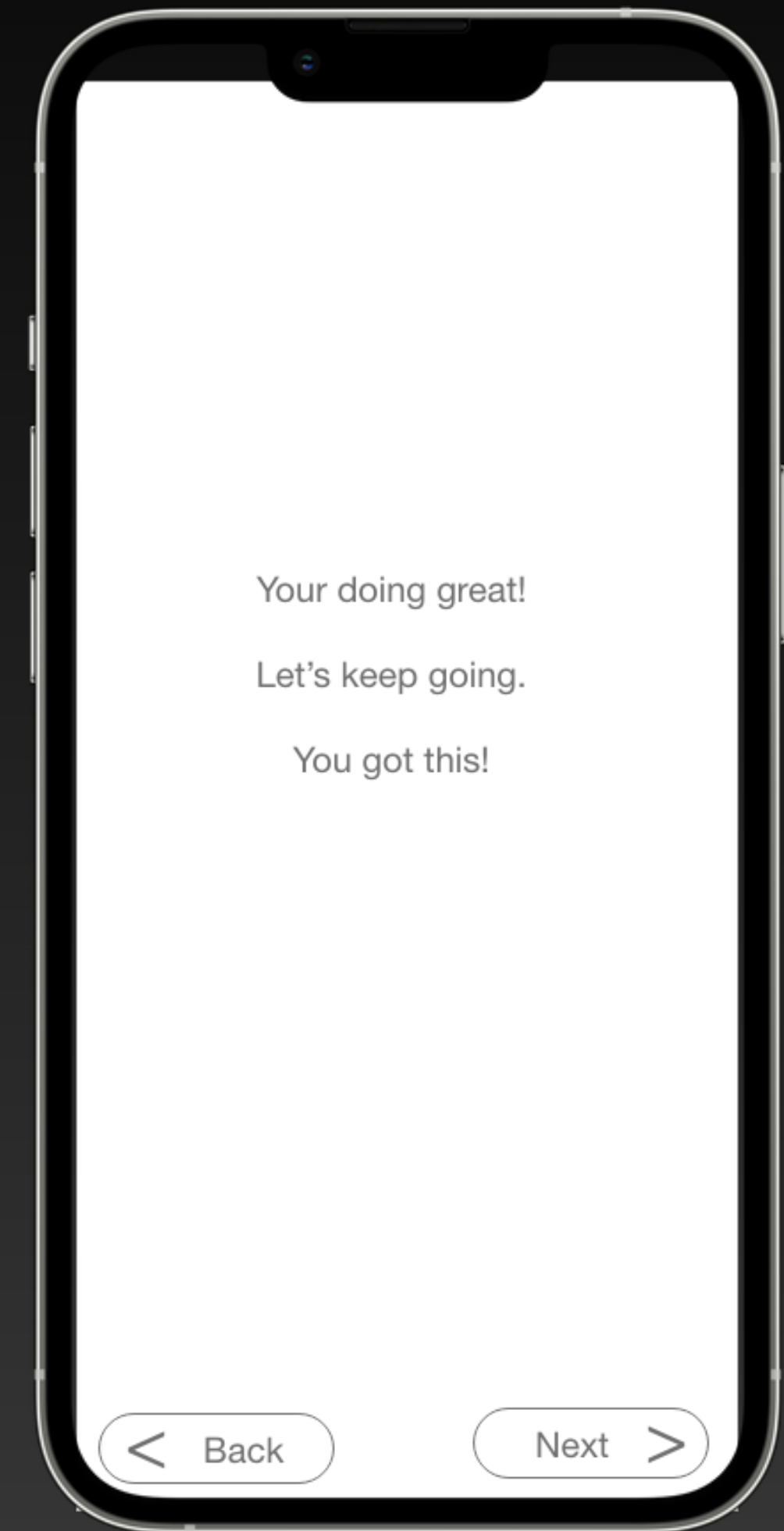
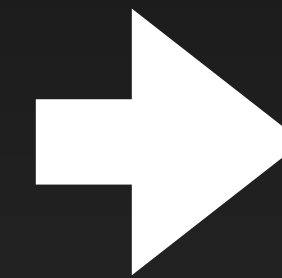
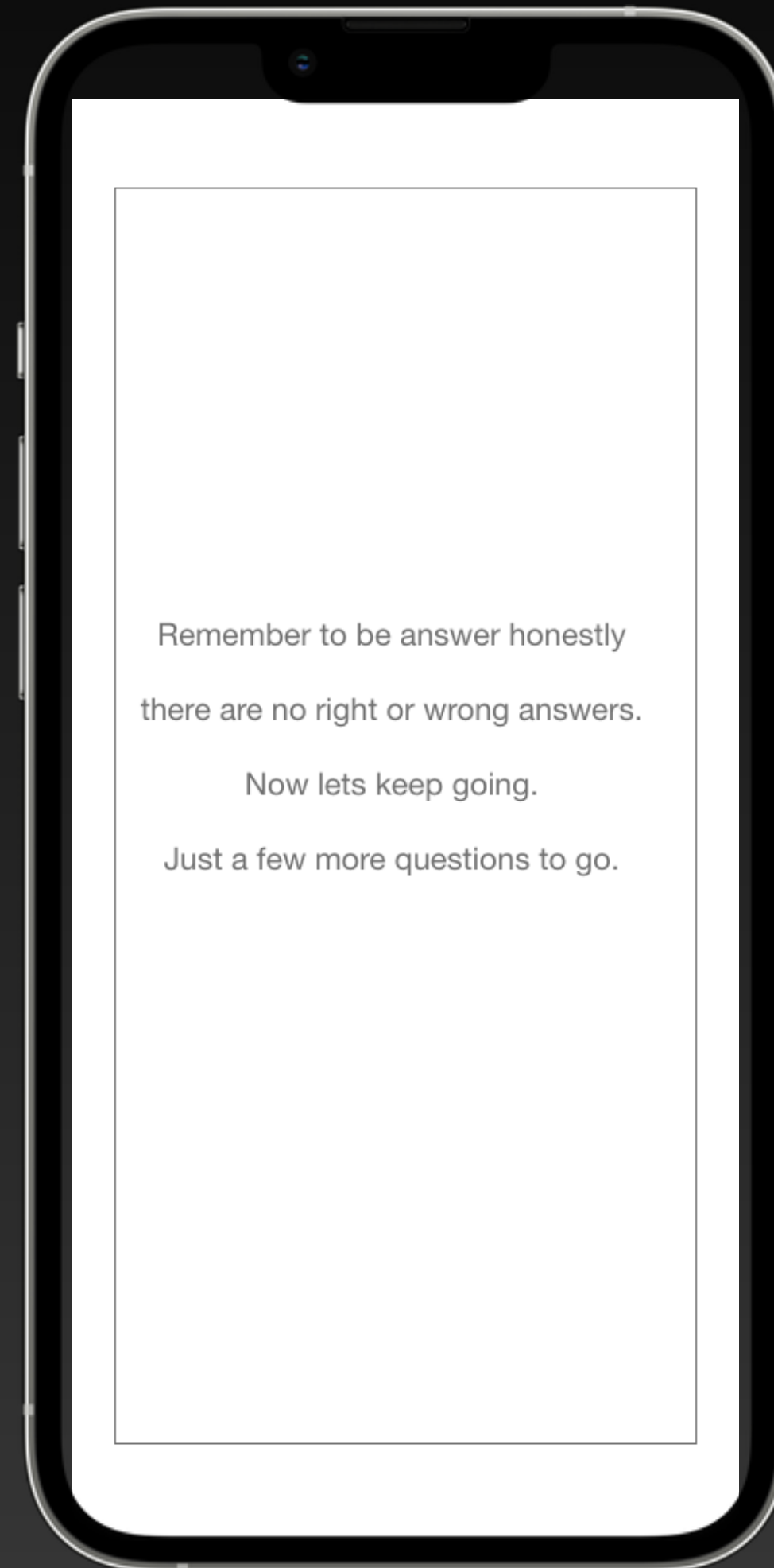


A mobile app form iteration showing a registration screen. The form includes the following fields: Name, Email, Relationship, User Name, Password, Re-Enter Password, Childs name, Childs Age, Childs User Name, Childs Password, and Re -Enter Password. A "Create New Profile" button is located at the bottom center. A "Back" button is visible in the bottom left corner.



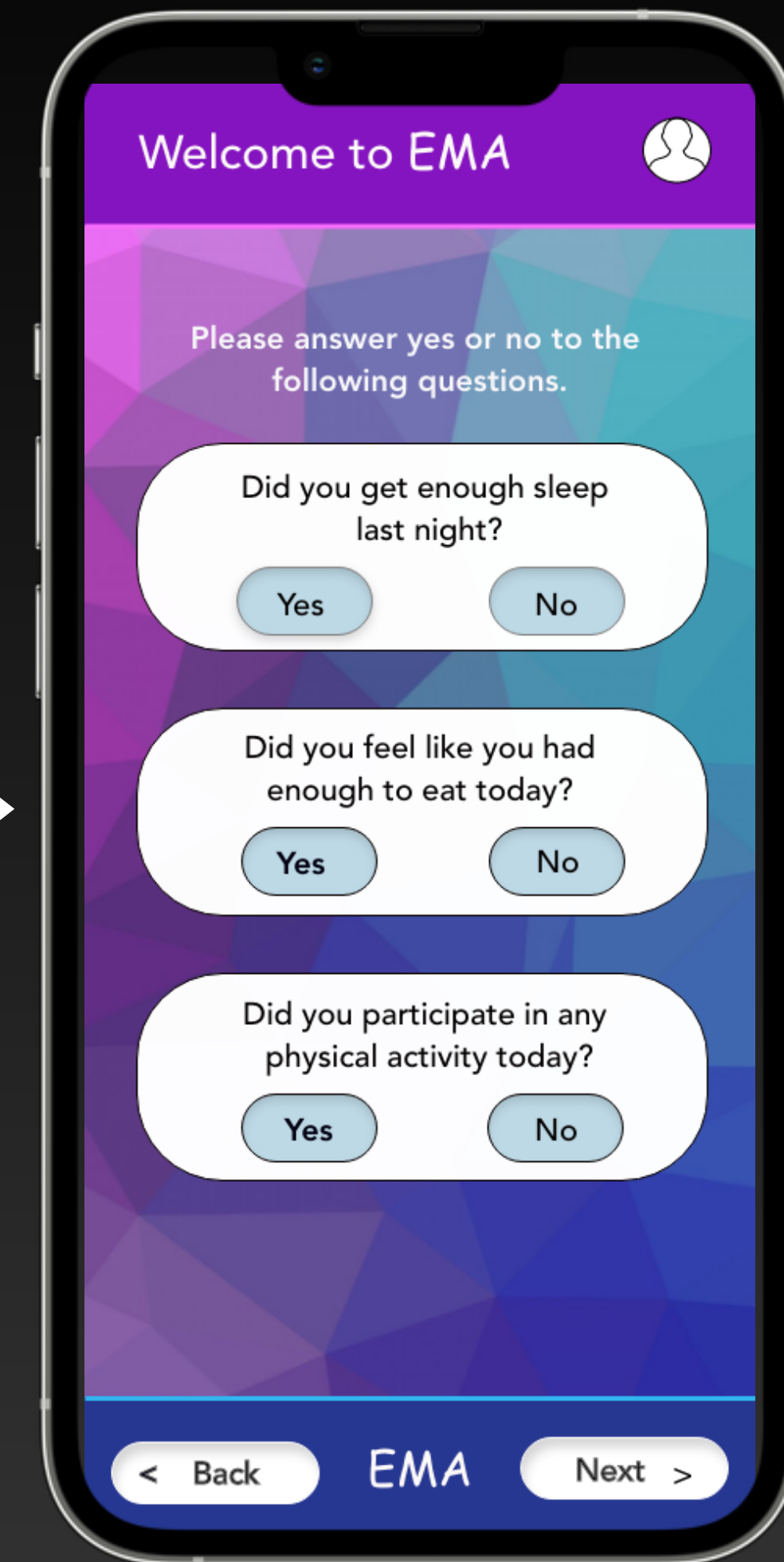
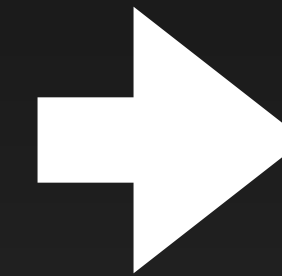
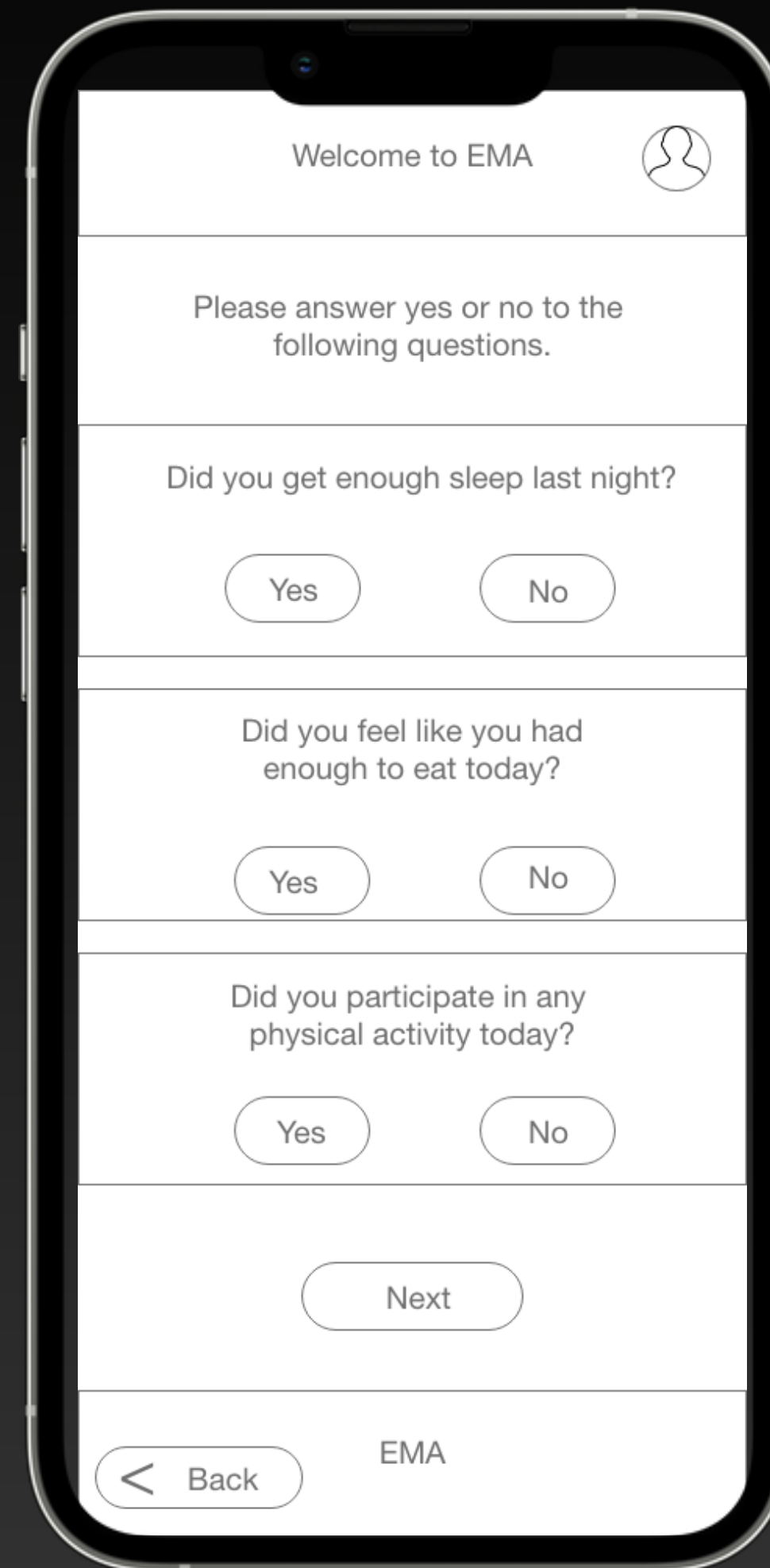
# Lo-fidelity Iterations

The language tone was adjusted to create a more positive tone for children based on insights collected from themes that came up in the children's user group.



# Mock Ups

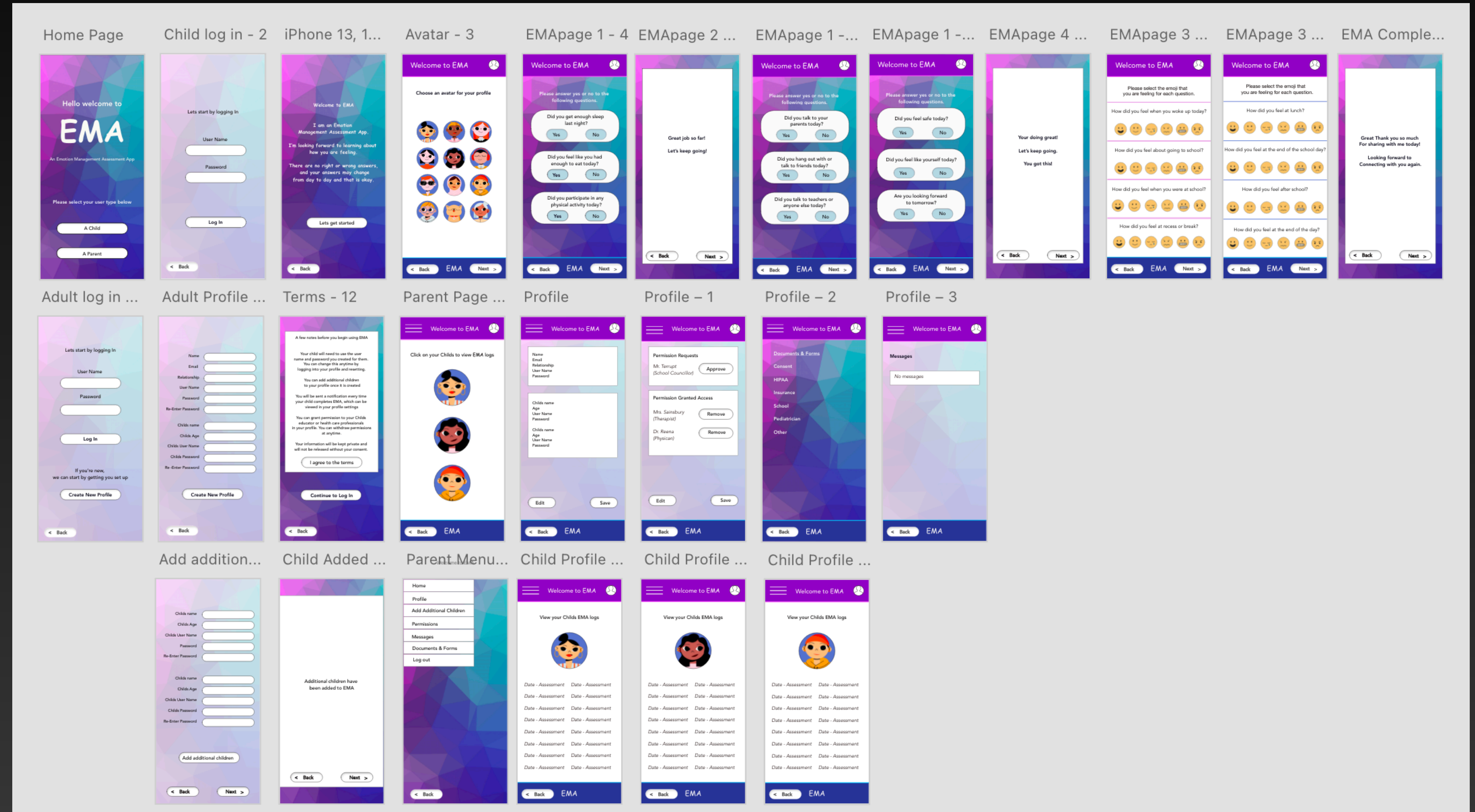
These back and next buttons were iterated further for consistency and direction.





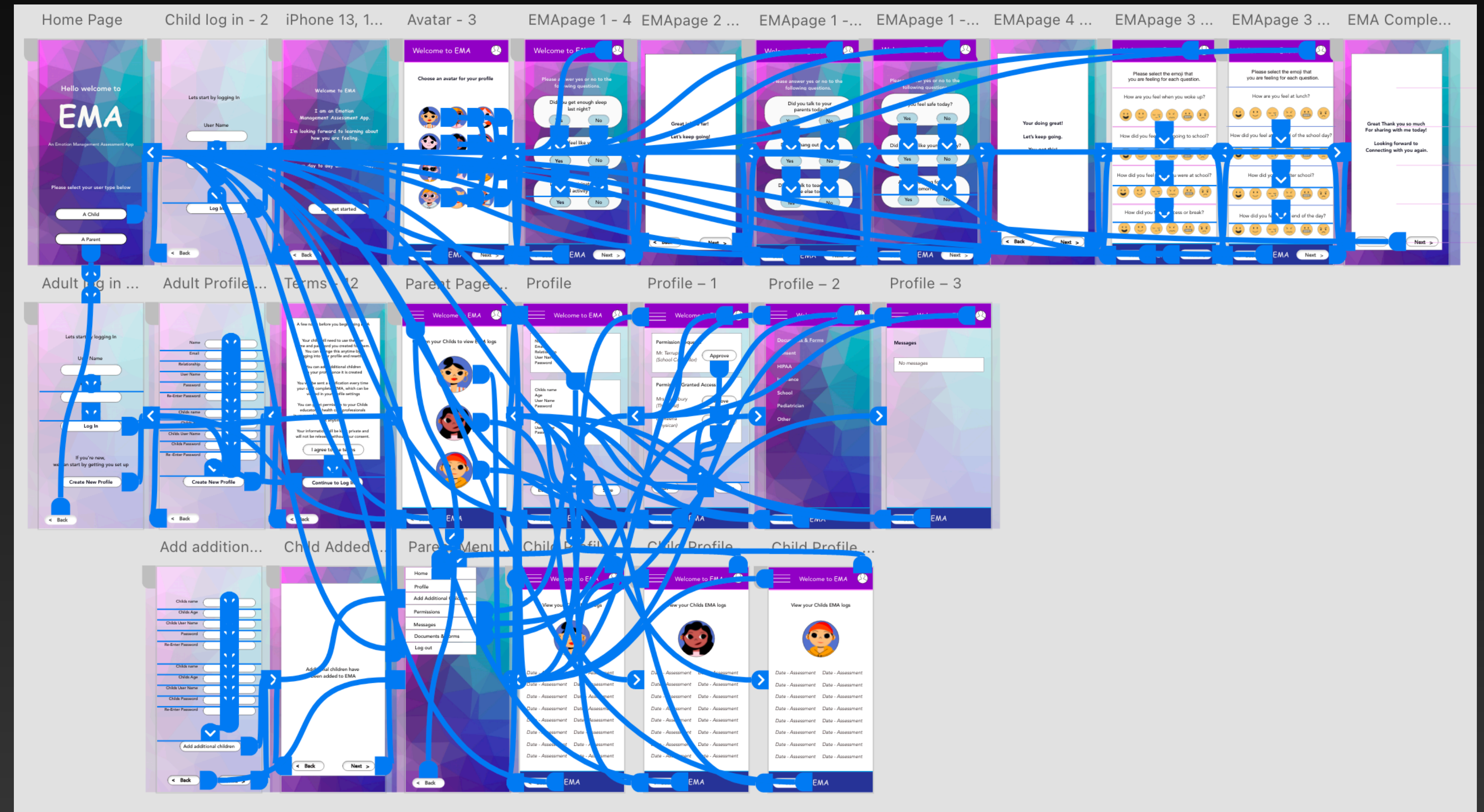
# Mock Ups

The Professional wireframes (which can be viewed in slide 12) were removed from in the mock up design to be later adapted into other screen sizes.



# High Fidelity Prototype

A prototype with two user flows, one for parents, one for children was created for mobile devices, as well as tablets.



<https://xd.adobe.com/view/fc9592c9-faca-4fce-80bc-f4f734909859-a9c6/>



# Refining







- Designing for specific use cases
- Multiple screen sizes
- Responsive Website





# Use Cases

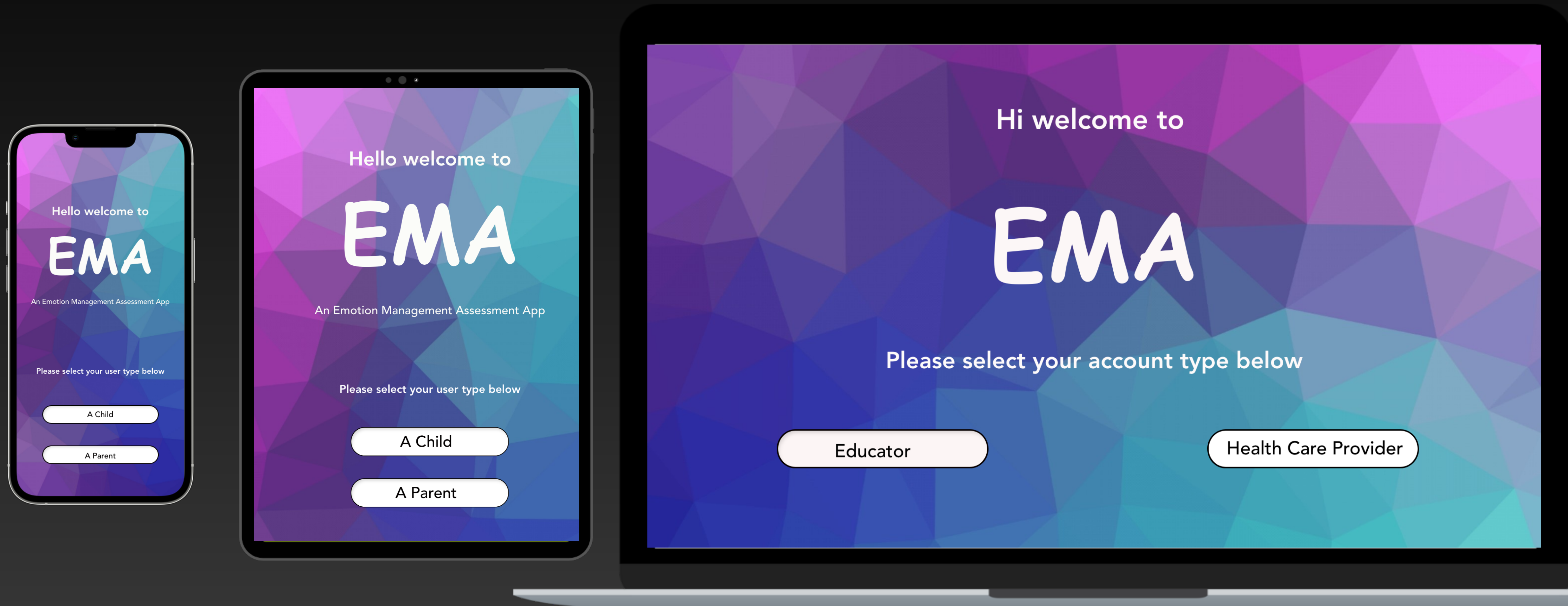
Based on the round 1 and round 2 usability studies it was clear that different screen sizes were required for the product depending on the user group and use case. This was determined by how the different users would interact with the product specific to accessibility, data, security, and privacy of information. In addition the back buttons were not part of the design for the professional group as an added security feature, however you can move through the app through the navigation menu.

User Group/Use Case	Parents	Children	Health Care Professionals	Educators
Mobile				
Tablet				
Desktop				

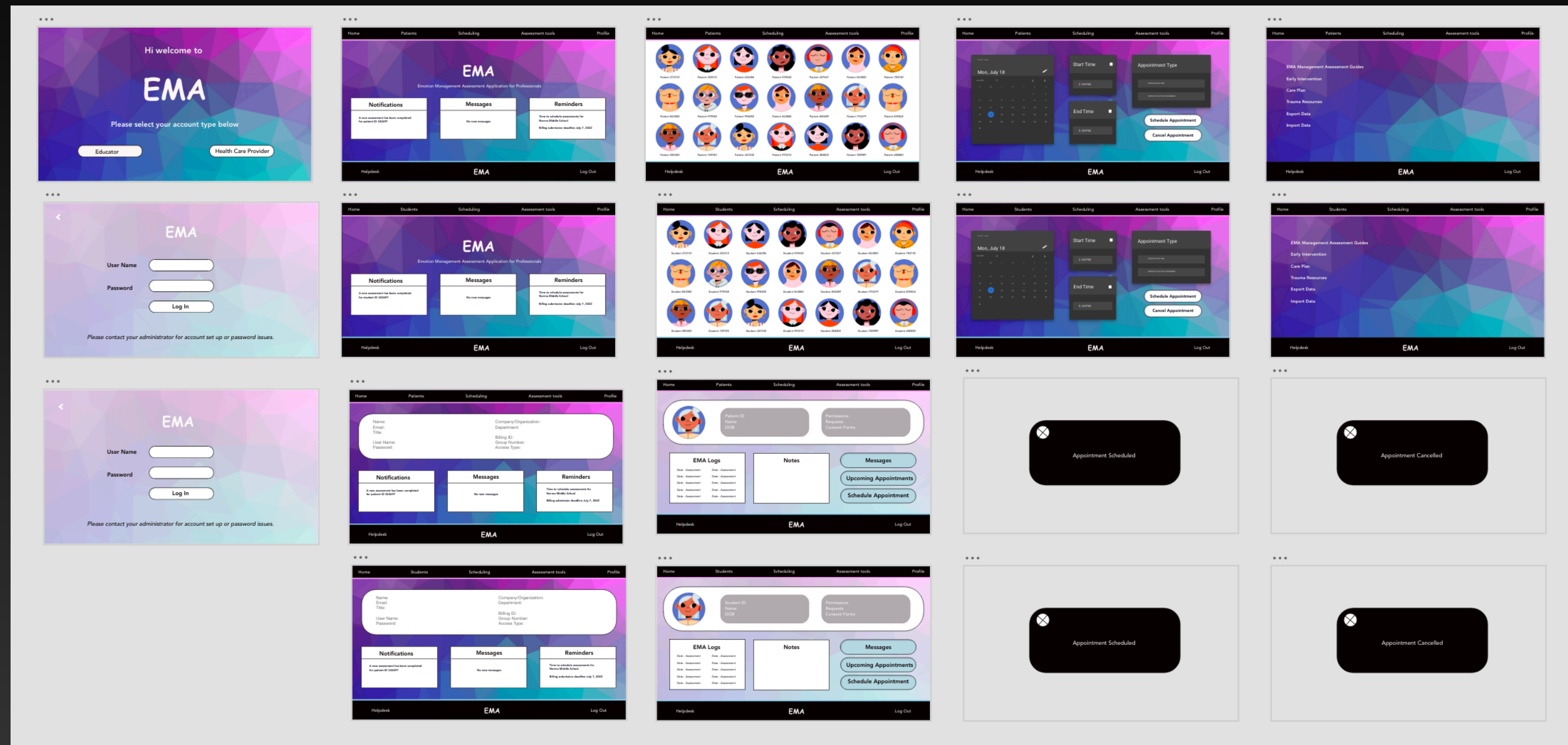


# Screen sizes

The product was designed for consistency across platforms dependent on the user groups ideal platform needs.



# Responsive Website



<https://xd.adobe.com/view/af4da3b0-2581-4cd1-b5af-8b9aa825cb24-fa1e/>



# Accessibility Considerations





# Accessibility considerations

1. Simple language, images, and iconography were used to engage and connect with children.
2. Color gradients were adjusted for visibility.
3. Back and next buttons included symbols and words.

\* Additional accessibility considerations to be included in the future are screen readers to assist young children who may be utilizing the application without assistance, as well any other users who may require a screen reader to read the required prompts.



# Going Forward

- Challenges
- Learnings
- Next Steps





# Going Forward

## Challenges

Multiple user groups and use cases created challenges based on the accessibility requirements, security, and privacy. These were taken into consideration throughout the design process.

## Learnings

The biggest learnings came through the usability studies which showcased the importance of including children in the study participant group for this particular product. The insights gained were formative to the language used, specially the tone required for engagement from children who may feel intimidated by the product.

## Next Steps

With respect to the learnings that came from the children's user group, further accessibility enhancements are required such as screen readers. This enhancement will benefit young children who can not read, but also serve the need for other population groups.



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Create a thing of beauty for  
your product or business needs**

**Beautiful, Accessible, Functional Design**

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