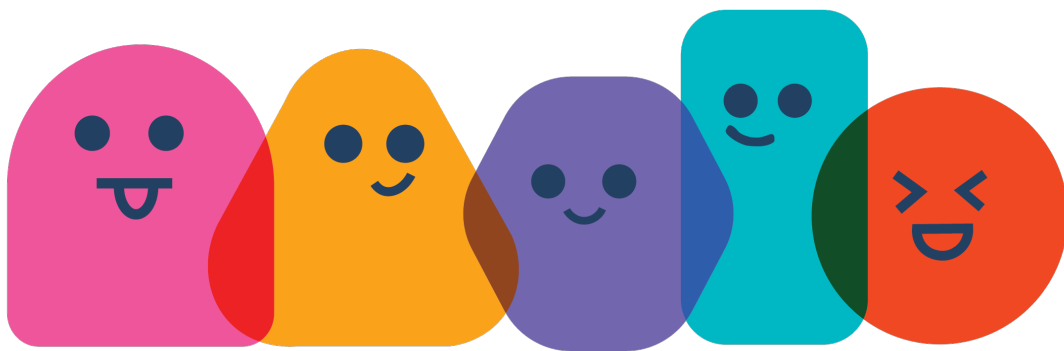


Assignment 2: User Research

Behaviour Correction In A 5 Year-Old



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20 November 2022

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Design Thinking Process

This project will be completed using the Design Thinking Process. The Design Thinking Process is user-centered and focuses on seeing things through the eyes of the users. Therefore facilitating creative problem solving and redefining problems to create a design that serves to cater to the users' needs. The Design Thinking Process consists of 4 main stages. The stages are as follows:



Empathise

This stage helps me to understand the problem I am trying to solve. I will start by putting myself in the shoes of my users by doing in-depth research on them to understand and define their needs. One of the tools I will be using is conducting a survey.

Define

I'll begin by compiling the information I've gathered about my users. From here, I can better understand my users' needs. This will guide me through the ideation process, as my approach is to prioritise my users. This is where personas come in as potential users.

Ideate

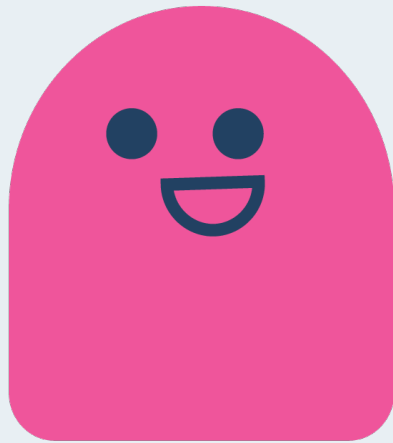
The background knowledge from the previous two stages will help me in brainstorming ideas. I will make a mindmap to organise all of the ideas I came up with.

Prototype

I should already have a clear design idea at this point. I'll start with a low-fidelity prototype and then conduct user testing before moving on to the high-fidelity prototype. Finally, I will conduct usability testing.

01

Empathise



1

User Research

Overview

Chosen Task

Behaviour correction in 5-year old.

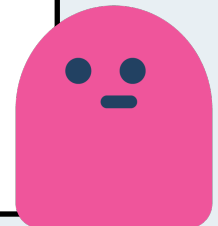
Main Users

5-year old and their parents.

Challenges for 5-years old

At this stage, A 5-year old's motor skills are developing. They will be able to tie shoelaces, use zips and buttons, and brush their hair. Although they enjoys independence, they still require their parents' love and attention. According to an article titled '4-to 5-Year-Olds: Developmental Milestones' a 5 year-old understands and obeys rules; however, they will be demanding and uncooperative at times.

They do not take criticism or discipline well. As a result, it is common for children aged 5 to misbehave and refuse to listen to their parents or caregivers as part of their social development.



Challenges for parents with 5 - years old

It is common for parents to feel tired and frustrated while caring for their children. The responsibility of raising healthy, happy, well-adjusted children can be overwhelming for parents at times. Parents are often afraid to say no to their children, according to an article titled 'The Evolution of Parenting: Five Biggest Challenges Faced by Parents Today.' They don't want to be known as the bad parent.

It is common for children to not listen to their parents as part of their social development. As early as the toddlers years, some children may deliberately misbehave to see how parents and caregivers react. So what can parents do to get their kids to listen to them without having to scold, nag or say no all the time?



2

Background Research

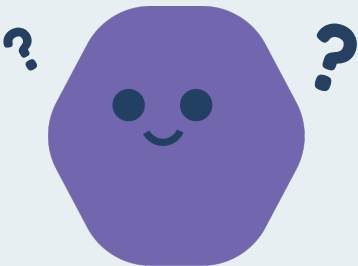
Positive Reinforcement



What is Positive Reinforcement?



It is a method where it involves rewarding to correct a behaviour. Positive reinforcement occurs when certain behaviors results in a positive outcome, making the behavior likely to be repeated in the future. This behavioral psychology concept can be used to teach and strengthen behaviors.



Parents using Positive Reinforcement in their child

Positive reinforcement involves parents recognizing their child's good behavior, either with verbal praise, loving touch or other rewards. It's a way of parents proactively giving their child positive recognition, rather than only giving them feedback when they have done something wrong. Kids as young as 5 years old loves getting attention from their parents. Positive reinforcement helps fill that need to be noticed and cared for while parents teach their toddler which behaviors they should engage in more often.

For example, when a child puts the dishes to the sink, parents praise them for putting the dishes before being told to do so. Or being kind to other people, parents reward them with rewards such as an ice cream.

3

Survey

The purpose of this survey is to better understand what are some of the challenges parents face when raising up their 5-year old.

Target Users

Parents with kids that are 5-year old.

Mode

Surveys (Via Google Forms)

Survey - Findings

This section will include the results of the online survey, which were done by 10 people.

A. Demographics

1

Age Group

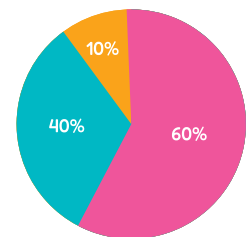
The respondents are ranged from 24 - 35 years old.

2

Occupation

Most respondents are stay-at-home parent (60%) followed by those that are working (30%) and caregivers (10%)

● Working ● Stay-at-home parent ● Caregivers

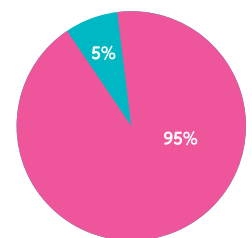


3

How many 5-year old do you have at home?

95% of respondent only have one 5-year old at home. Whereas the other 5% have 2

● One 5-year old ● Two 5-year old



4

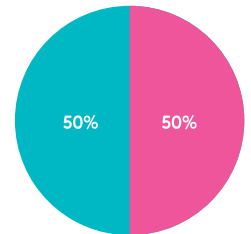
Survey

4

How much time do you spend with your 5-year old every day?

50% of respondents spend 1 - 3 hours each day whereas the other 50% spend around 4 - 5 hours.

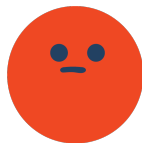
● 1 - 3 hours ● 3 - 5 hours



5

What are some challenges you face when taking care of your 5-year old?

55% of respondents stated that their 5-year-old does not listen when they are told not to do something.

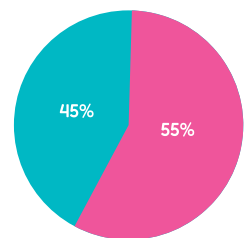


"She never listens when I tell her not to play on her iPad during mealtime. It gets frustrating but I feel bad when I take the iPad away."



"I'm afraid my child will grow up to be rude to me when I scold them. That's why I try not to scold them all the time."

● Unsure on how to discipline ● Don't listen



5

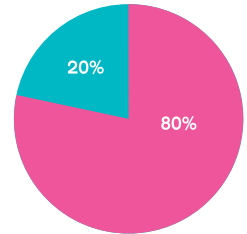
Survey

6

When do you feel the most exhausted while caring for your 5-year-old?

80% of respondents say they are most tired when their 5-year-old throws a tantrum because things don't go their way.

20% of respondent said when their 5-year old don't listen and ignore what they say.



● Throw Tantrum ● Don't listen

7

Positive reinforcement is a method of correcting behavior by rewarding. Praising your 5-year-old for cleaning their toys is an example. Have you tried this method while caring for your five-year-old? If yes, describe the results of using this method.

All respondents mentioned that they use this method at times and the outcome is always good.



"Whenever I reward my son with toys or ice cream, he repeats his good behavior, such as brushing his teeth before going to bed. However, I realise that constantly rewarding him may not always be beneficial because he now has way too many toys."



"I promised my daughter that if she behaved while I was at home for my online meeting, I would take her to the playground." I fulfilled my promise. The next day, she brought up the playground, while I was preparing for another online meeting. She was hoping I would bring her there if she behaved."

6

Survey - Summary Analysis & Conclusion

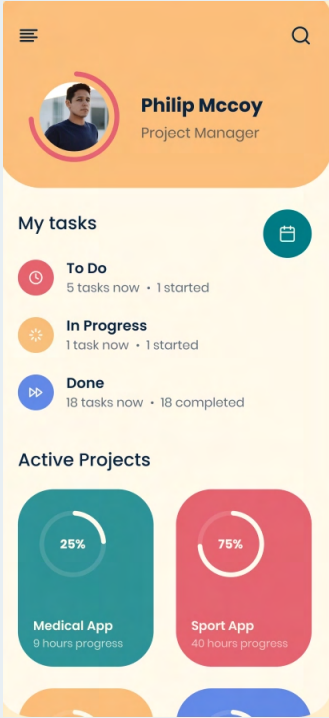
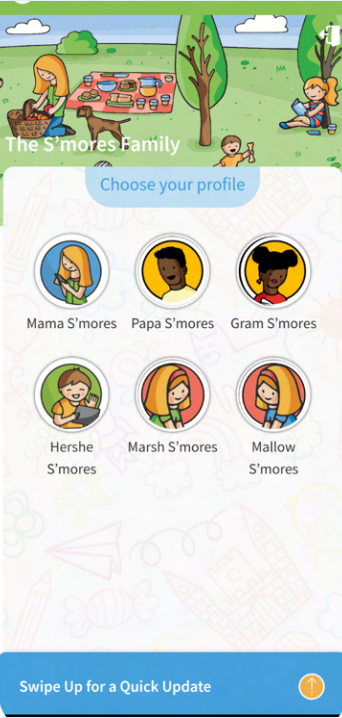
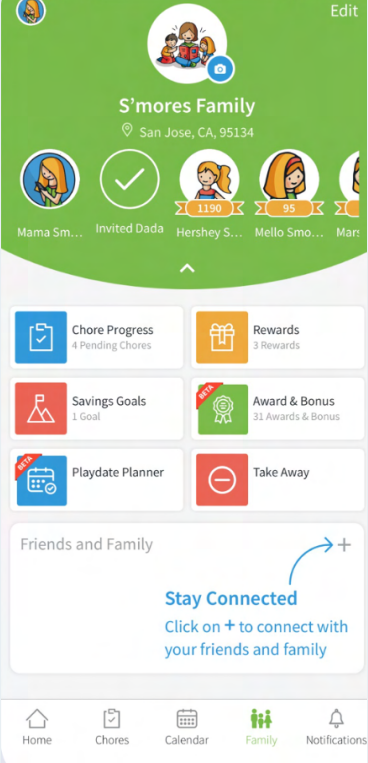
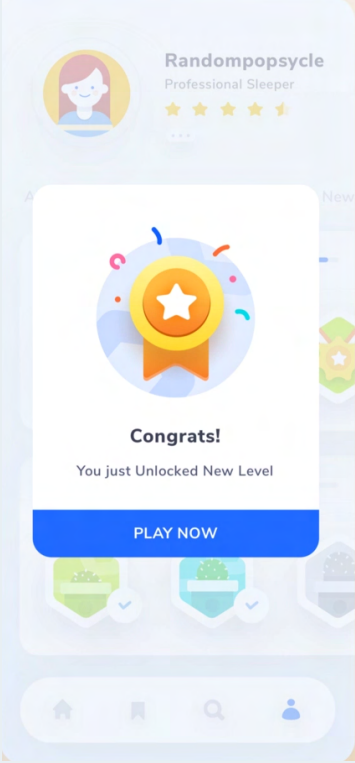
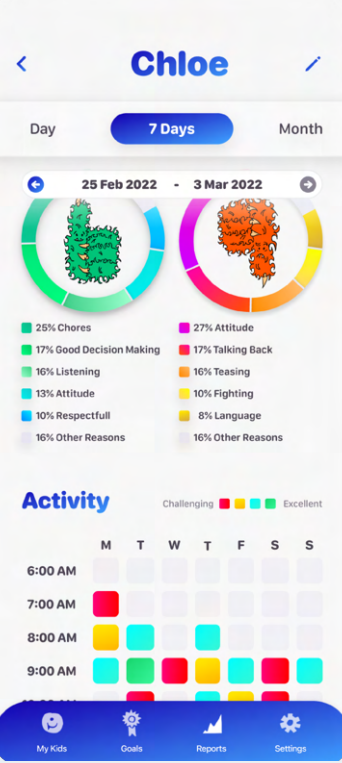
Common Behaviour	<p>It is evident that throwing tantrums and refusing to listen to their parents or caregivers is common for a 5-year old when things don't go their way.</p> <p>This is just one of the many things that can exhaust and frustrate any parent, both stay-at-home and working.</p>
Positive Reinforcement	<p>Almost all respondents are aware that they use Positive reinforcement when teaching their 5-year old. from the survey results it is obvious that they receive positive outcome from using the method.</p> <p>However there are quite a number who mentioned that rewarding all the time may not be that beneficial.</p>
Discipline	<p>According to the results of the survey, most parents or caregivers are unsure of how to discipline their child. As a result, many of them are reluctant to say no. it is obvious that not everyone knows the best way to teach and discipline a 5-year-old.</p>

Conclusion

Being a 5-year-old is difficult because they are at the stage where they are learning a lot about the world around them. Such as comprehending and adhering to rules and fully understanding their own emotions. As a result, when things don't go their way, they may come across as misbehaving and rude to their parents. So, how do they change this behavior? They require the assistance of their parents. Praise, loving touch, and rewards will help a 5-year-old correct their behavior in a positive way.

3

Heuristic Evaluation

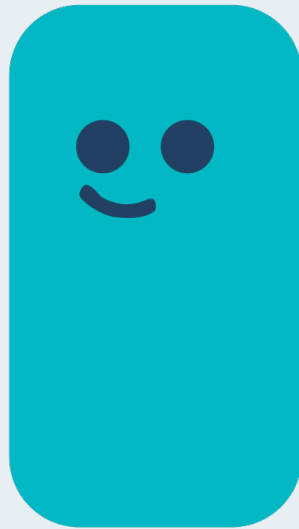


Help and Documentation:
 The User Interface shown does not require a need of additional explanation. It is easy to understand as they use words that are familiar and accepted worldwide. This is one of the things that I will mostly look out for as my users are 5-year old and adults.

Match Between System and Real World:
 The design speaks the users language as the colour choices and icons used are something that a 5-year old would be familiar with.

02

Define

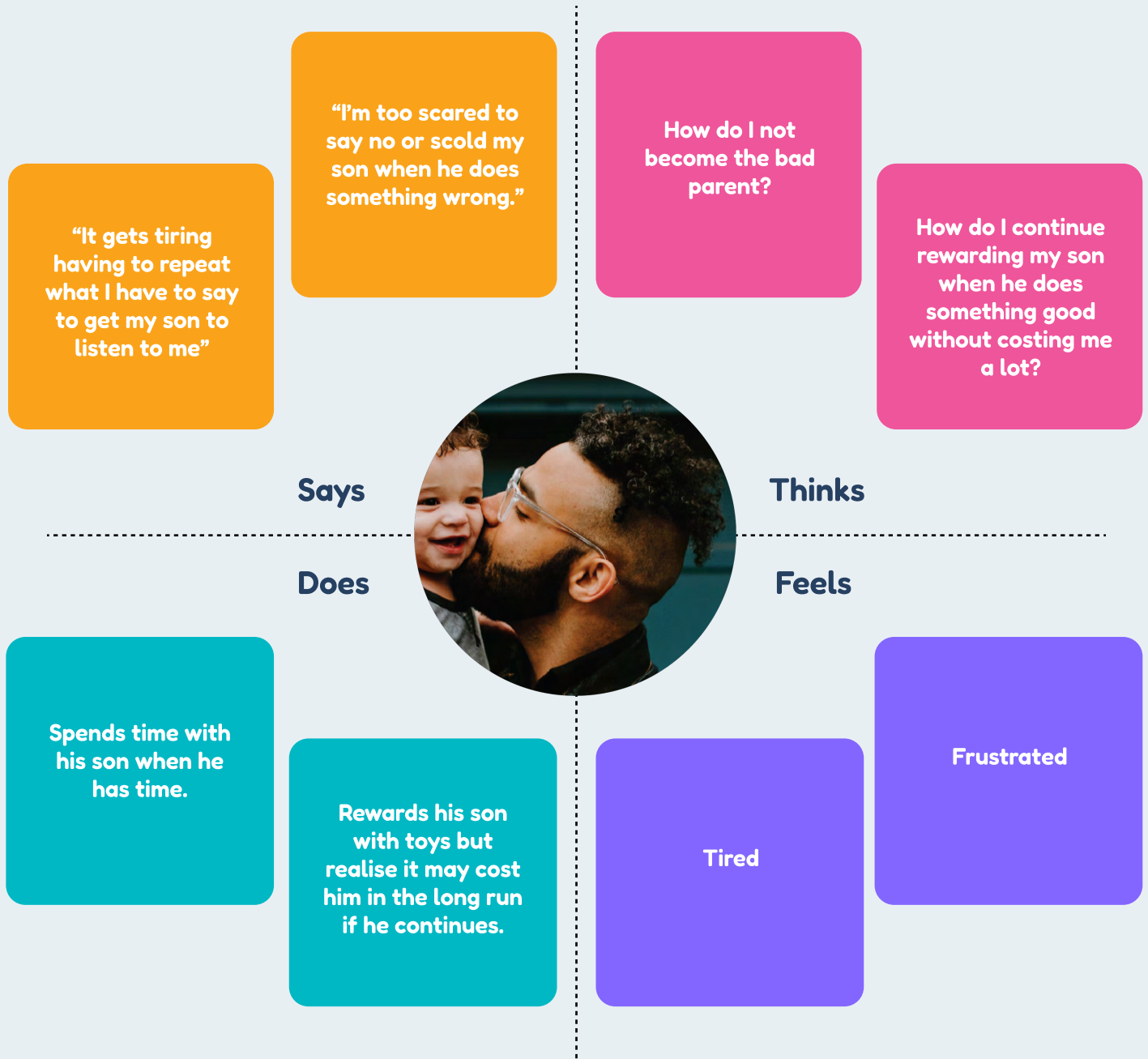


1

Empathy Map

Persona 1: Danial (Parent)

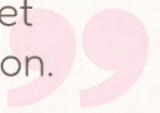
This highlights information and observations from the survey that capture the persona's perspective, Danial.





QUOTE

"I want to be able to control my child when he misbehaves and let him be more mindful of his actions."



DEMOGRAPHIC

Age: 27
Family: Married, 2 kids
Occupation: Software Engineer

BIOGRAPHY

Daniel is married to his wife, and they raised their beautiful child, Mikael, together. When Daniel returned home from work, he spent the majority of his time caring for Mikael. He is a busy man, but he still wants to play an important role in Mikael's life and be there for him.

PERSONAL VALUES

SIMPLICITY

FAMILY

SOCIAL MEDIA



CORE NEEDS

- An app that allows me to set goals for my child.
- An app that allows me to incentivise my child's good behaviour, while penalising poor behaviour.

PAIN POINTS

- Simple UI for me to quickly check my kid's progress.
- When my child behaves well, I like to reward him with toys. However, it can be costly in the long run.

BEHAVIOURS

- I prefer an app that allows me to easily track my child's behavior.
- I like apps that have simple UI but still colorful and entertaining.
- Because I am a busy person, setting up the account should be simple and seamless.

MOTIVATIONS

Easy To Use 90%

Convenience 80%

Simple UI 85%

Fast 85%

1

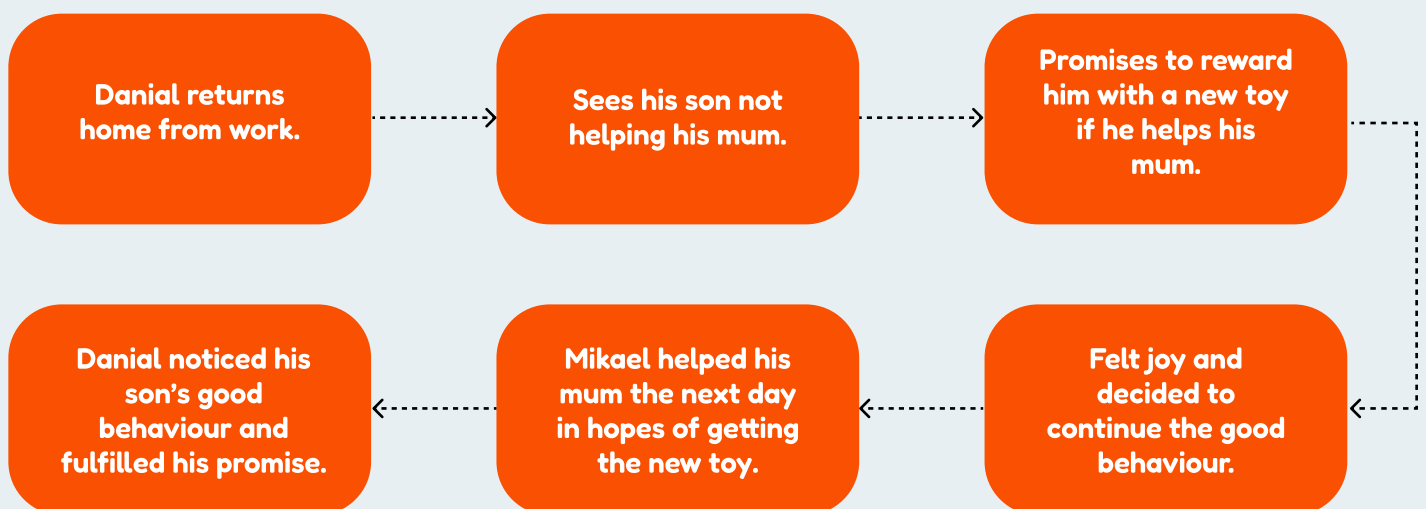
User Journey (Danial)

Scenario

Danial returns home from work to find his son, Mikael, not helping his mother in cleaning up his toys after playtime. Danial felt that his son should help clean and decided to reward him if he helped his mother clean his toys. Danial promises to buy him a new toy if his son helps out. Mikael was overjoyed and promised to help. Mikael helped his mother clean up his toys after playtime the next day, hoping to get the new toy and have his father notice his good behavior. After A few weeks, Danial fulfilled his promised and bought his son a new toy.

User Journey Map

An overview of the steps taken by Danial to correct Mikael's behaviour by rewarding him with a new toy.

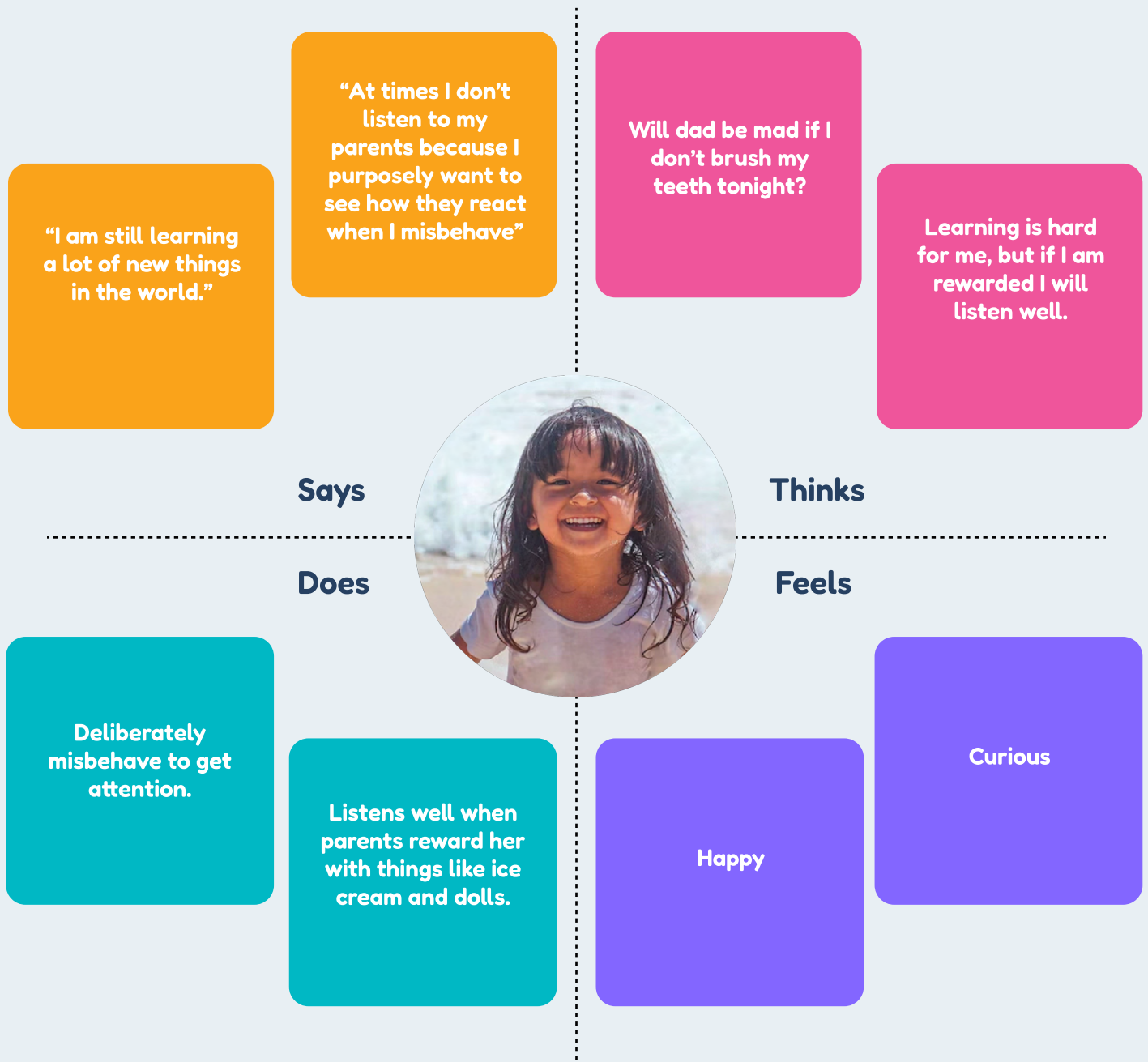


2

Empathy Map

Persona 1: Rosie (5-year old)

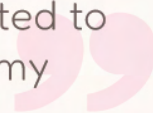
This highlights information from the user and background research that capture the persona's perspective, Rosie





QUOTE

I dislike learning, but when there are rewards involved, I am motivated to do the right thing and correct my behavior.



CORE NEEDS

- I enjoy using apps that has vibrant colours
- I want to be able to set rewards to goals I set for myself in an app.
- I need to have a lot of images and icons in an app to grab my attention

PAIN POINTS

- The app contains numerous and unfamiliar words.
- Too simple design that does not catch my eyes.

DEMOGRAPHIC

Age: 5
Family: Lives with Mum and Dad
Occupation: Student

BIOGRAPHY

Rosie is an adventurous kid who loves playing around. She is mischievous and laughs a lot. She can be a handful at times, but when praised, she listens and behaves well.

PERSONAL VALUES

TOYS

KINDNESS

SOCIAL MEDIA



BEHAVIOURS

- When I open an app, I expect to see images because I am still learning new words and vocabulary.
- Cute animated characters attract me.
- I like colourful designs.

MOTIVATIONS

Easy To Use 95%

Convenience 65%

Simple UI 85%

Fast 85%

2

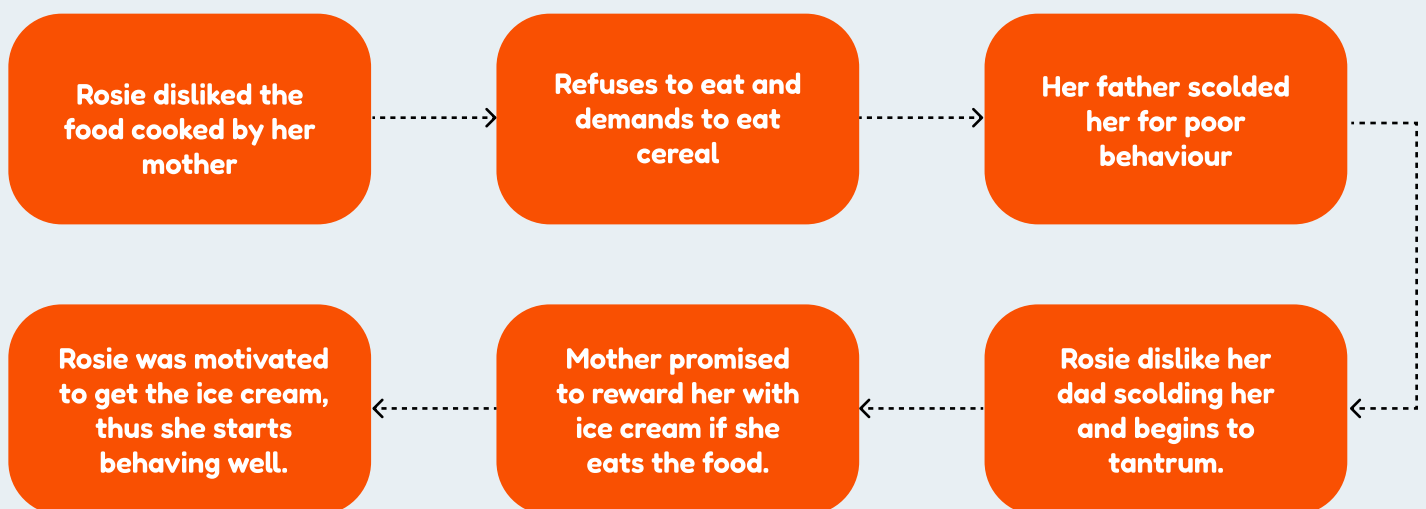
User Journey (Rosie)

Scenario

It is lunch time and Rosie does not like the food cooked by her mother. She refuses to eat and demands to eat cereal. Her father scolded her and told her to stop whining. Rosie dislikes it when her father scolds her, so she refuses to listen and begins to tantrum. Her mother said that if she eats the food, she will be rewarded with ice cream after lunch. Rosie was motivated to get the ice cream, so she starts behaving well and ate her food.

User Journey Map

An overview of the steps taken for Rosie to correct her behaviour after positive reinforcement is involved.



3

Empathy Map

Persona 1: Ruben (5-year old)

This highlights information from the user and background research that capture the persona's perspective, Ruben





“ QUOTE

I listen to my parents well, but at times I get tired trying to always obey their rules if they don't notice it.

CORE NEEDS

- I want to be able to have an app where I can set goals for myself.
- I want mum and dad to notice my hardwork through the app
- I want to see my progress in the app.

PAIN POINTS

- Too much information in an app.
- Boring app with not much engagement.

DEMOGRAPHIC

Age: 5
Family: Lives with Mum and Dad
Occupation: Student

BIOGRAPHY

Ruben is a well-behaved kid. He likes spending time with his family and friends. He uses his ipad often to play games but still set some time to help his parents around with the house chore.

PERSONAL VALUES

IPAD

FAMILY AND FRIENDSHIP

SOCIAL MEDIA



BEHAVIOURS

- I like playing games on my ipad. At times, I don't realise how much time I have spent. I wish I could track how long I play.
- I have a tendency to do things to impress my parents.

MOTIVATIONS

Easy To Use  95%

Convenience  85%

Simple UI  85%

Fast  85%

3

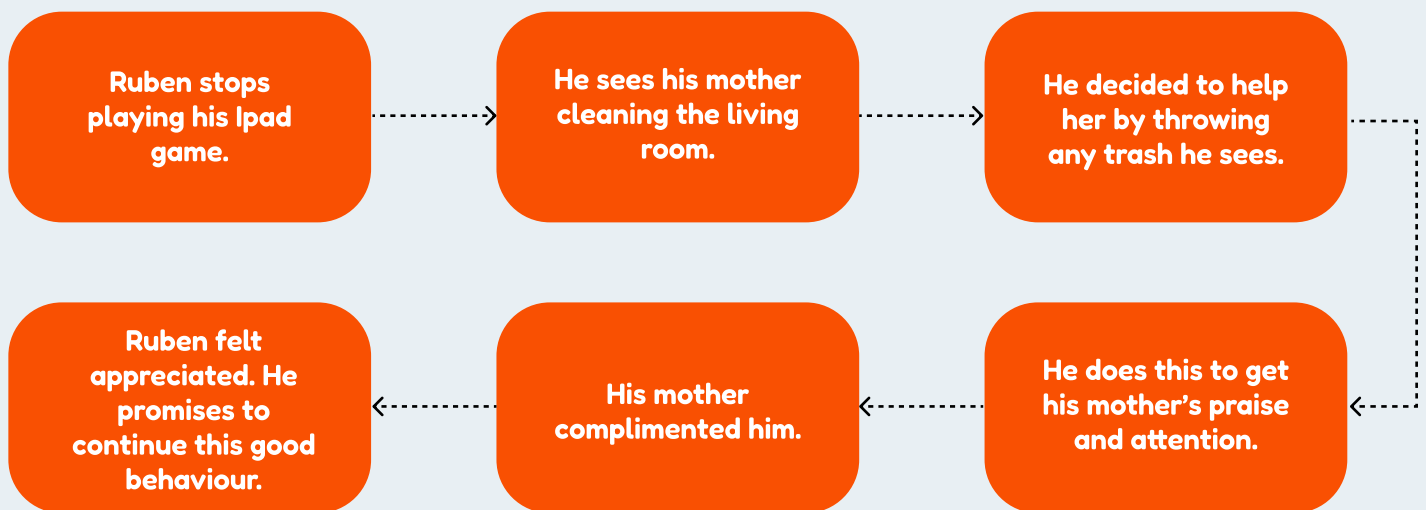
User Journey (Ruben)

Scenario

Ruben stops playing his Ipad game when he notices his mother cleaning the living room. He decided to help her by throwing any trash he saw on the floor. He does this in the hopes of getting his mother's praise and attention. He felt appreciated and loved when his mother said, "Good job." He promises himself that the next time he sees his mother cleaning, he will help her.

User Journey Map

An overview of the steps taken by Danial to correct Mikael's behaviour by rewarding him with a new toy.



03

Ideate



1

Final Idea

Victory Smile



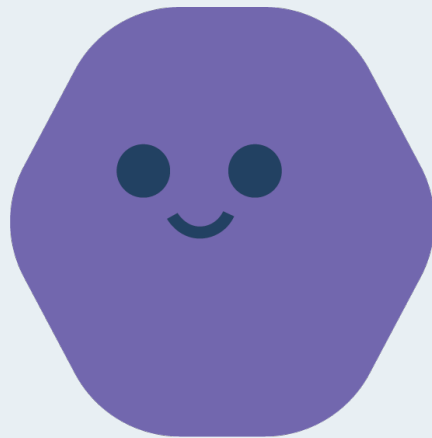
This app sets up a system for parents and children to discuss, manage, and encourage good behavior. The app creates a reward system based on performance and behavior, allowing parents to award smiley faces to their children when they are on good behavior, complete tasks, or finish chores. Positive reinforcement helps children of all ages develop self-esteem and confidence. When a child knows that their parents noticed and acknowledged their good behavior with a smiley face, the effect is even greater.

For example, the parent could offer "more playtime" in exchange for ten smiley faces, or a "new toy" in exchange for thirty. This app teaches children to be aware of their behavior and what is expected of them, as well as the rewards and consequences of their actions.

The app allows children to actively track their progress, allowing them to see where they need to improve their behaviour. Children can even see which good behaviours are most important to adopt by looking at the number of smiley faces awarded for each goal, which gives them a better idea of which good habits to adopt.

04

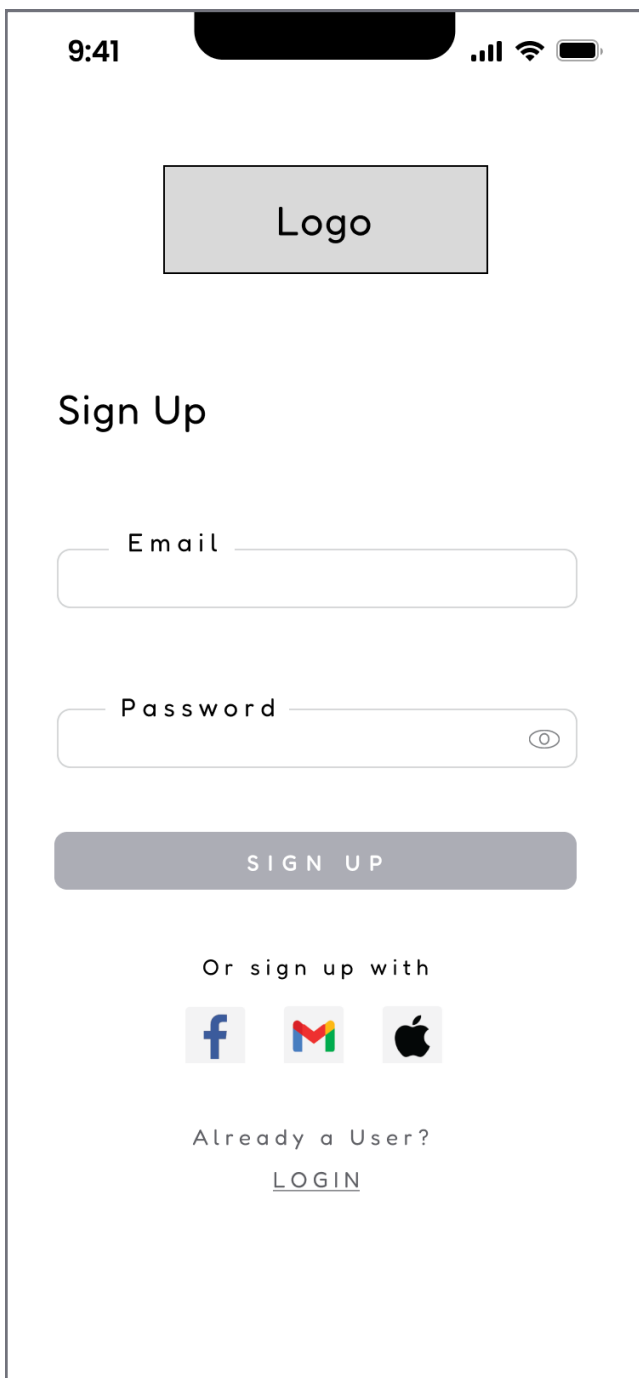
Prototype



1

Sign-up Page

This is the sign-up page where new users are able to create a new account.



9:41

Logo




Sign Up

Email


Password

SIGN UP

Or sign up with

Already a User?
[LOGIN](#)



9:41

Logo


Sign Up

Email

Password

SIGN UP

Or sign up with

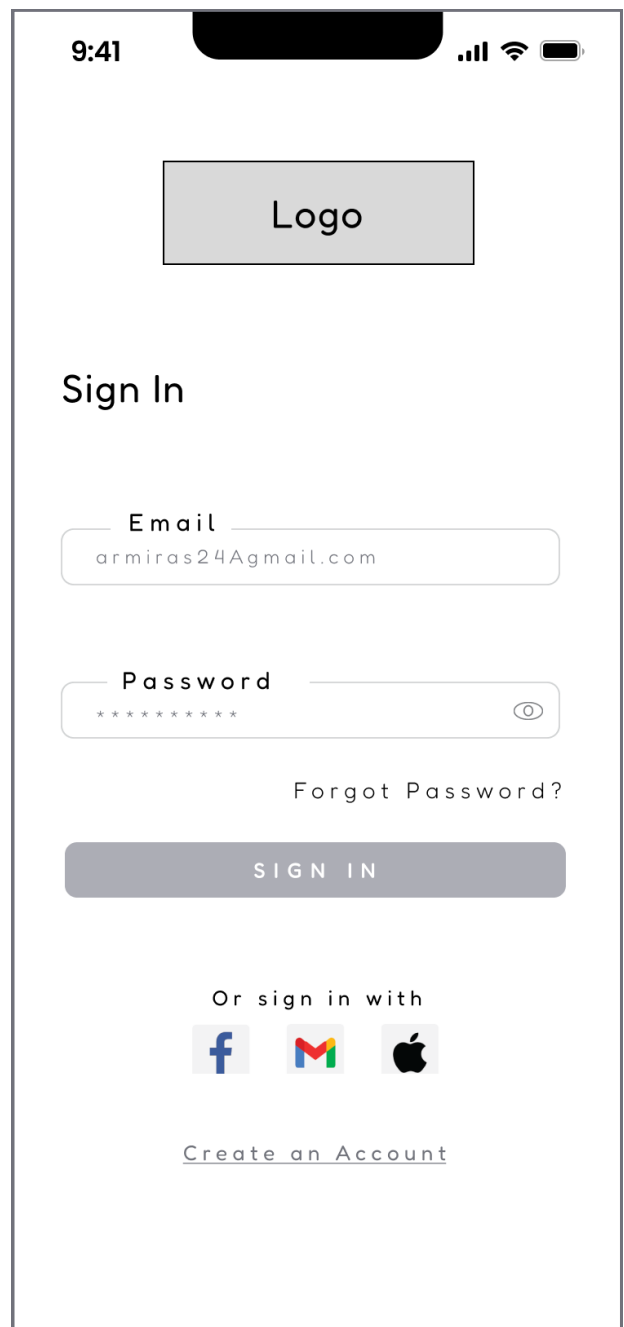
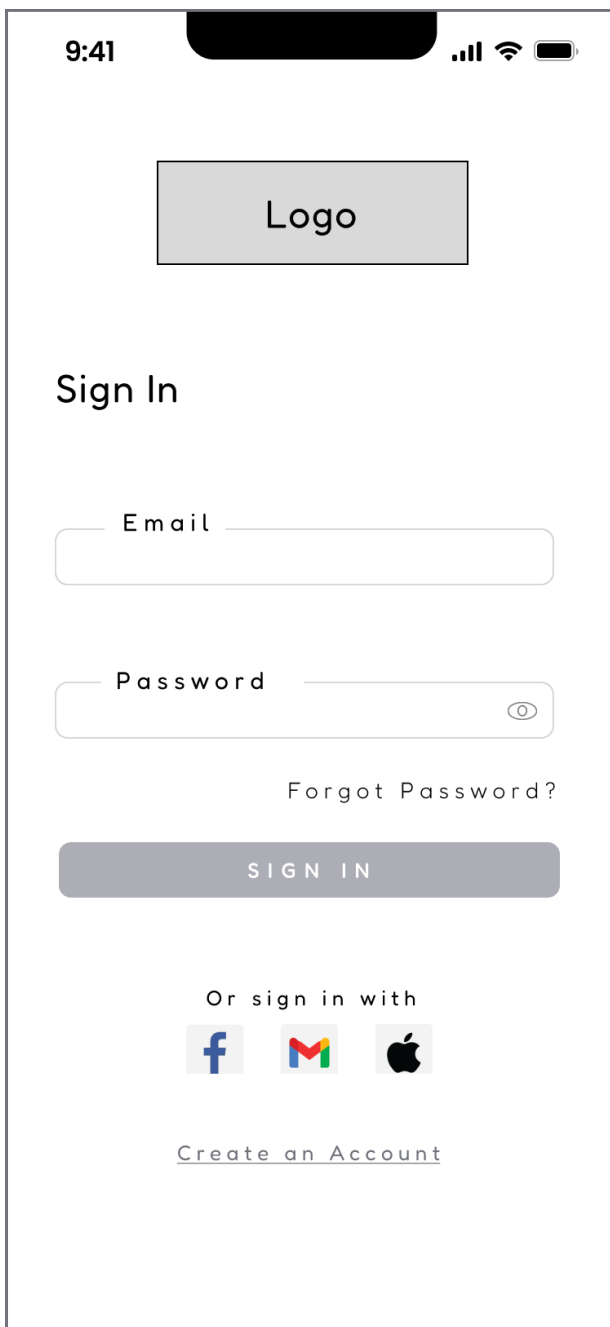
  

Already a User?
[LOGIN](#)

2

Sign-in

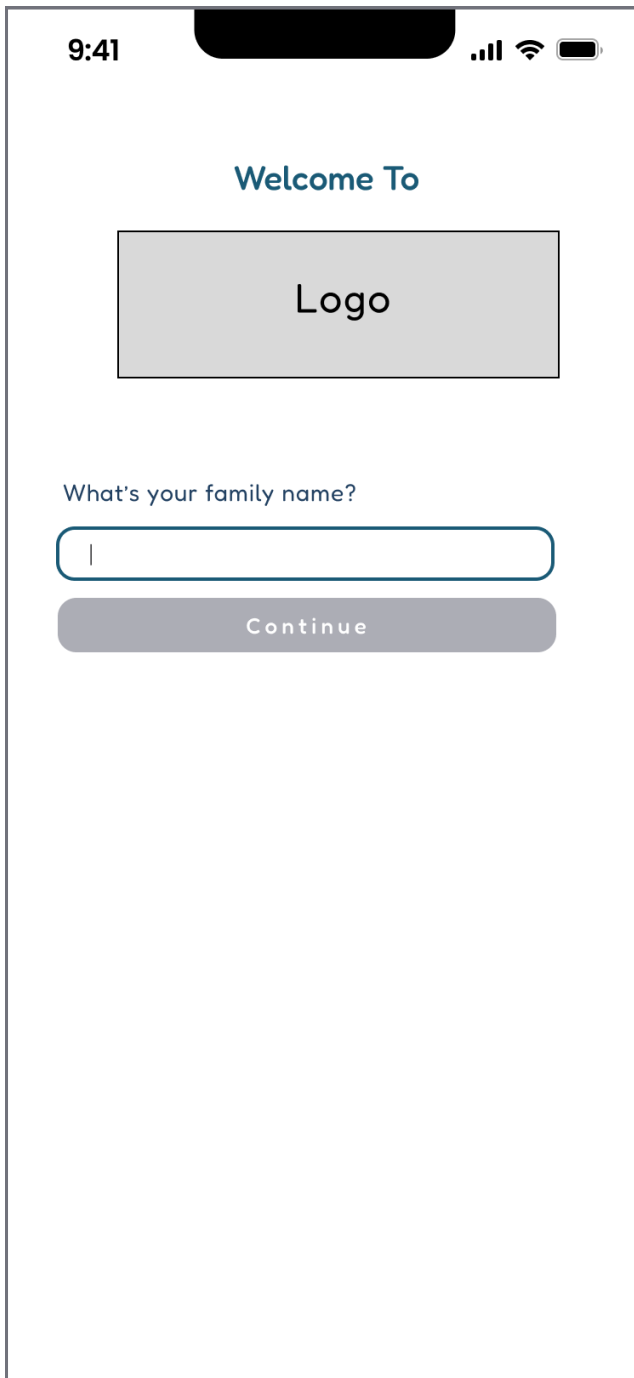
This is the sign-in page where users can sign in to their existing account.



3

Welcome Page

Users get started with a welcome page that instructs the user to write down their family name.



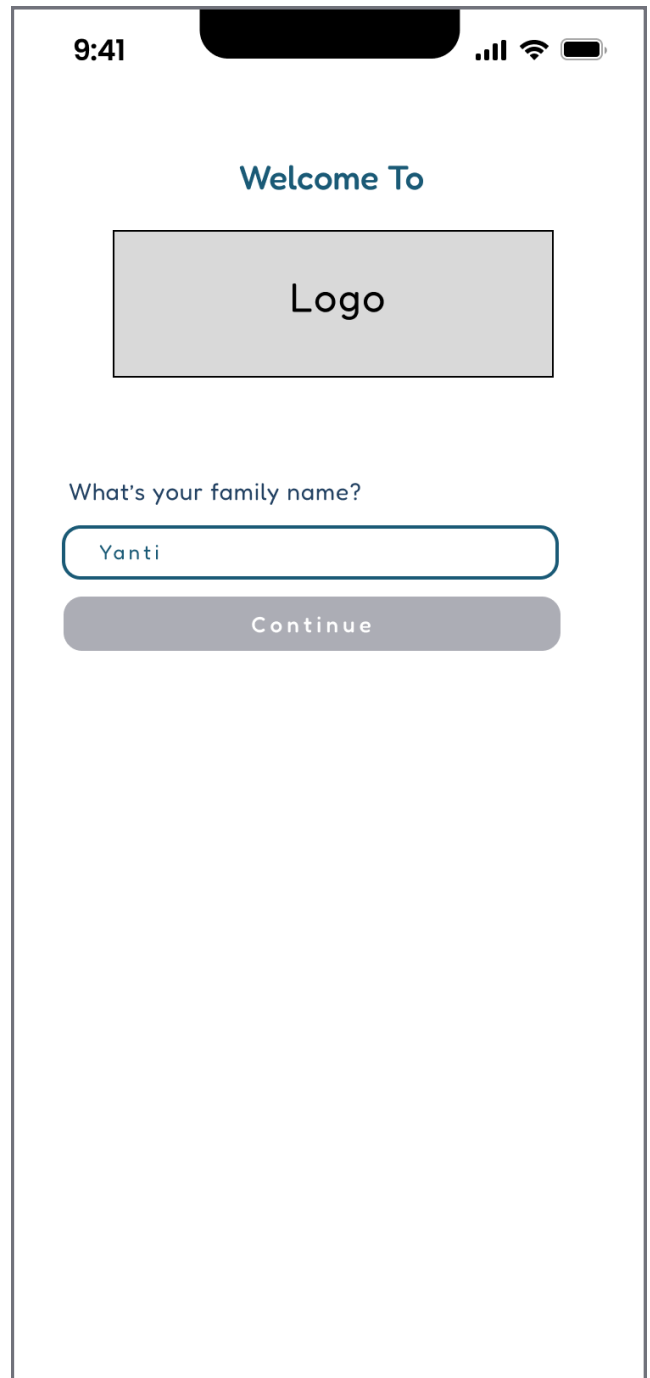
9:41

Welcome To

Logo

What's your family name?

Continue



9:41

Welcome To

Logo

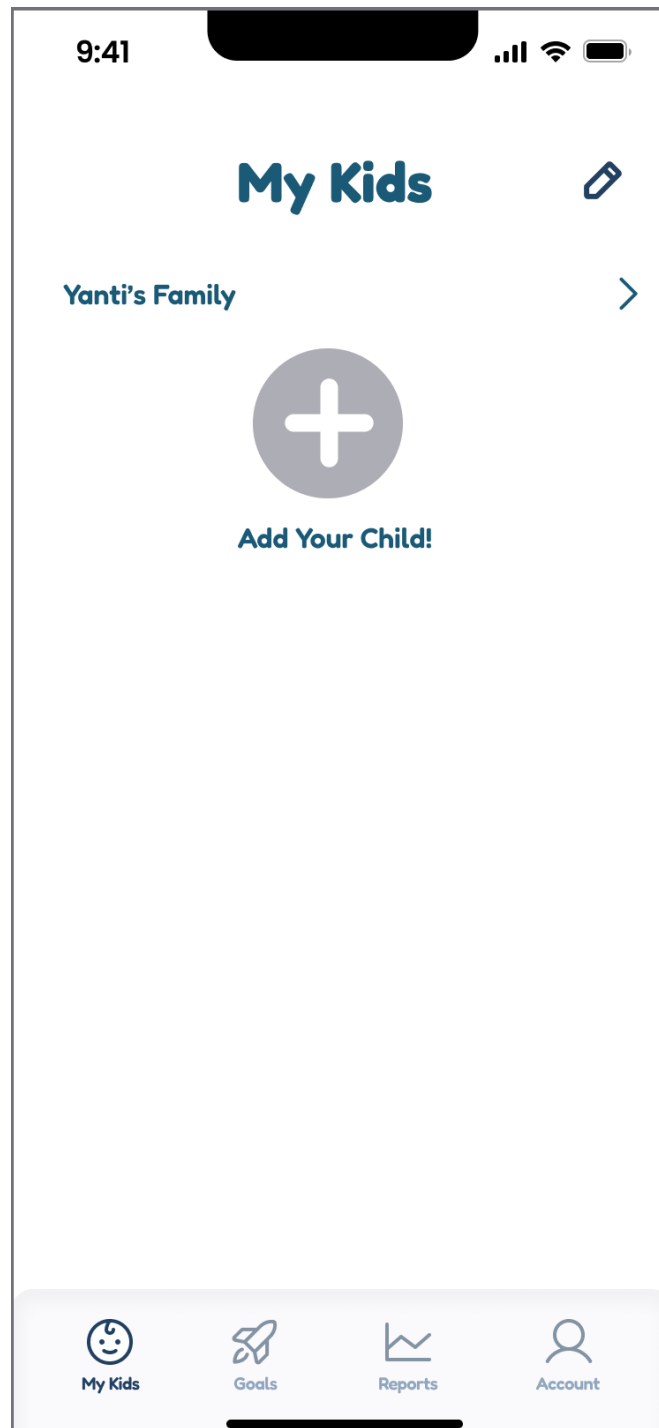
What's your family name?

Continue

4

My Kids Page

This is the “My Kids” page where users can add in their child into the system.



5

“Add Your Child” Page

After clicking on the “Add Your Child!” button. Users will be led to this page. Where they will have to input their child’s name and gender.

9:41

<

Add Your Child!

What's their name?

Next

What's their gender?

Next

9:41

<

Add Your Child!

What's their name?

Next

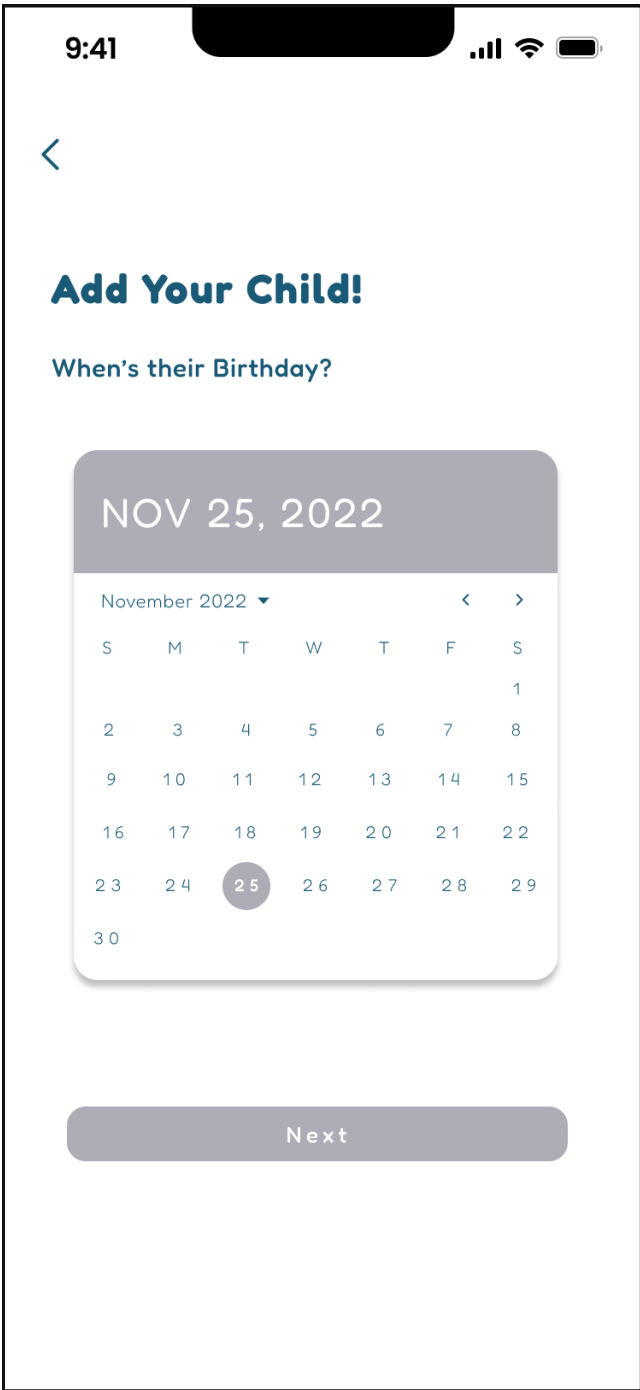
What's their gender?

Next

6

“Add Your Child” Page

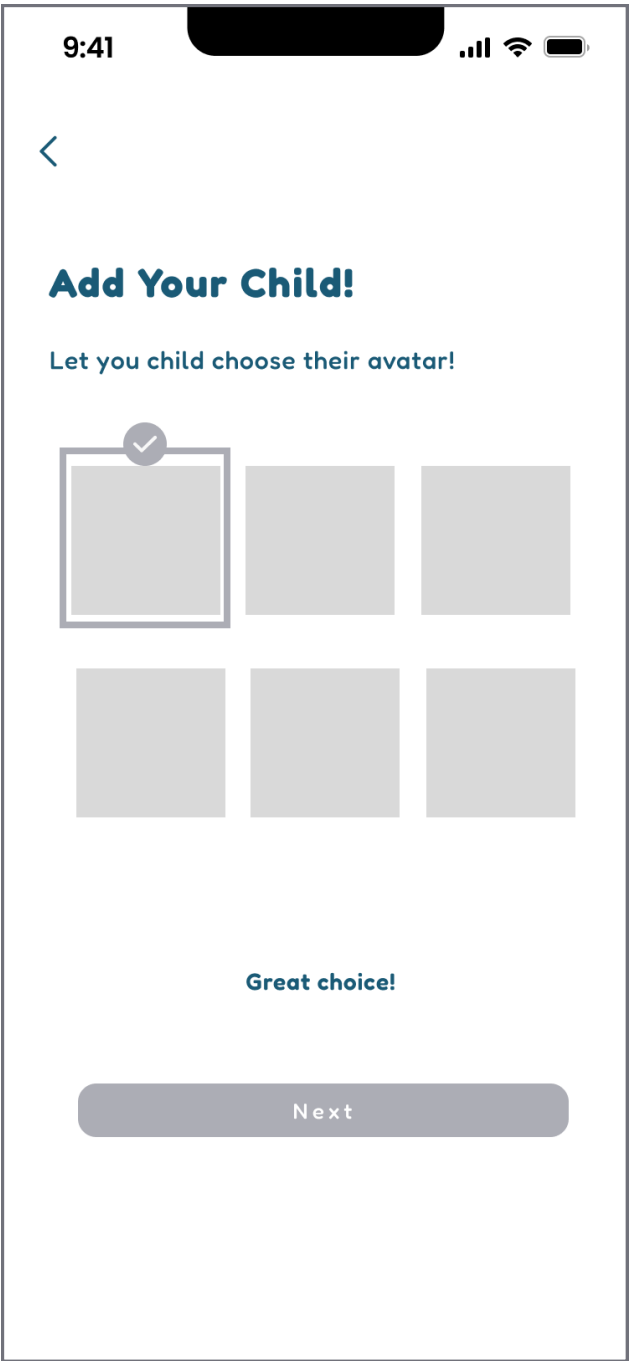
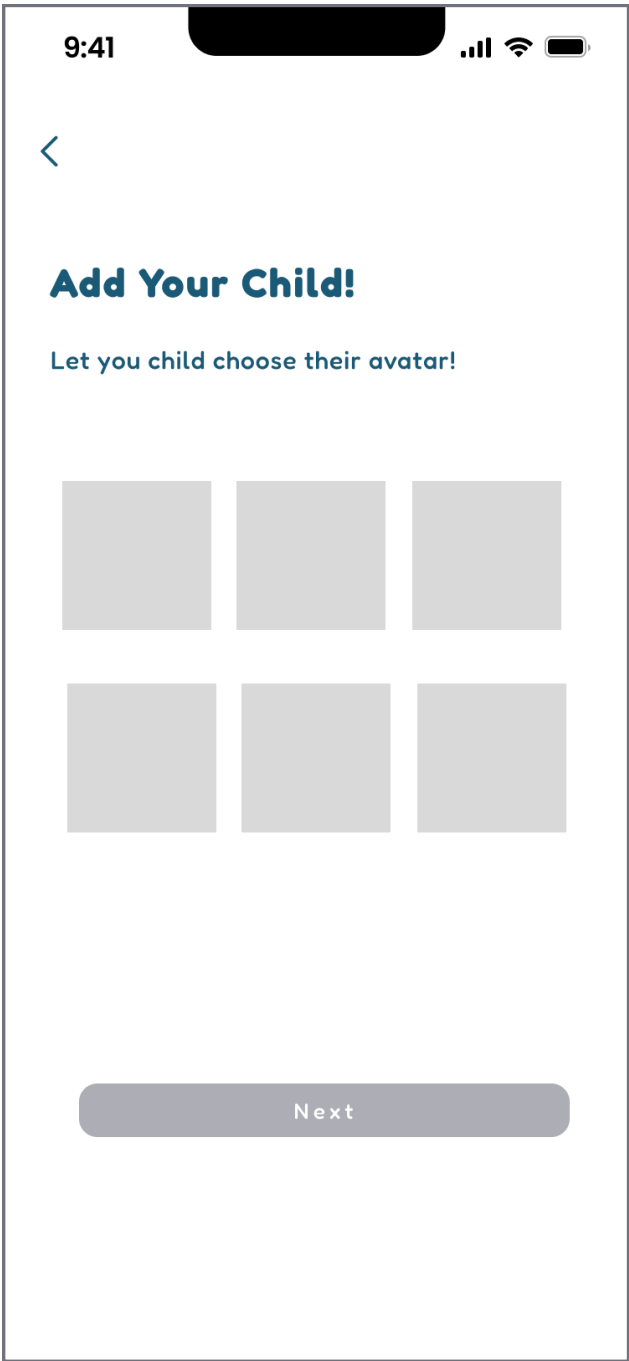
After inputting the child’s name and gender, parents will then have to select their child’s birthdate.



7

“Add Your Child” Page

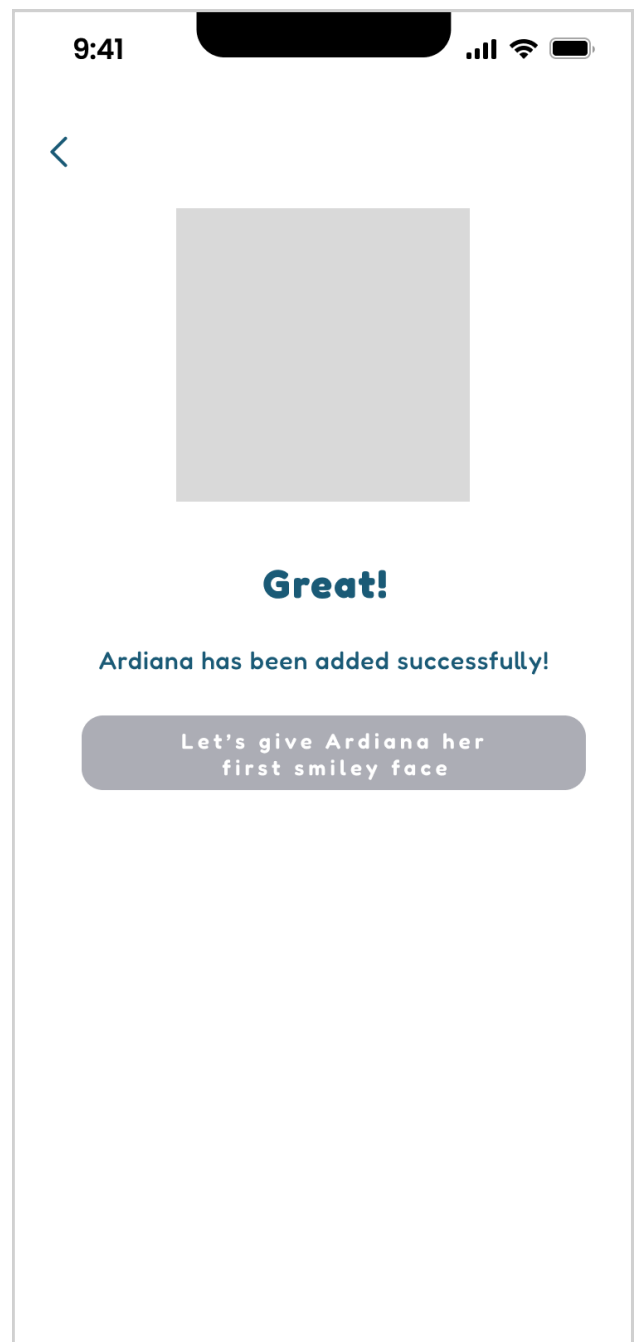
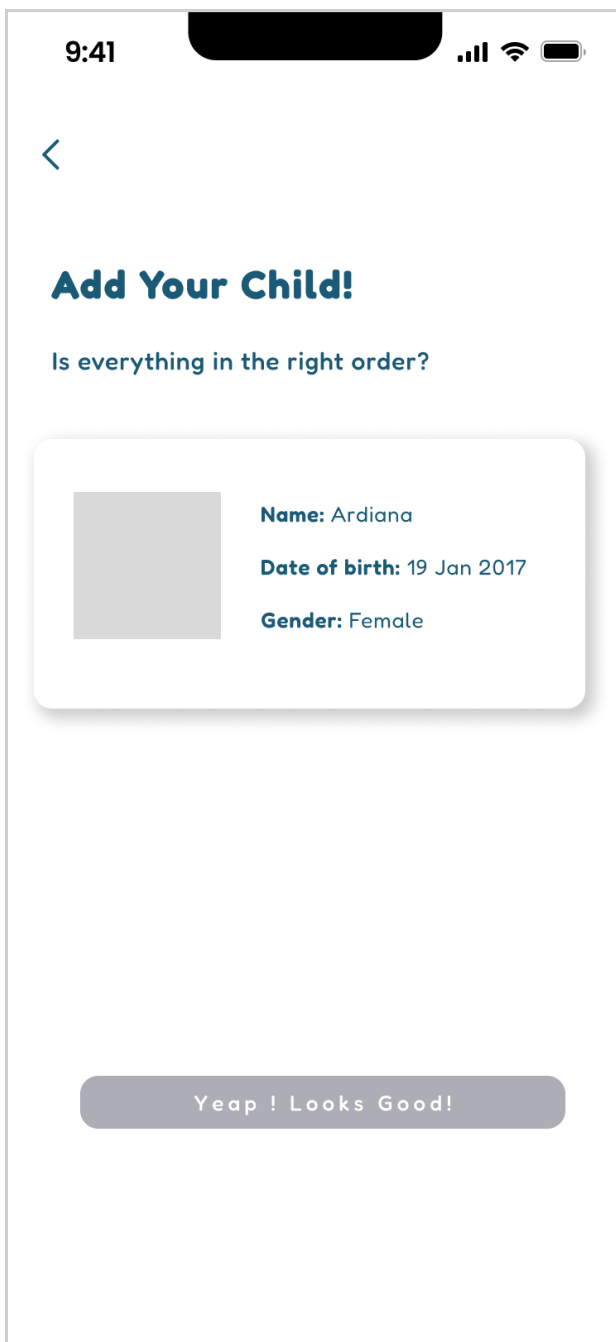
Then users can select the child’s avatar. Parents can let their child choose the avatar if they want to.



8

“Add Your Child” Page

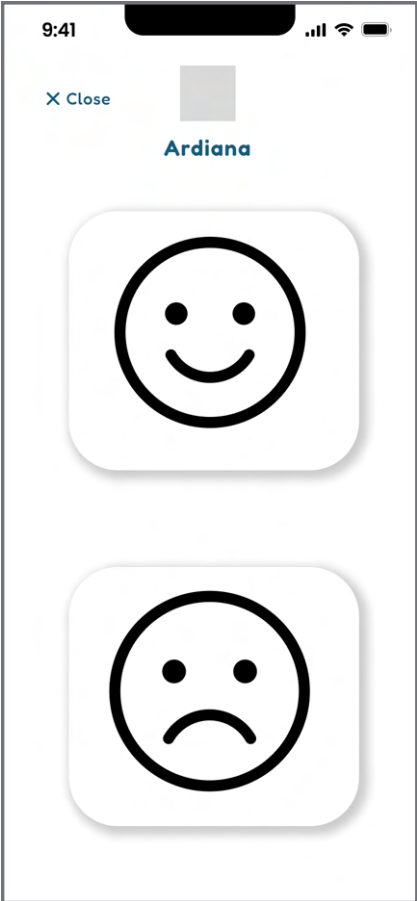
After everything is complete the app will confirm the details with the users. Once everything is confirmed, a pop up will appear to indicate that the child has been successfully added into the system.



9

Adding Smiley Face

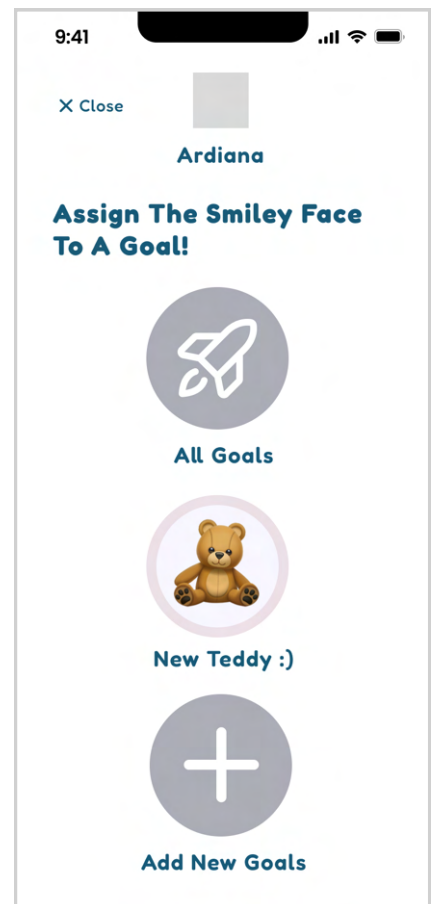
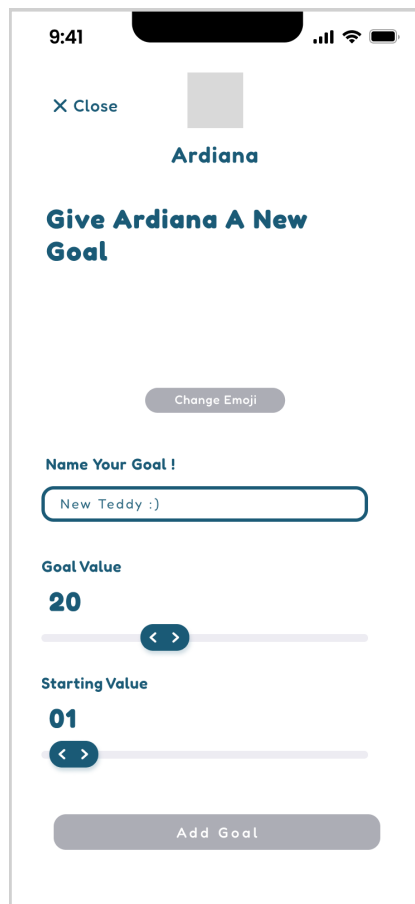
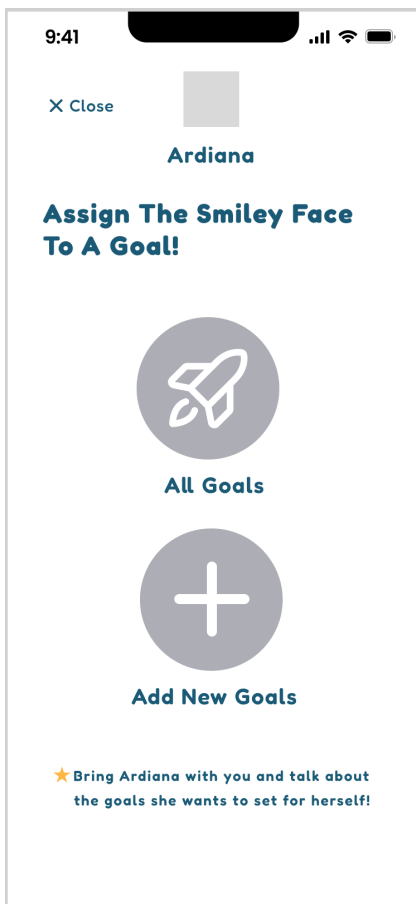
After successfully adding their child, users can add a smiley face in this page.



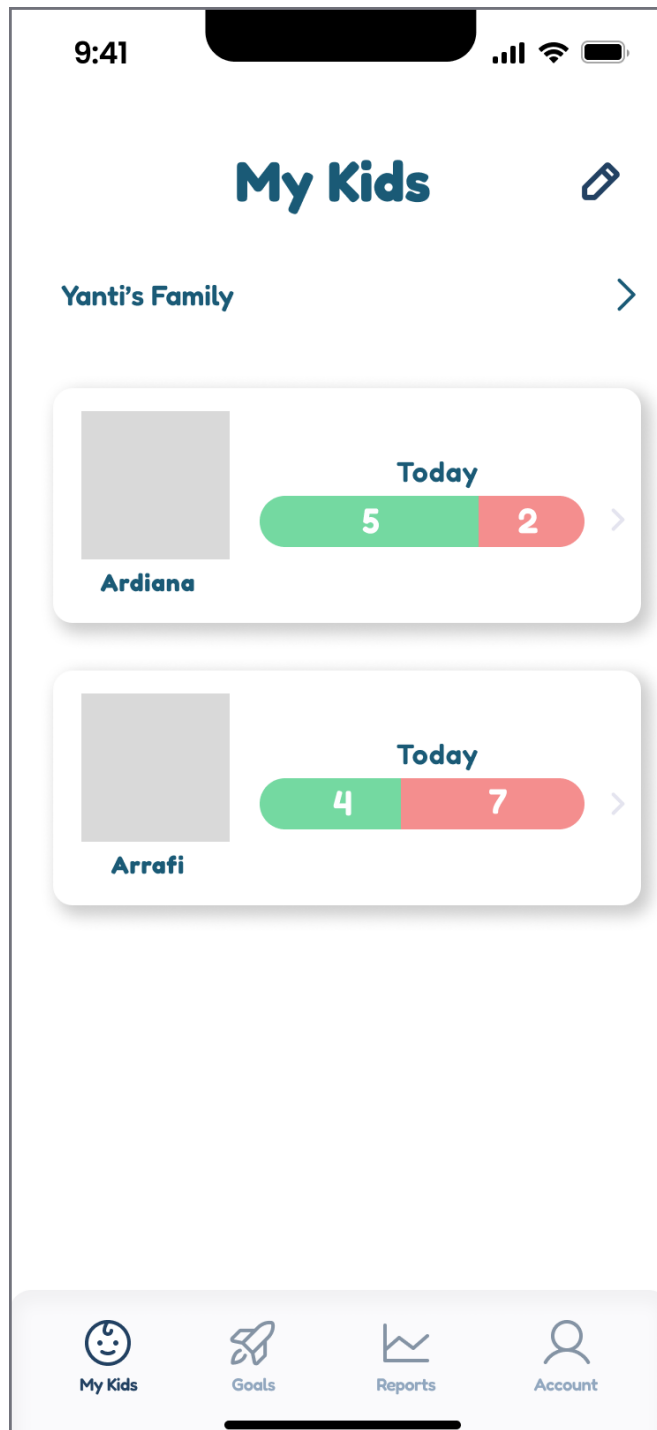
10

Assign Smiley face to a goal

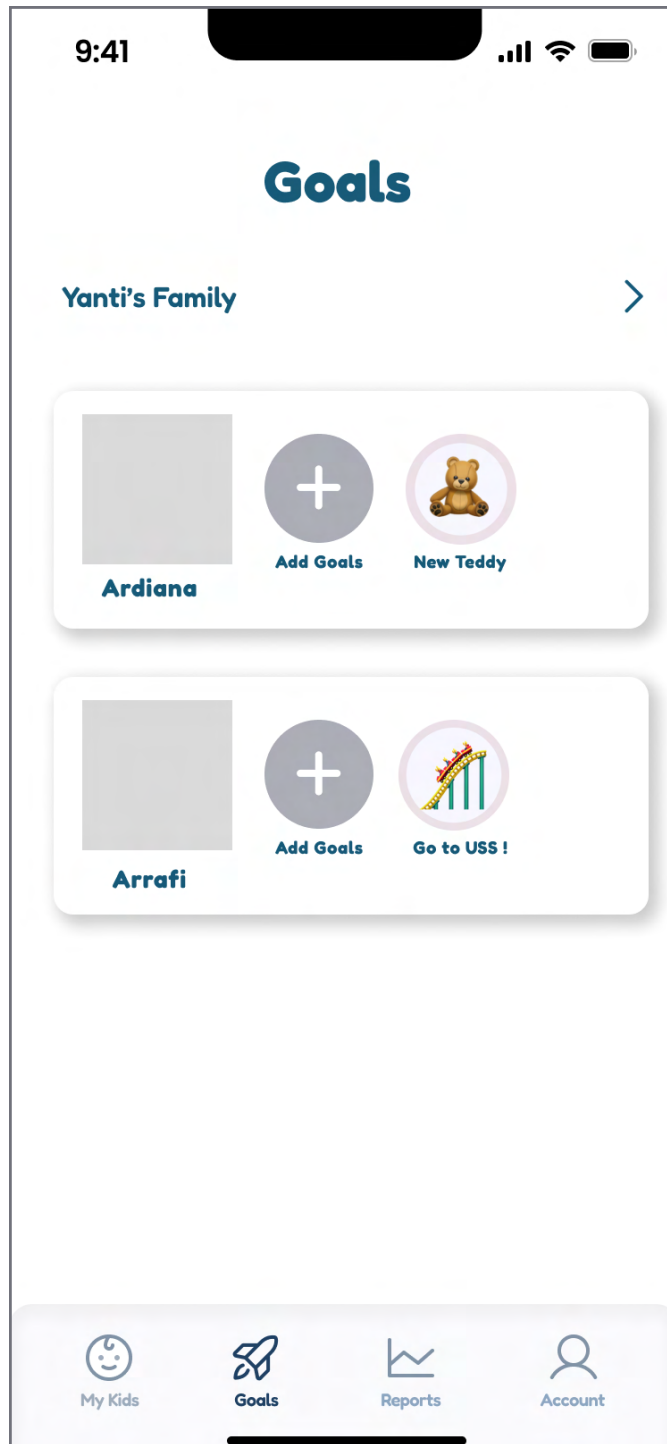
After selecting the Smiley face, users will then need to assign a goal to the smiley face. They can add a new goal using the button indicated with a "Add New Goals".



After everything is completed, the “My Kids” page will be updated as shown below.



All the goals assigned to each child is shown here.



1

High-Fidelity Mockup

This section will contain the high-fidelity screens that has been created and asjusted accordingly based on my research findings and surveys.

Figma Prototype

A. Link to Figma File

[Click here](#)

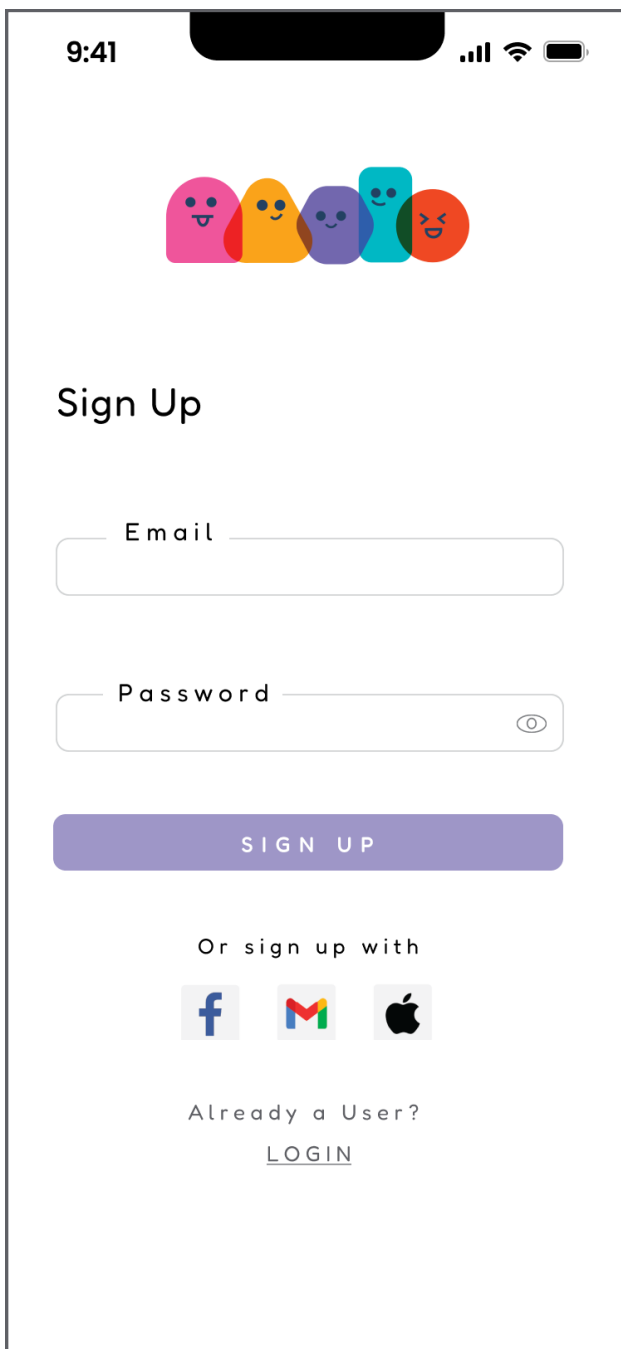
B. Link to High-Fidelity Prototype

[Click Here](#)


2

Sign-up Page

This is the sign-up page where new users are able to create a new account.



9:41






Sign Up

Email

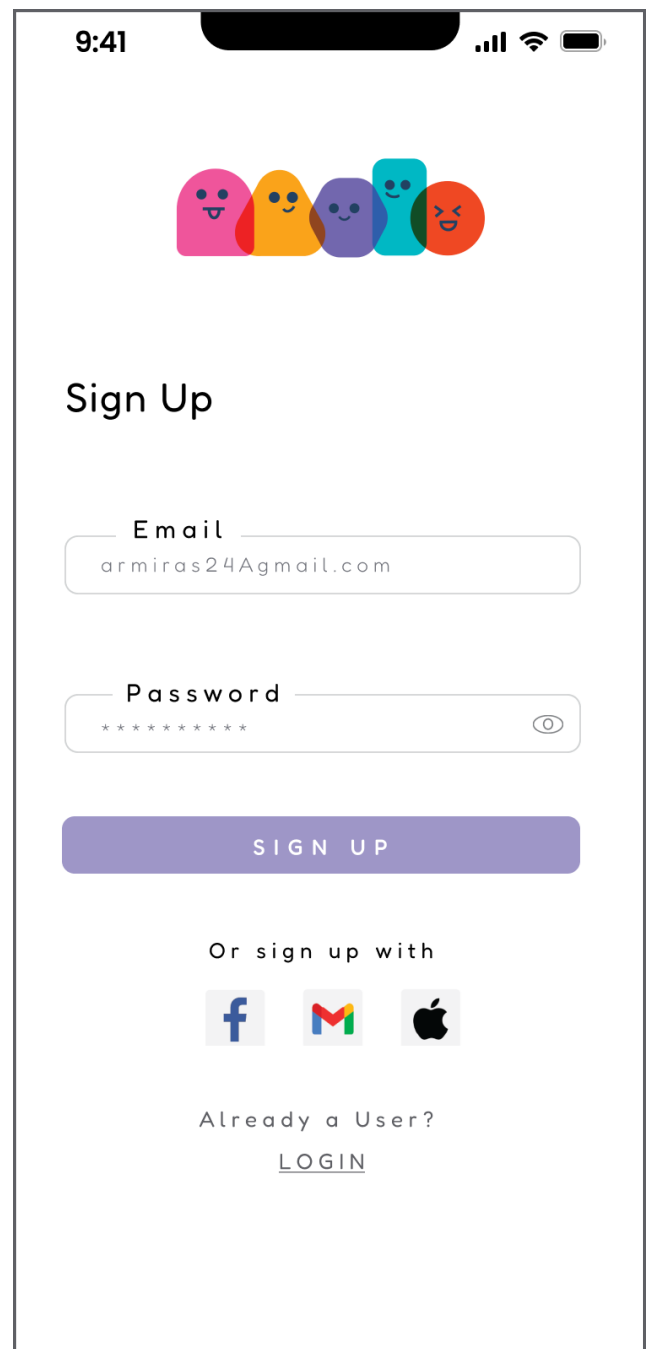
Password

[SIGN UP](#)


Or sign up with

Already a User?
[LOGIN](#)



9:41






Sign Up

Email

Password

[SIGN UP](#)

Or sign up with

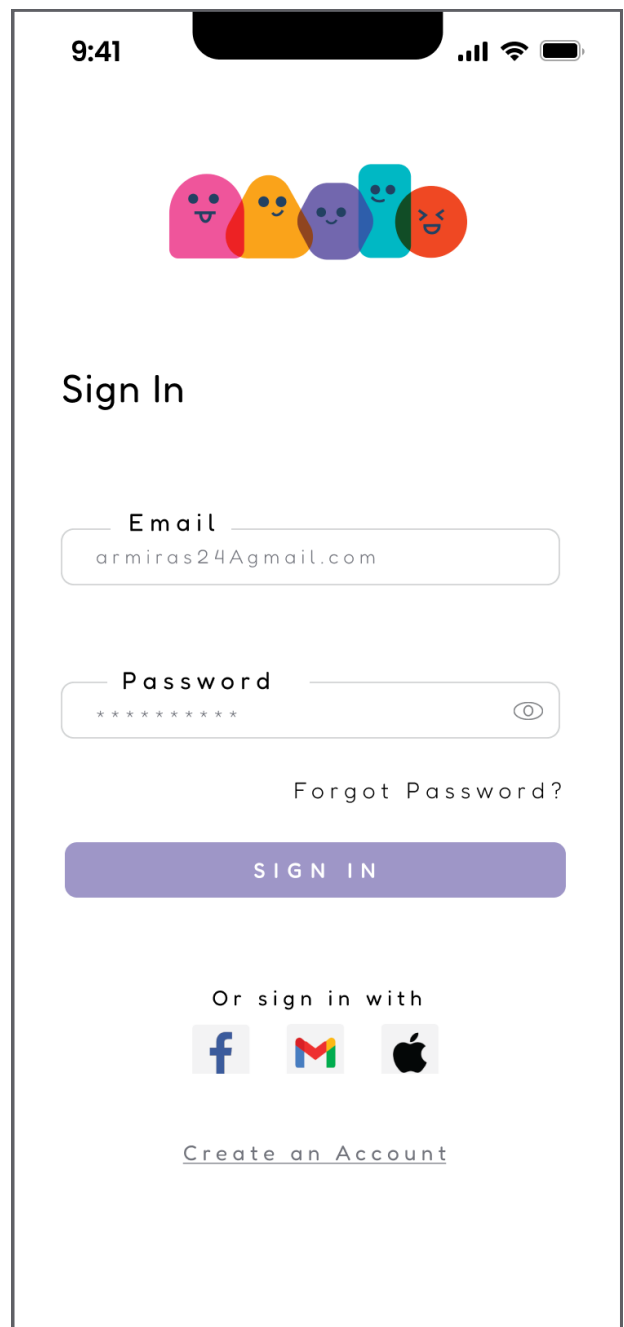
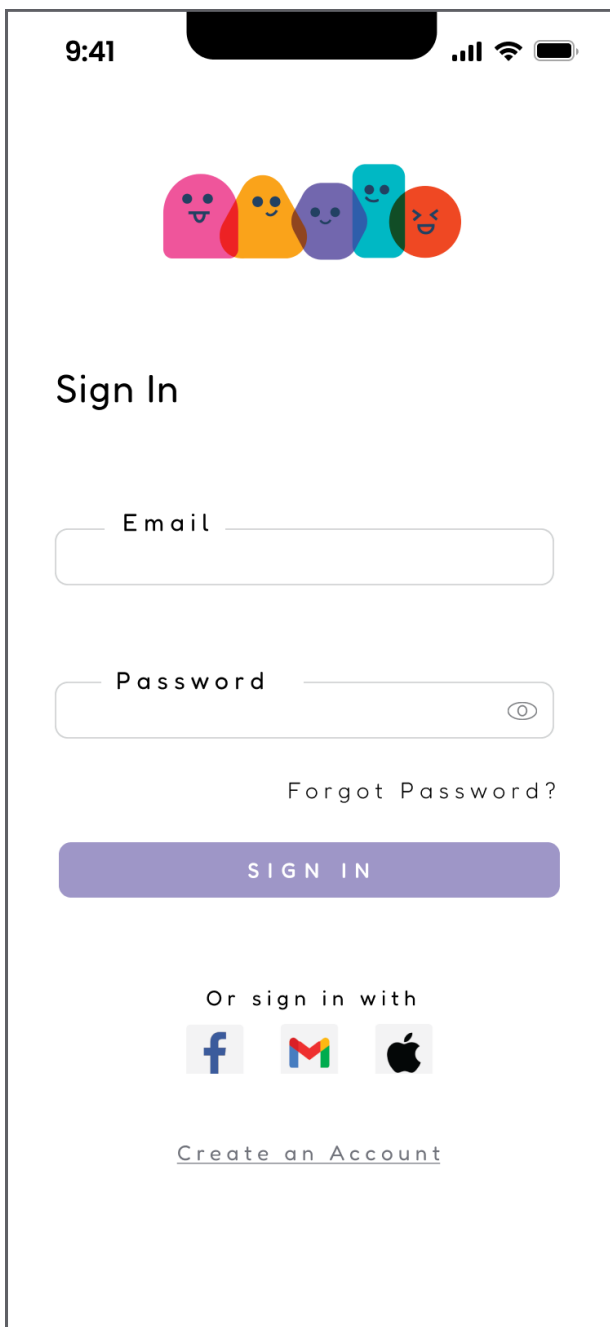
  

Already a User?
[LOGIN](#)

3

Sign-in

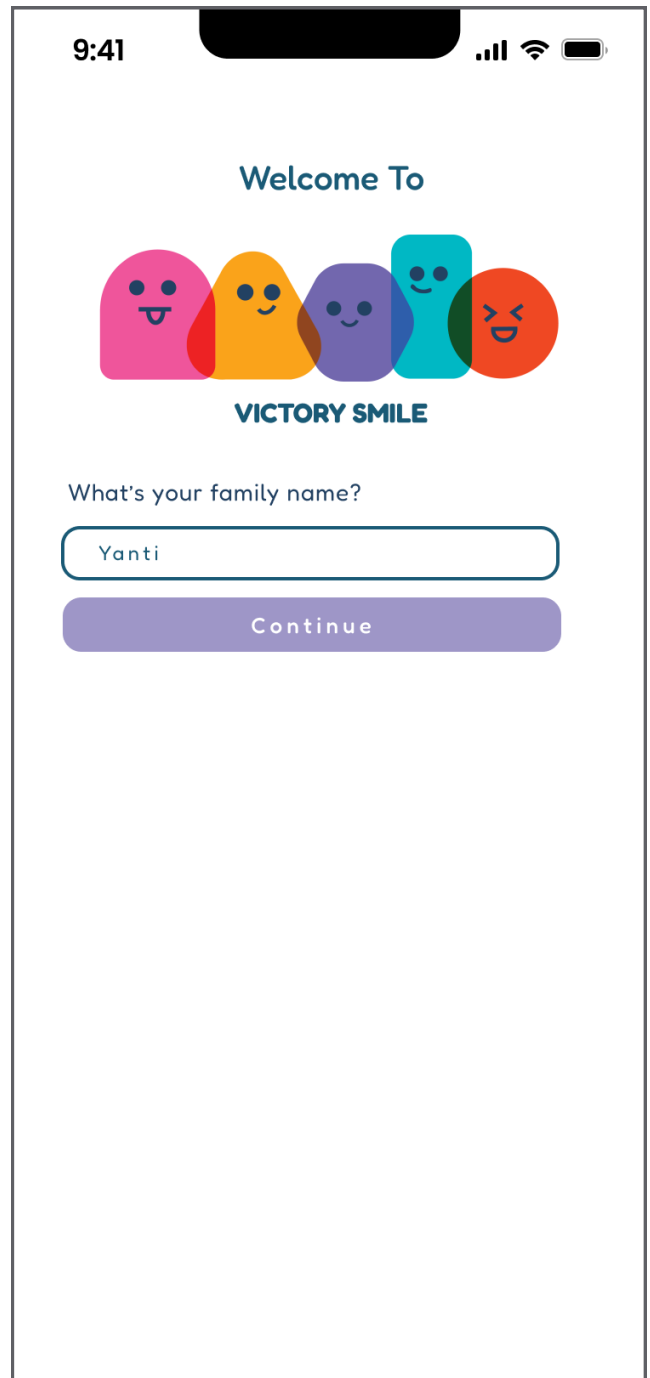
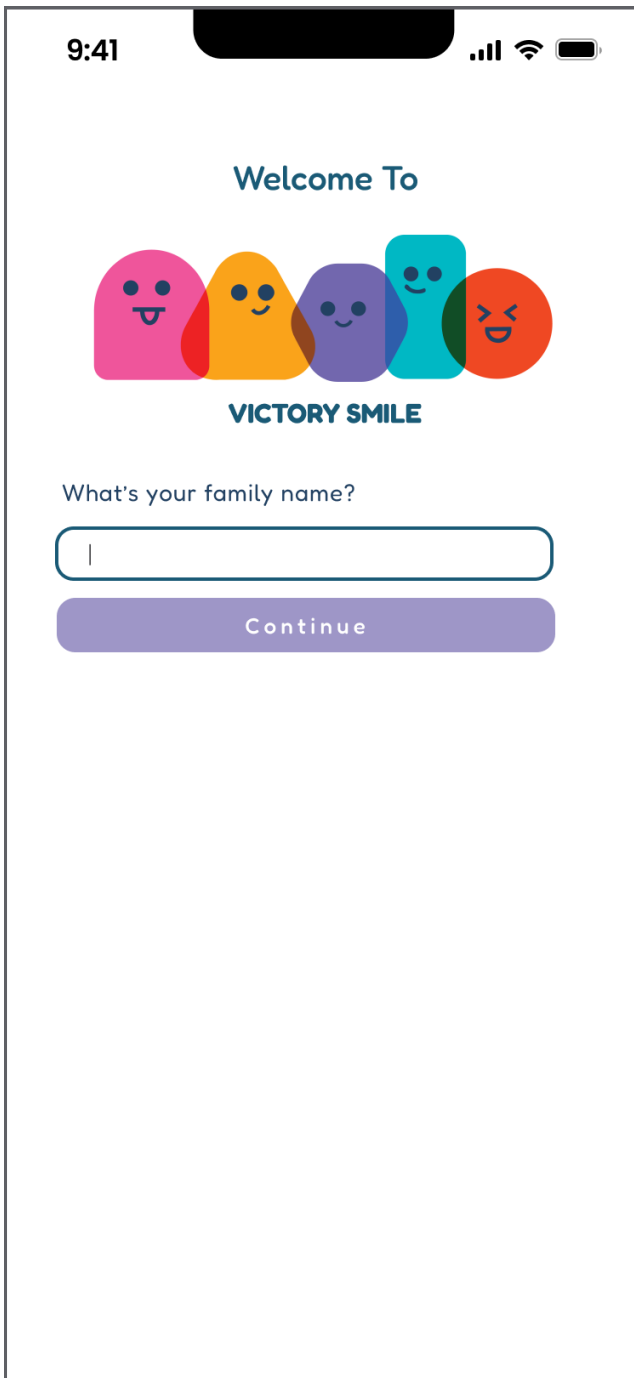
This is the sign-in page where users can sign in to their existing account.



4

Welcome Page

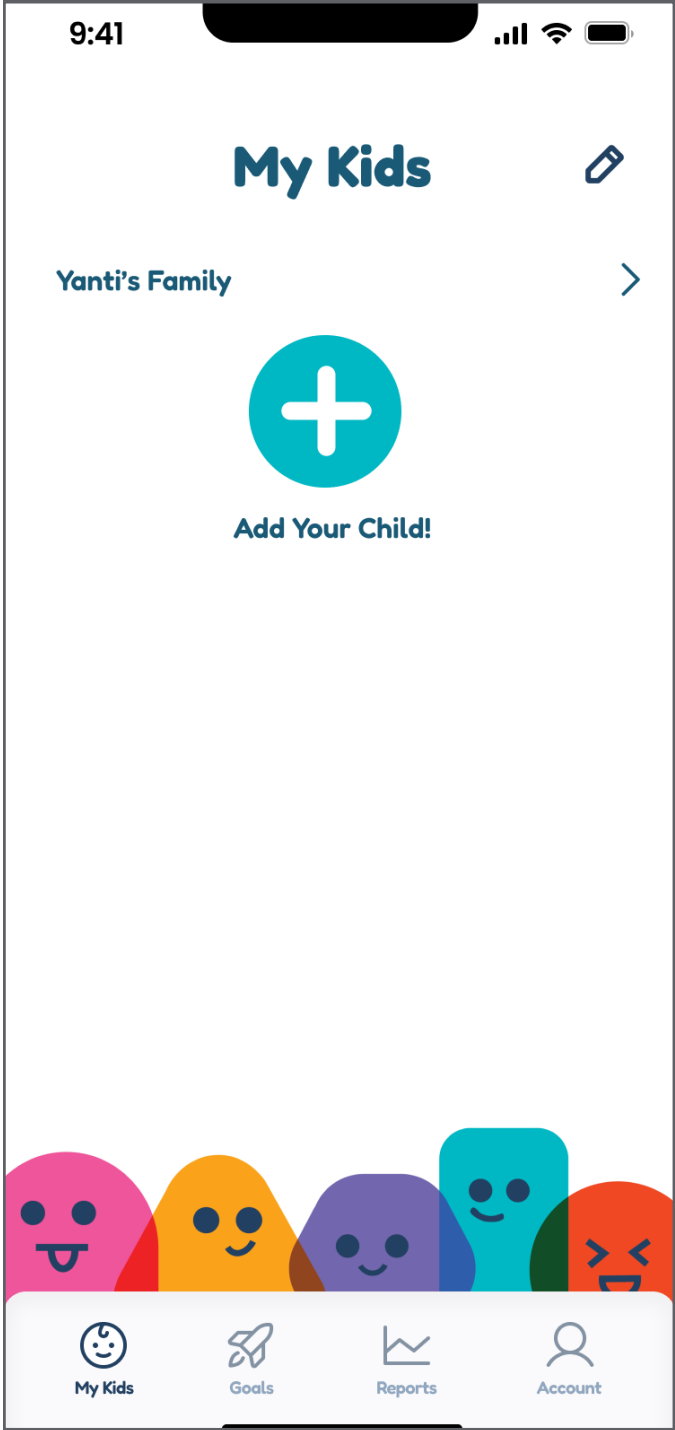
Users get started with a welcome page that instructs the user to write down their family name.



5

My Kids Page

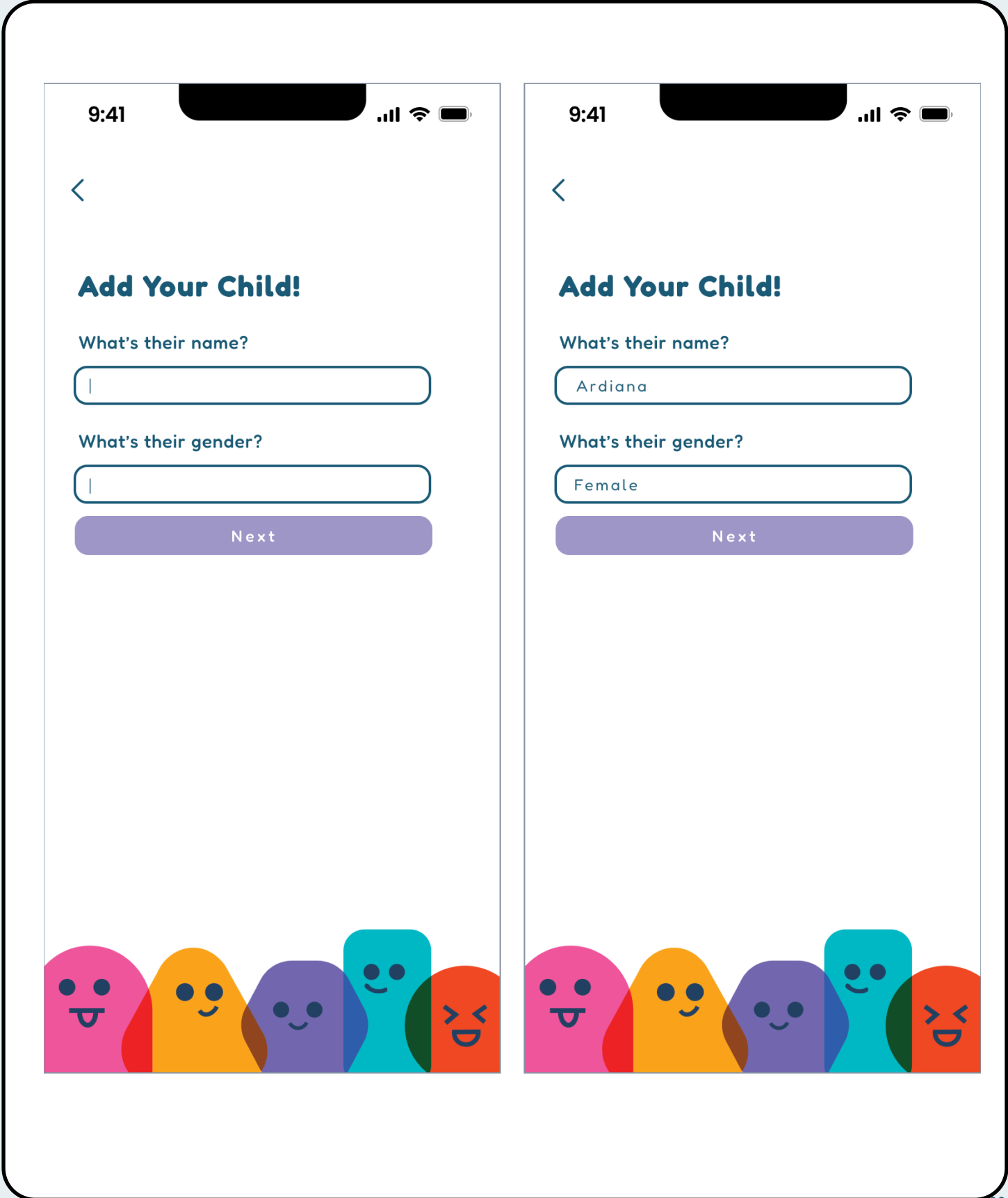
This is the "My Kids" page where users can add in their child into the system.



6

“Add Your Child” Page

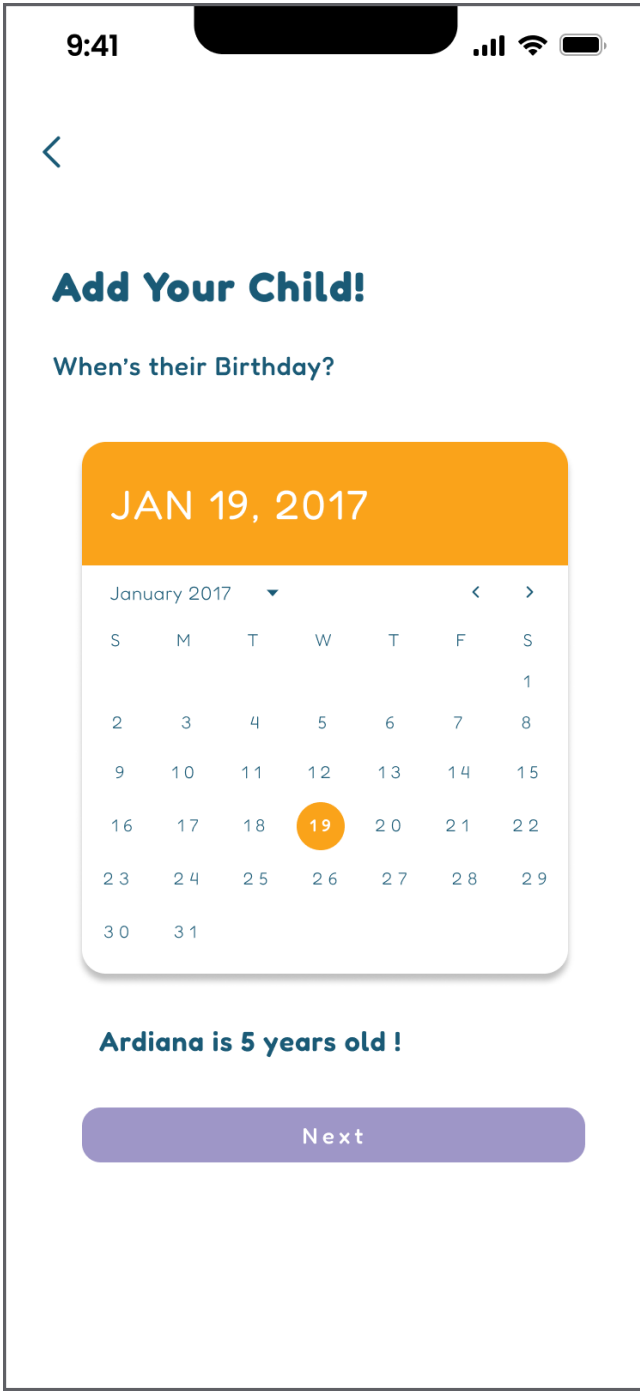
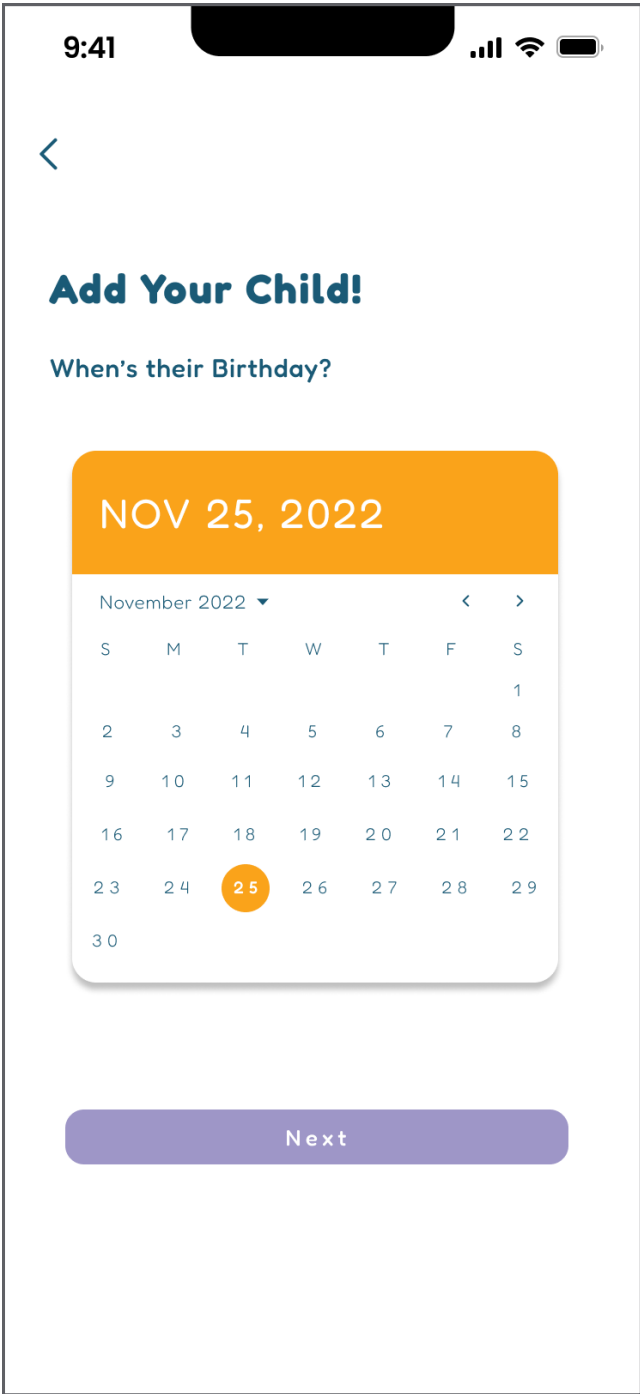
After clicking on the “Add Your Child!” button. Users will be led to this page. Where they will have to input their child’s name and gender.



7

“Add Your Child” Page

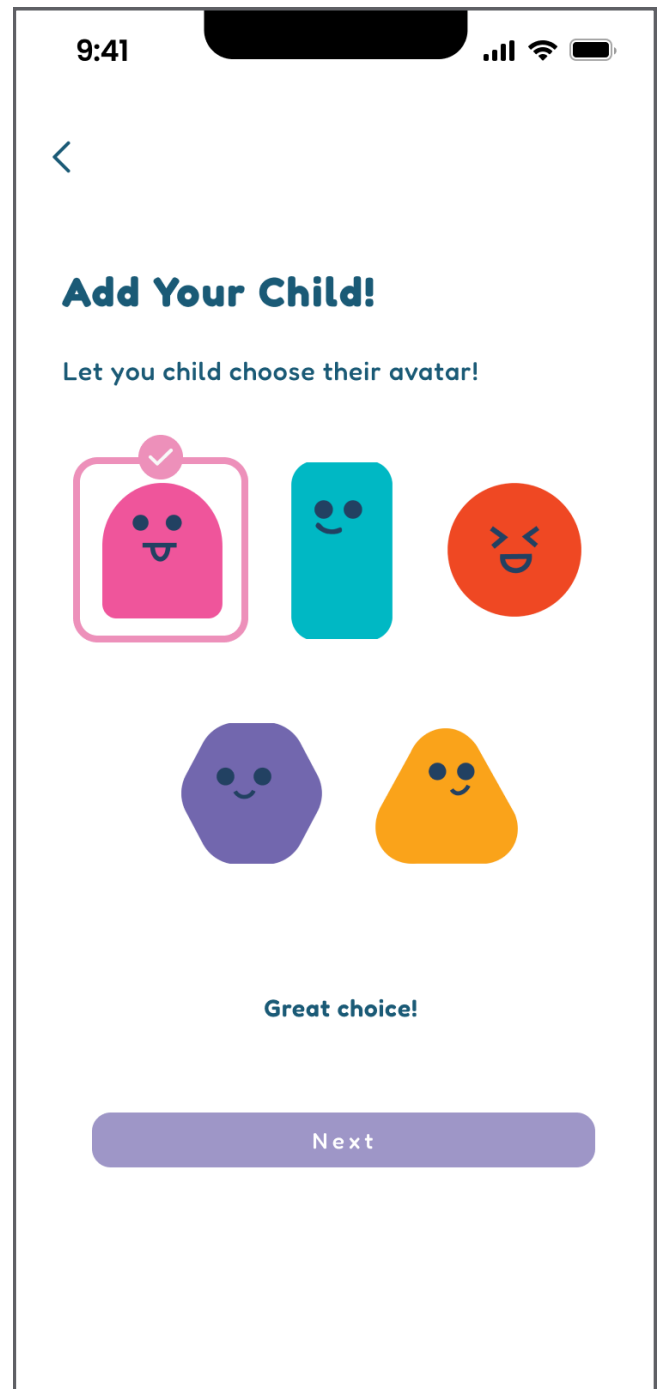
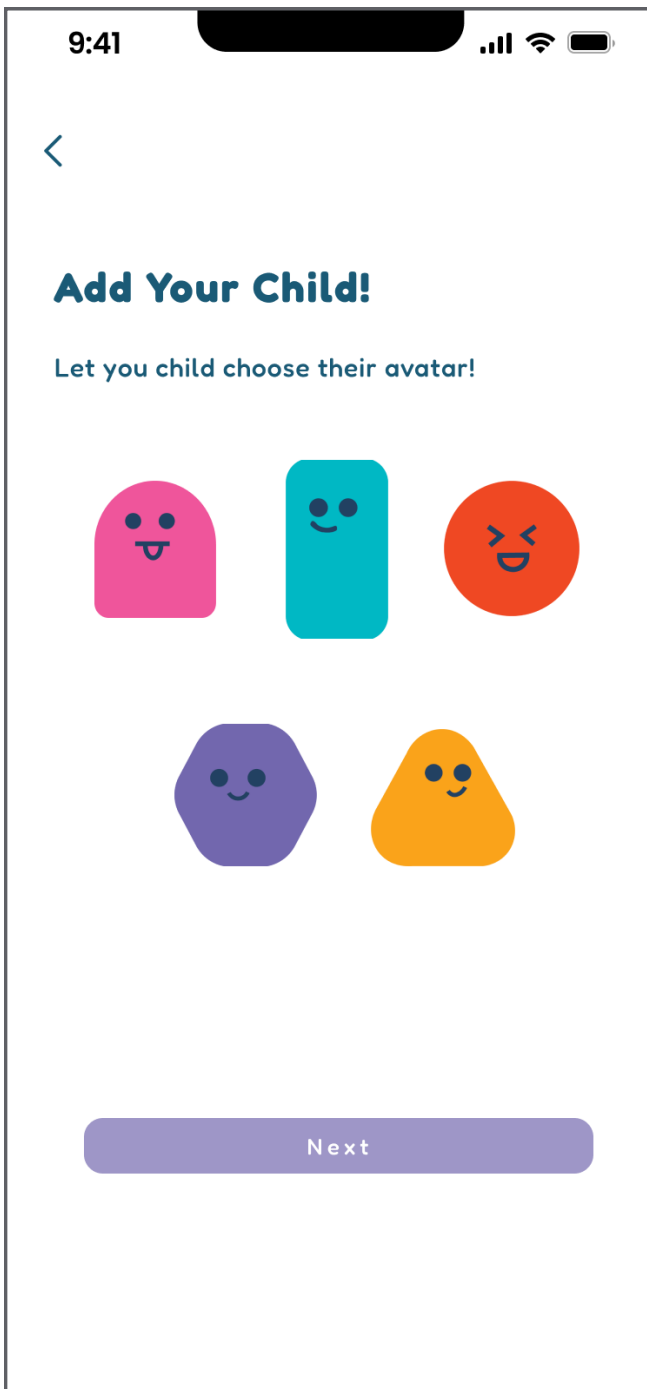
After inputting the child’s name and gender, parents will then have to select their child’s birthdate.



8

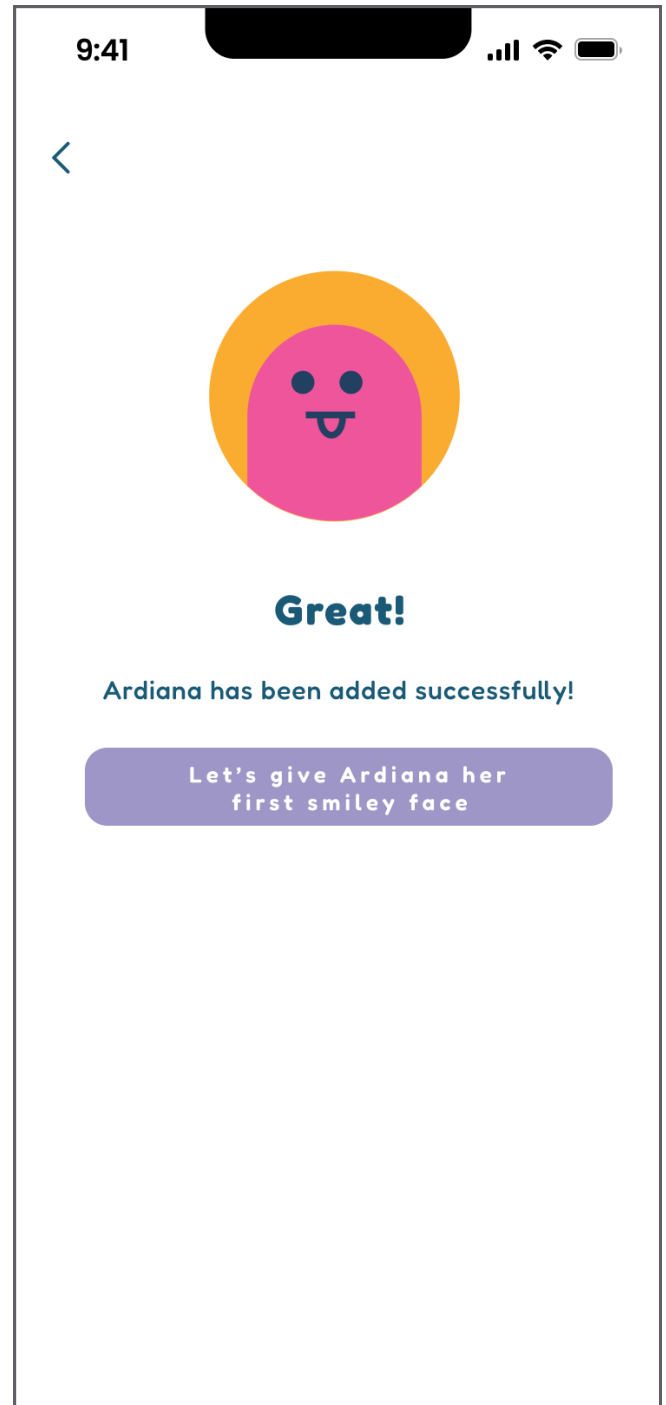
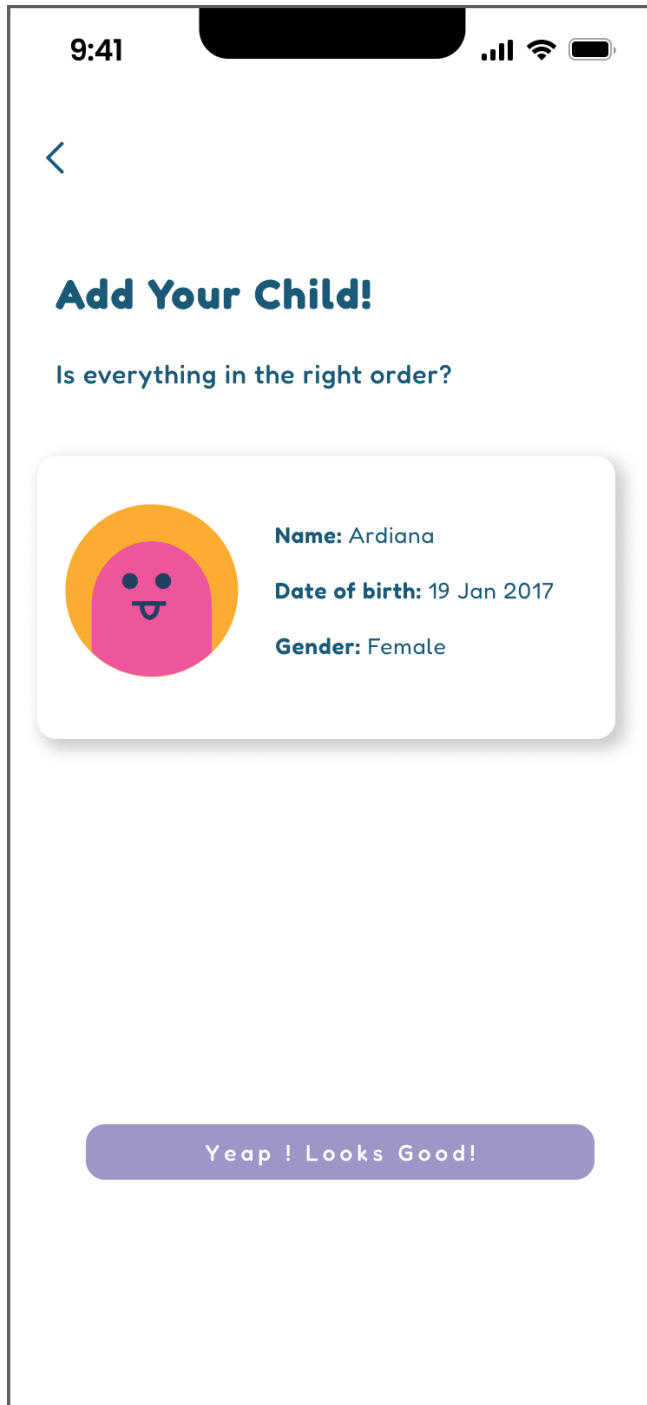
“Add Your Child” Page

Then users can select the child’s avatar. Parents can let their child choose the avatar if they want to.



“Add Your Child” Page

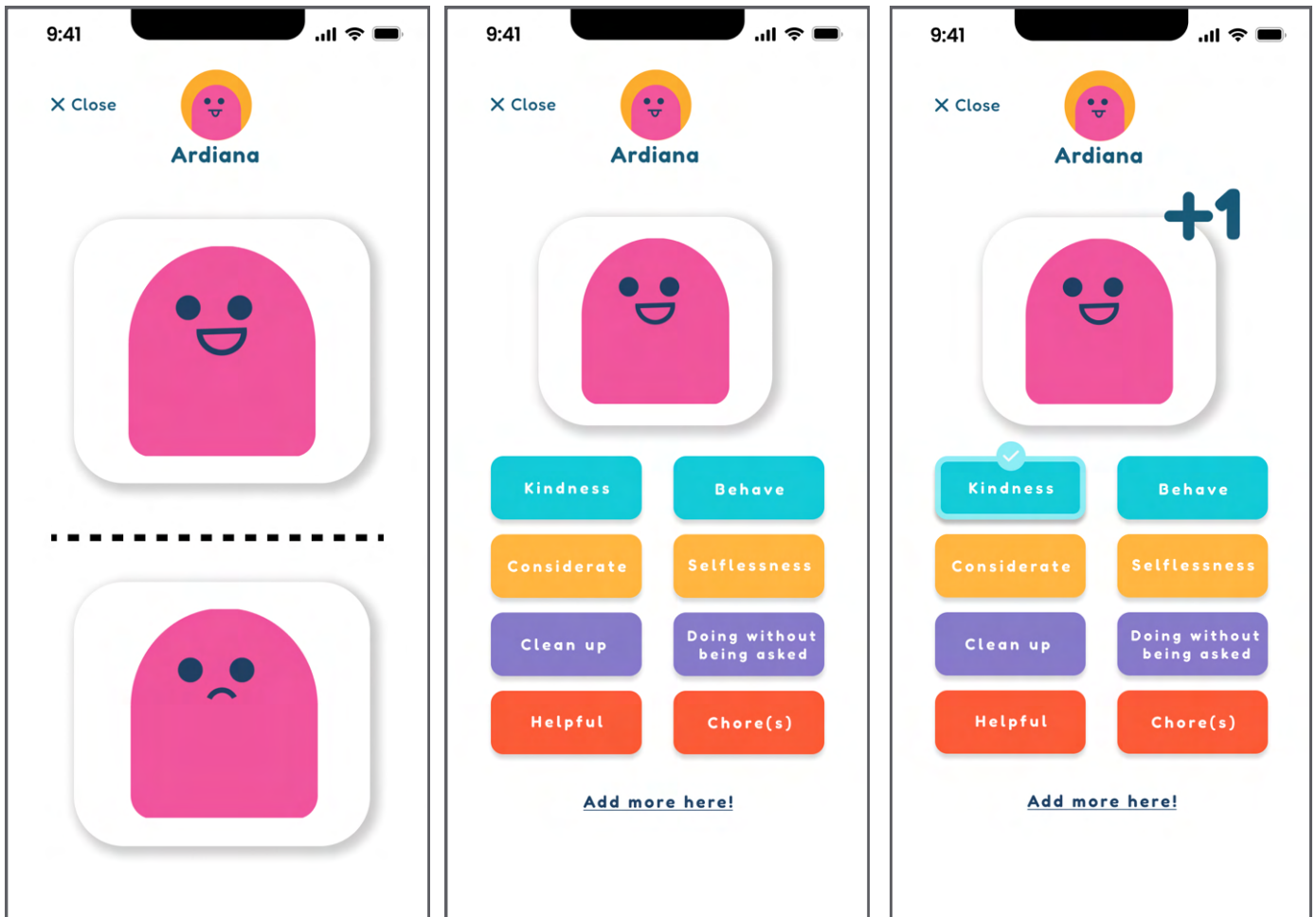
After everything is complete the app will confirm the details with the users. Once everything is confirmed, a pop up will appear to indicate that the child has been successfully added into the system.



10

Adding Smiley Face

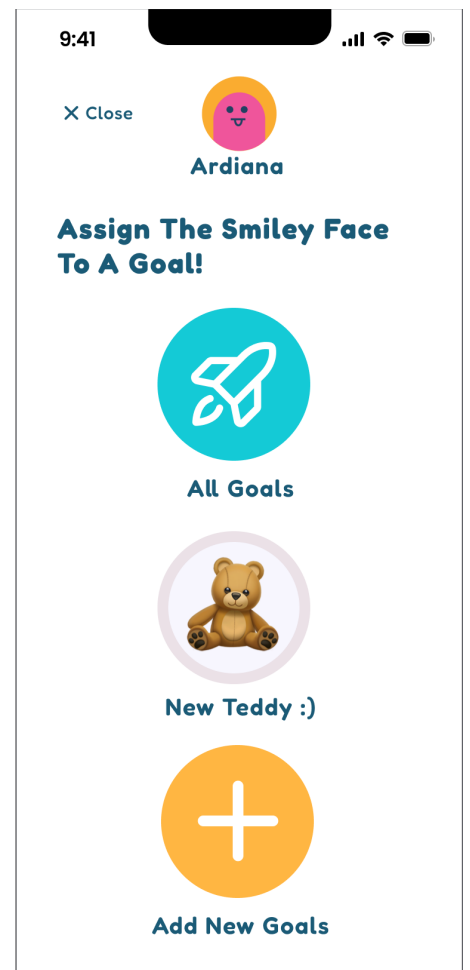
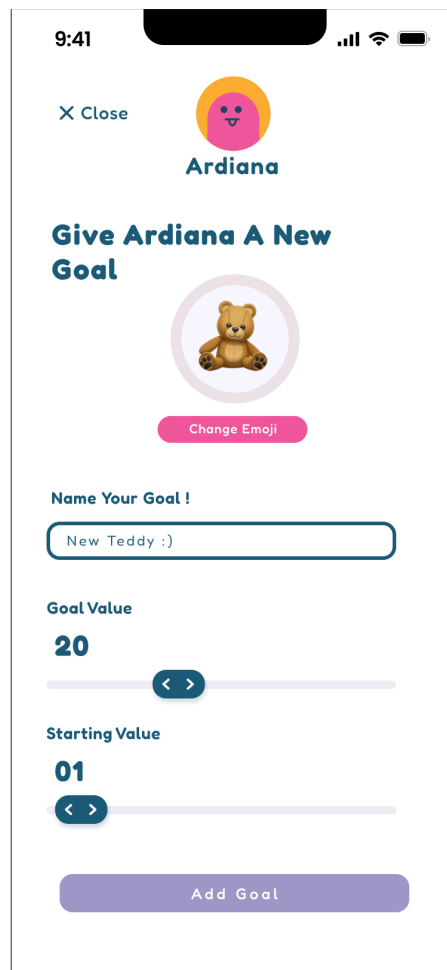
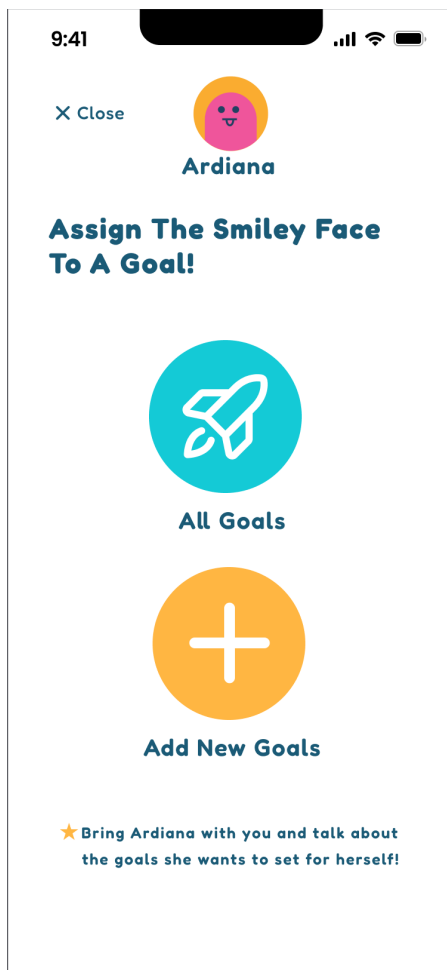
After successfully adding their child, users can add a smiley face in this page.



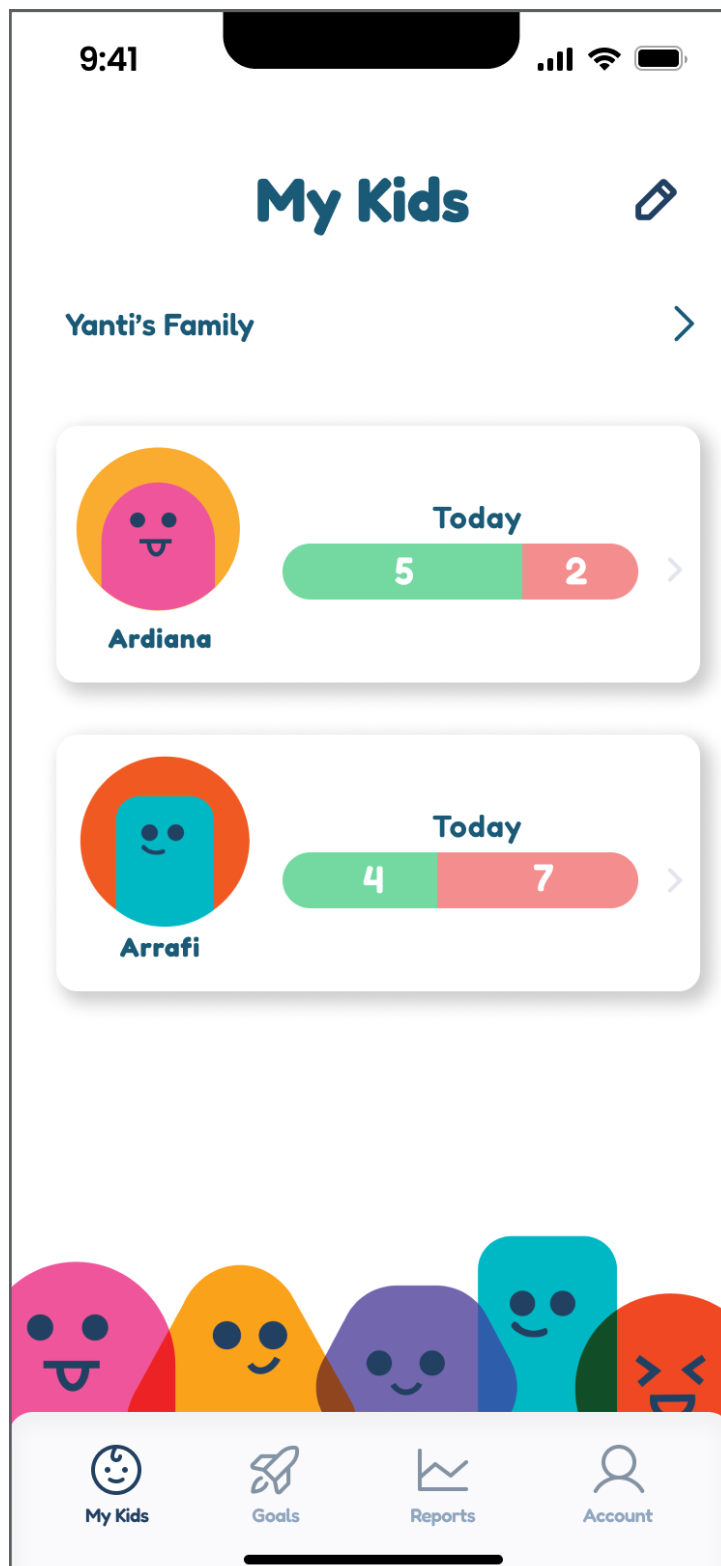
11

Assign Smiley face to a goal

After selecting the Smiley face, users will then need to assign a goal to the smiley face. They can add a new goal using the button indicated with a "Add New Goals".



After everything is completed, the “My Kids” page will be updated as shown below.



All the goals assigned to each child is shown here.

