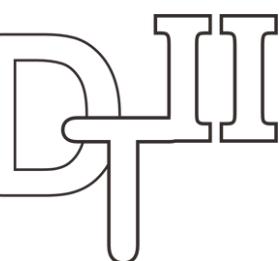




edu
CAN
Anyone **CAN** do it!

by 



Problem Statement

Current education technology for students with **disabilities** is riddled with **inadequacies**, as existing platforms **lack essential accessibility features**, which exacerbates the **discrepancy** in **educational opportunities** and impedes the ability of students with disabilities to **keep pace** with their peers, leading to increased **challenges** in **accessing** educational **resources** and **opportunities**.

Consequently, **limited employment** opportunities further compound their socio-economic challenges, creating a cycle of **disadvantage** for people with disabilities, making it difficult for them to achieve **economic independence** and **social inclusion**. Thus, our team decided to focus on **educating children with disabilities** to solve the problem from the root.

HMW Statement

How might we **bridge** the gap in educational opportunities by **developing** an **educational platform** that helps students with disabilities **access** essential **educational resources** to break the cycle of **socio-economic disadvantage, foster economic independence, and promote social inclusion** for people with disabilities?

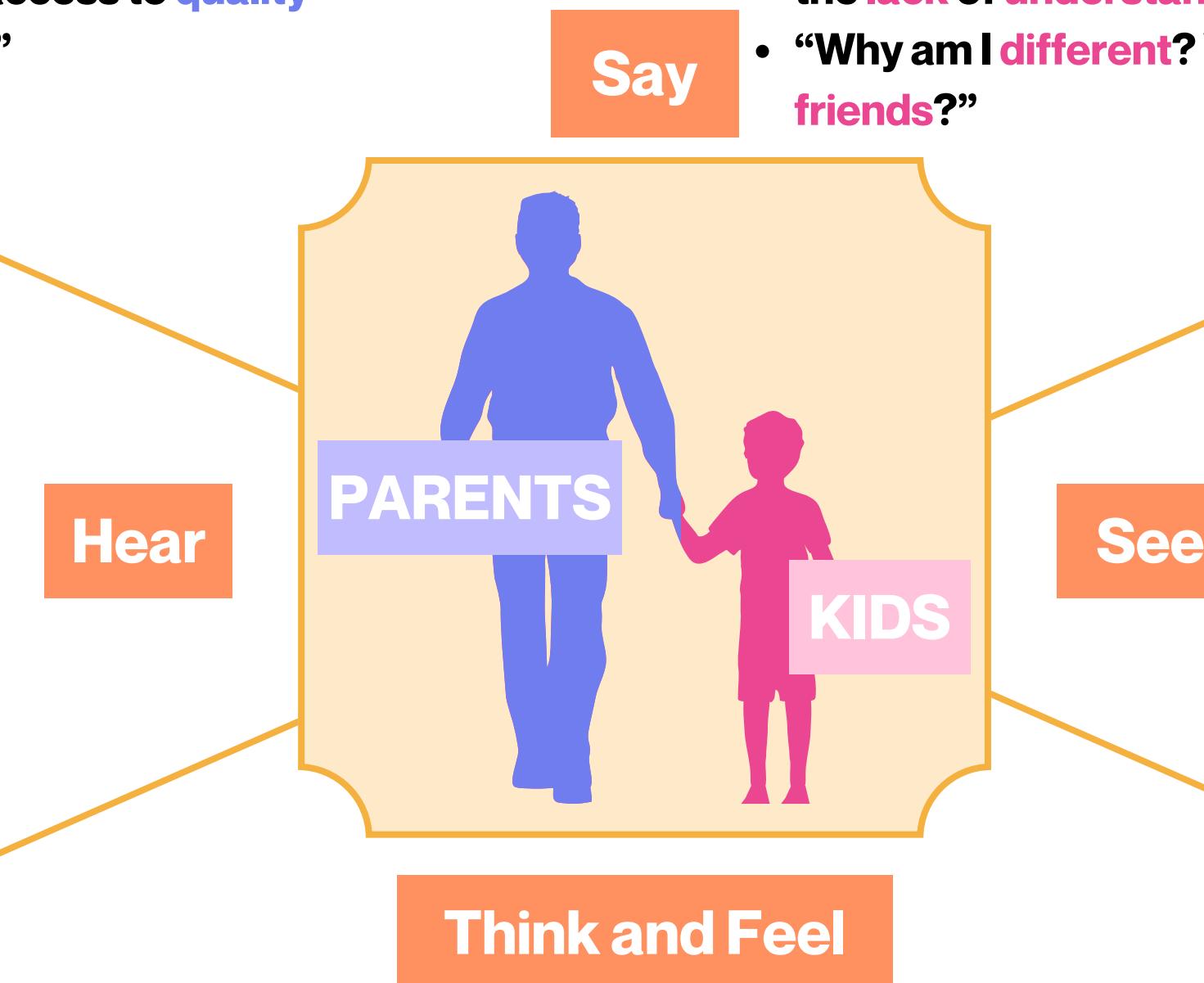
User testimonials on current education platform that aims to aid educating children with special needs

Children with Special Needs	<p>"The app doesn't read out the instructions. I can't read very well and I need help."</p>	<p>"I like learning with apps, but the ones I've tried are too fast for me. I need more time to understand."</p>	<p>"I wish the app had more pictures. It's easier for me to learn when I can see what I'm learning about."</p>	<p>"There's a lack of personalization in these apps. Every child is different and the app should adapt to their learning style."</p>	<p>"The apps don't provide enough feedback on the child's progress. It's hard for us to know if they're really learning."</p>
Parents of child with Special Needs	<p>"The apps we've tried are not user-friendly for my son who has motor skill difficulties. He gets frustrated and loses interest."</p>	<p>"I want my son to be independent, but the lack of suitable learning apps is a hurdle. His disability shouldn't be a barrier to his education."</p>			
Adults with Special Needs	<p>"I wish there were apps that could have helped me learn at my own pace when I was a kid. Maybe then I wouldn't struggle so much now."</p>	<p>"The lack of specialized education in my childhood has made it difficult for me to secure a stable job."</p>			
Key Features	Apps	Khan Academy Kids	ABC Mouse	Quick Maths	epic! Epic!
Topics Covered		Math, Reading, Writing	Math, Reading, Social Studies, Art, Science	Math	Books, Audiobooks
Free					
Screen Reading & Keyboard navigation					
Color Contrast					
Sign Language Support					
Captioning					
Social Interaction					
Customizable Difficulty Level					

EMPATHY MAP

- “We need better resources and support, it’s not easy navigating this alone.”
- “Education is a right, not a privilege. My child deserve access to quality education too.”

- “You’re such a strong parent.”
- “Your child is doing so well, considering.”
- “Your child is so lucky to have so much help.”
- “You don’t act like a disabled person.”
- “You must have a mild case.”
- “You need to study harder, you will have a hard time finding a job.”



- Sadness when they are left out.
- Frustration when they can't do what their peers can.
- Worry about their child's future

- “Unemployment is not a choice for me. It’s a harsh reality imposed by societal barriers.”
- “My disability doesn’t limit my ability to learn, but the lack of understanding and support does.”
- “Why am I different? Why can’t I do things like my friends?”

- societal norms and expectations that is inconsiderate towards people with disabilities.
- Lack of resources, facilities, or programs designed to support people with disabilities in education and employment.
- World designed primarily for people without disabilities.

DISCOVER

DEFINE

DEVELOP

DELIVER

User Personas	Lucas Alexander Gray Visually Impaired Child 	Ethan James Autism Spectrum Disorder (ASD) child 	Charlotte Davis Concerned Parent 
Goals	To be able to have a more similar learning experience with their peers	To be able to effectively study while feeling engaged	To aid their disabled child in becoming more independent
Pain Points	<ul style="list-style-type: none">Inability to access the same resources/books as their peersDifficulty in making and connecting with friendsThe constant need to rely on others when learning	<ul style="list-style-type: none">Difficulty in paying attention for prolonged periods of timeDifficulty in interacting with their peersUnable to engage in daily activities without external guidance	<ul style="list-style-type: none">Unsure of how of their child should approach studyingWorried of how their child is treated outside of the houseThe need to constantly guide or assist their child

DISCOVER

DEFINE

DEVELOP

DELIVER

Create a new Account/ Register



Demands **extensive data** and information. Multiple steps of verification (captcha)

Login



Struggle remembering usernames and passwords

Homepage



Complex menus due to excessive information, **multiple sections**, and **cluttered** designs **confuse** users.

Sub-sections



Lack of **personalization** and **customizability** results in contents that doesn't cater each child's unique **needs** and **capability**.

Video Explanation/ Readings



Video explanations and readings **lack interactive elements** and lack of **features** for children with disabilities (visual, hearing impairments, motor difficulties)

Quizzes and Assignments



Lengthy and **non-interactive**, lacking accessibility features, which poses **challenges** for students with disabilities to engage effectively with the material.

Reccomendations

Streamline account creation with **simplified** design, removing unnecessary required fields. (like gender, phone number, address, etc).

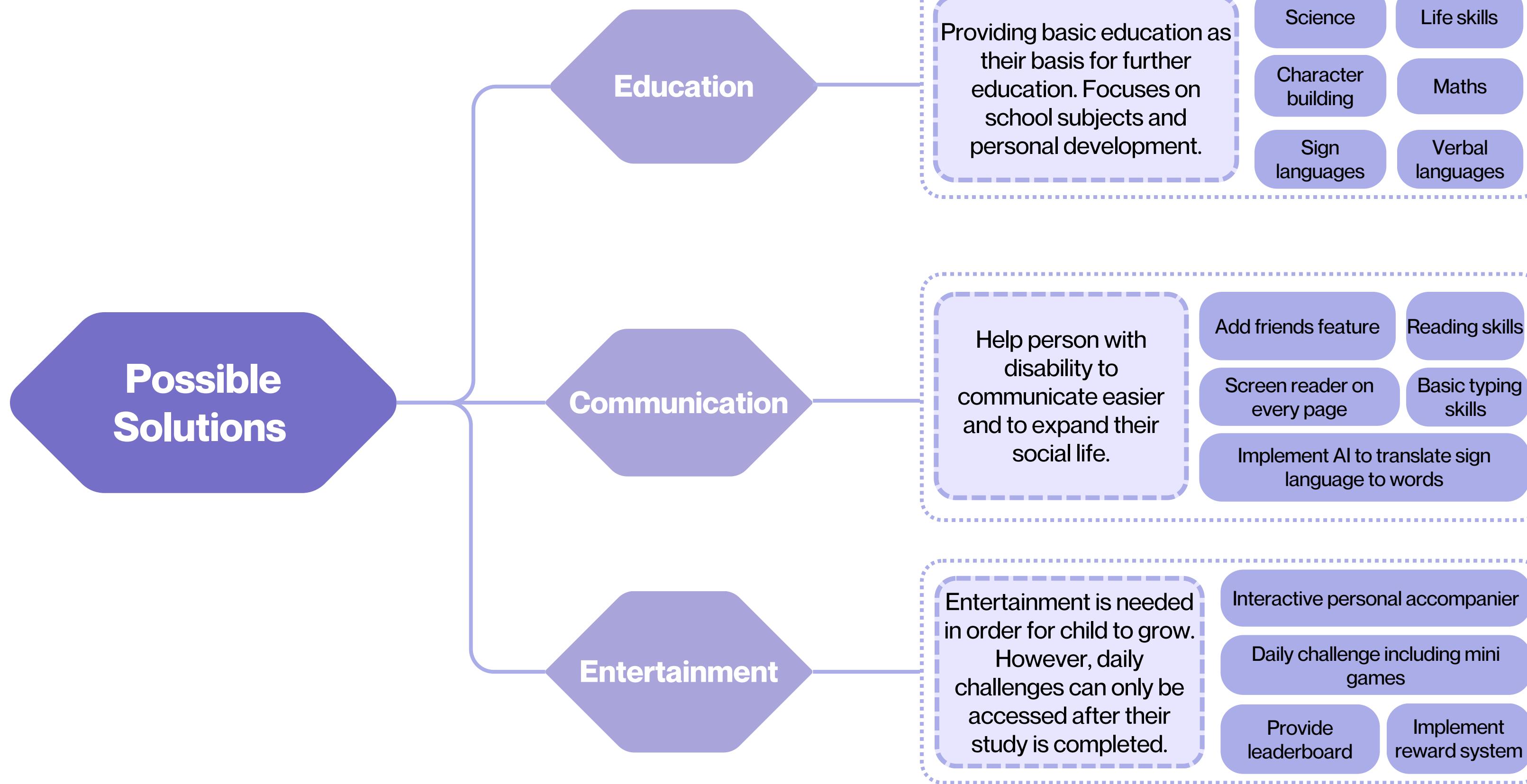
Offer **alternative registration** methods, such as social media sign-in or email verification links.

Implement SSO (**Single Sign On**) options, Implement Face ID

Provide **guided** steps and simplify design to **minimize distractions**. Increase **accessibility** by providing alternative text and **input** actions.

Customizable content difficulty and implementation of **adaptive** learning algorithms to adjust difficulty.

Add **interactive** quizzes and clickable elements within readings and videos. Implement **text-to-speech** functionality for readings. Give **rewards**.



DISCOVER

DEFINE

DEVELOP

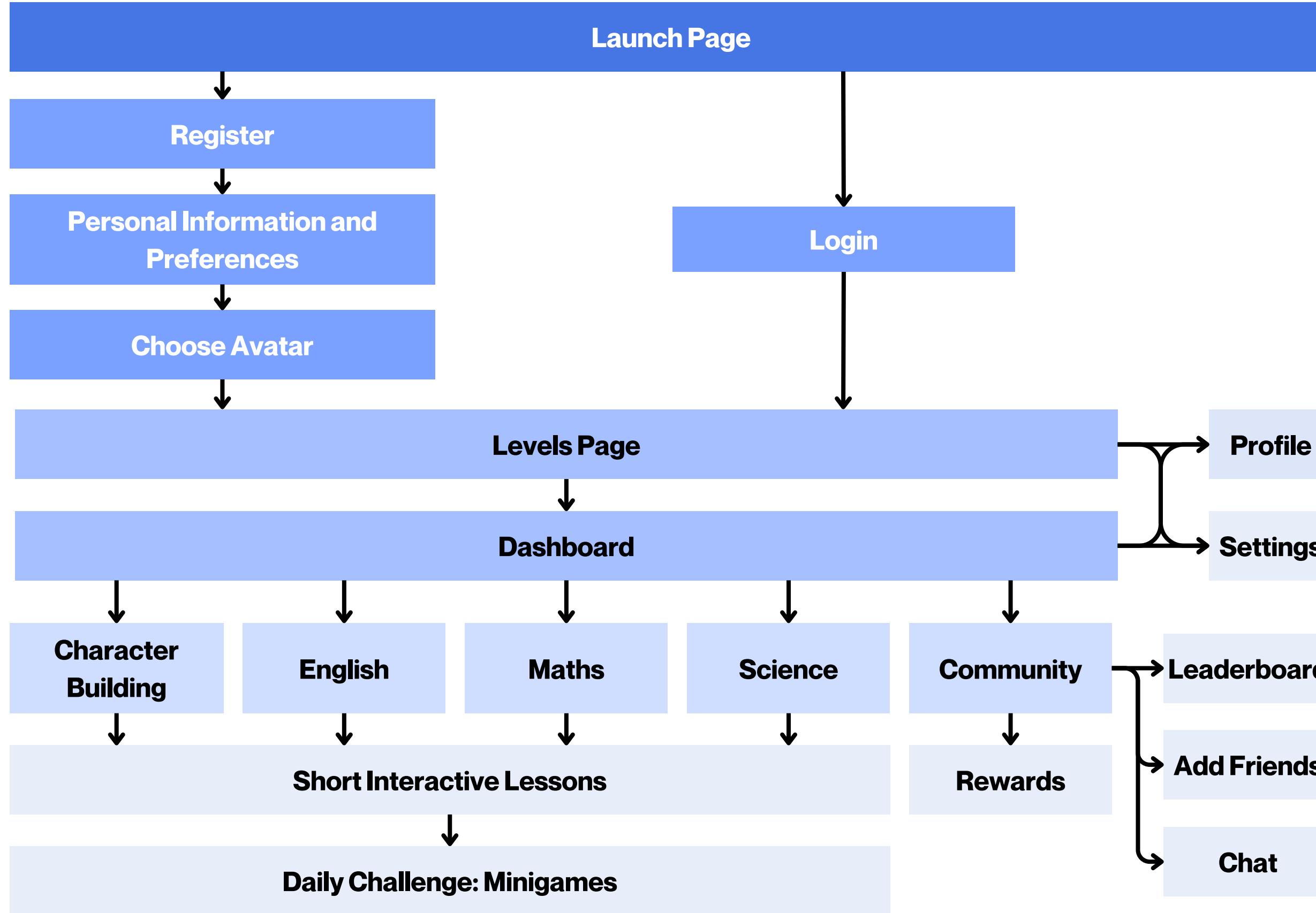
DELIVER

Design Considerations	Main User Target	Explanation
User Interface (UI) Accessibility	Everyone	Allows children to easily navigate the application
Screen Reader Compatibility	Children with vision impairment	Screen reader is always on throughout the entire app to help children with vision impairment; There is an option in settings to turn it off
Keyboard Navigation	Children experiencing difficulty using and moving hands /fingers	Reduce amount of movement needed to navigate through the app for those with limited mobility
Captioning and Transcripts	Children with hearing impairment	
Alternative Input Methods	Children experiencing difficulty using and moving hands /fingers children with vision/hearing impairment	Helps to communicate with others and follow lessons comfortably
Text-to-Speech and Speech-to-Text	Children with vision/hearing impairment	
Short Chaptered Lessons	Children experiencing difficulty in concentrating	Short lessons helps kids with difficulty in concentrating to absorb more materials
Font and Color Customization	Children with difficulty in recognizing colors	The colors are chosen by considering colorblind children do not miss out on anything.

DEFINE

DEVELOP

Site Map



Design Systems

TYPOGRAPHY

Nunito

- 30 **Heading 1**

24 **Heading 2**

20 **Bold**

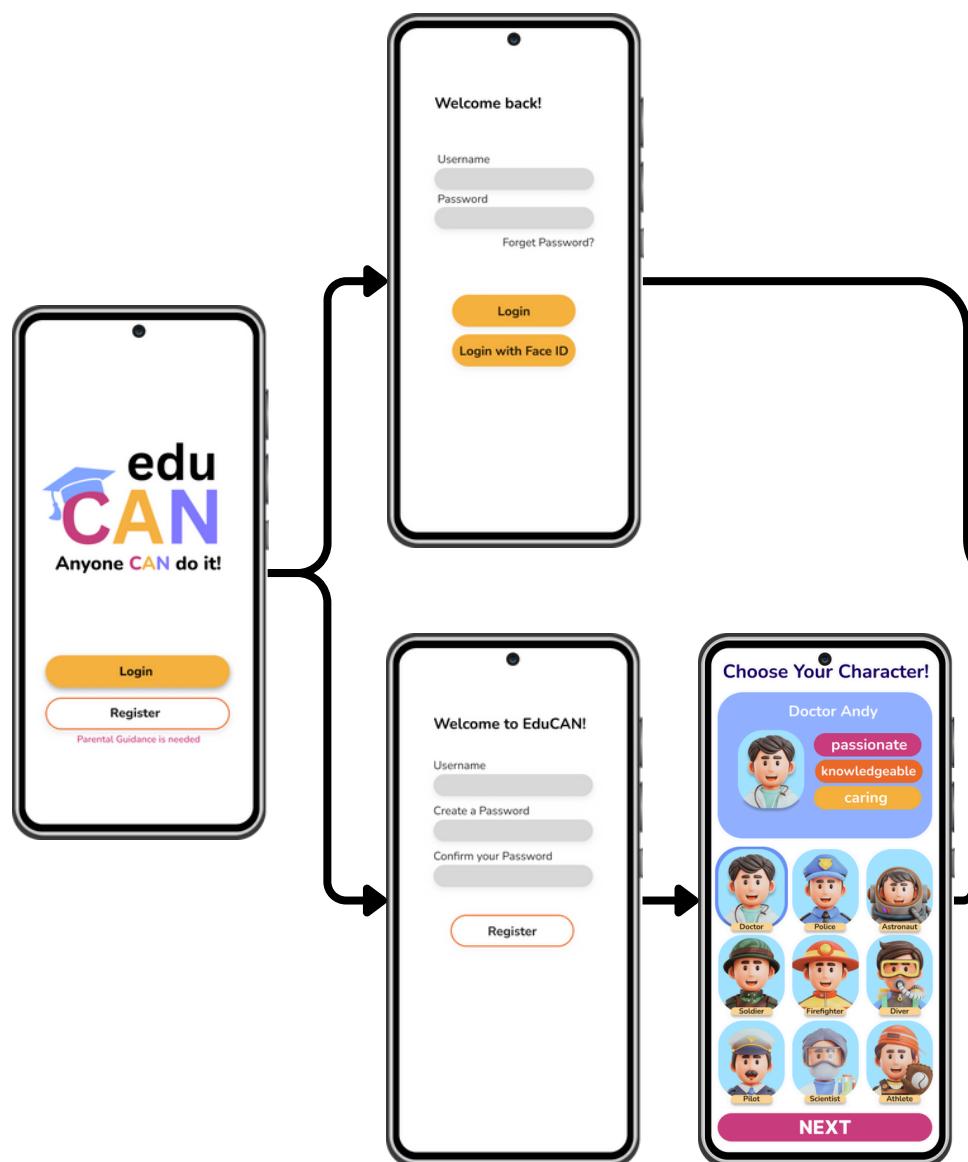
15 **Semi Bold**

10 Regular

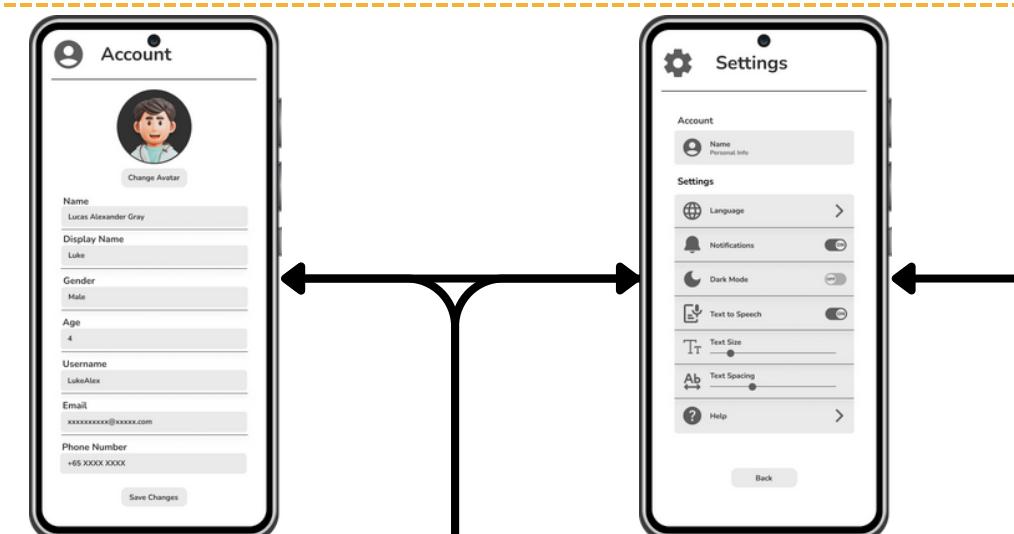
COLOR PALETTE



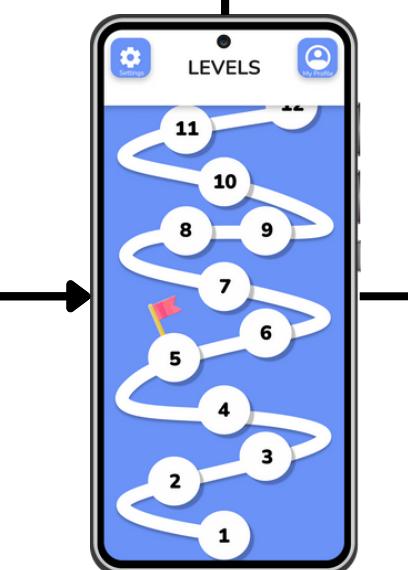
1 Login and Register



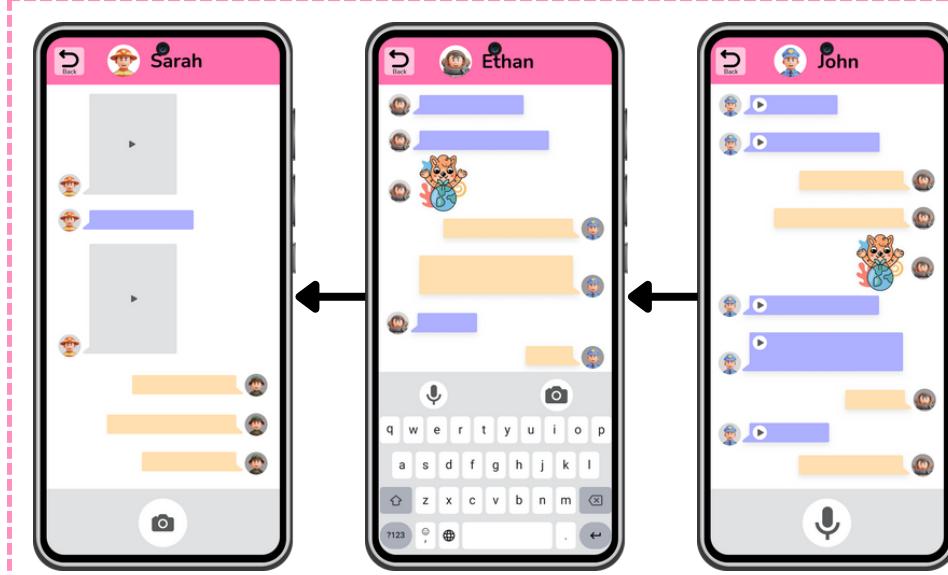
3 Account and Settings



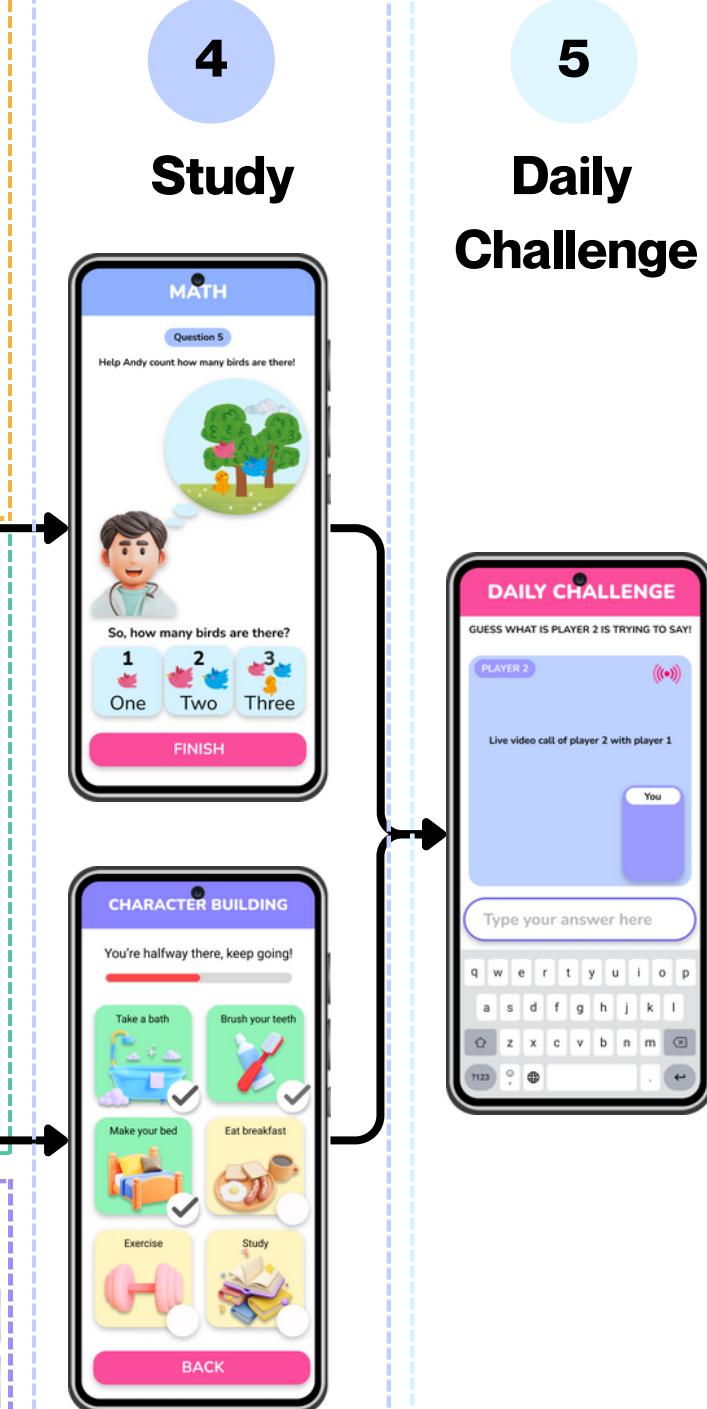
2 Selection Pages



6 Community



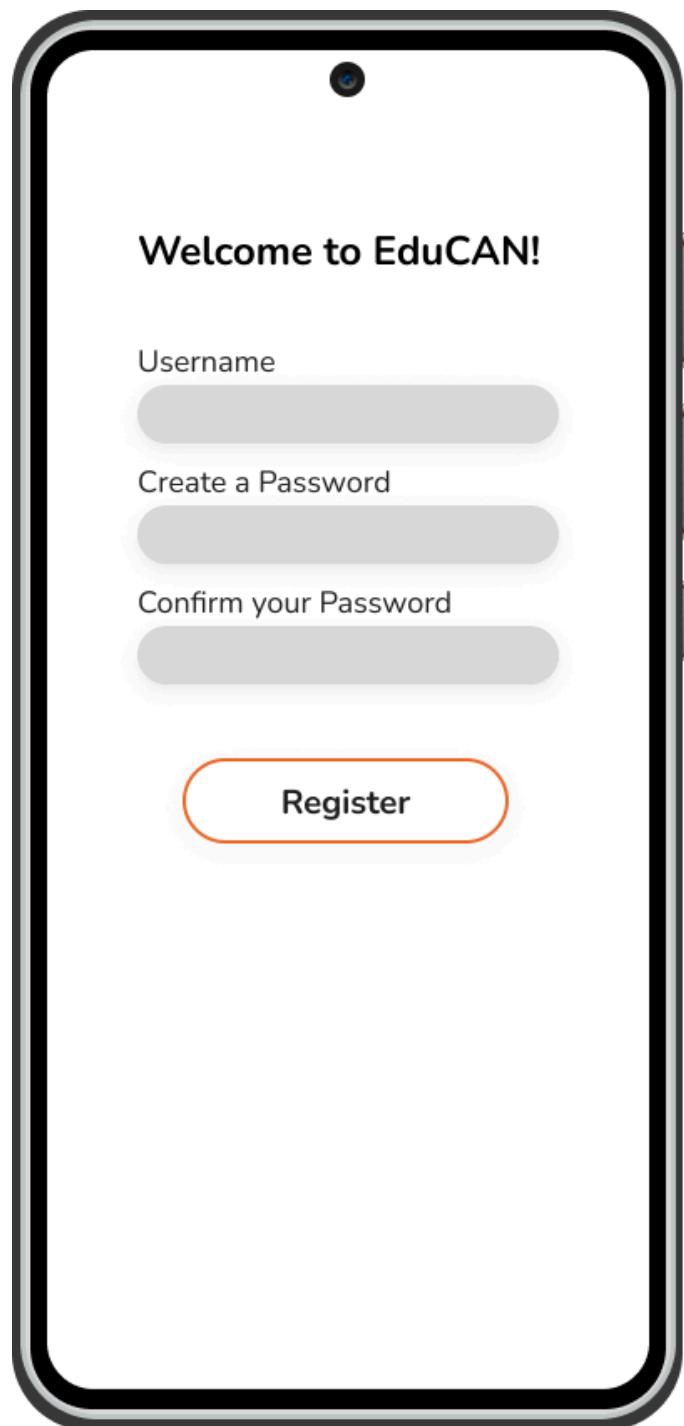
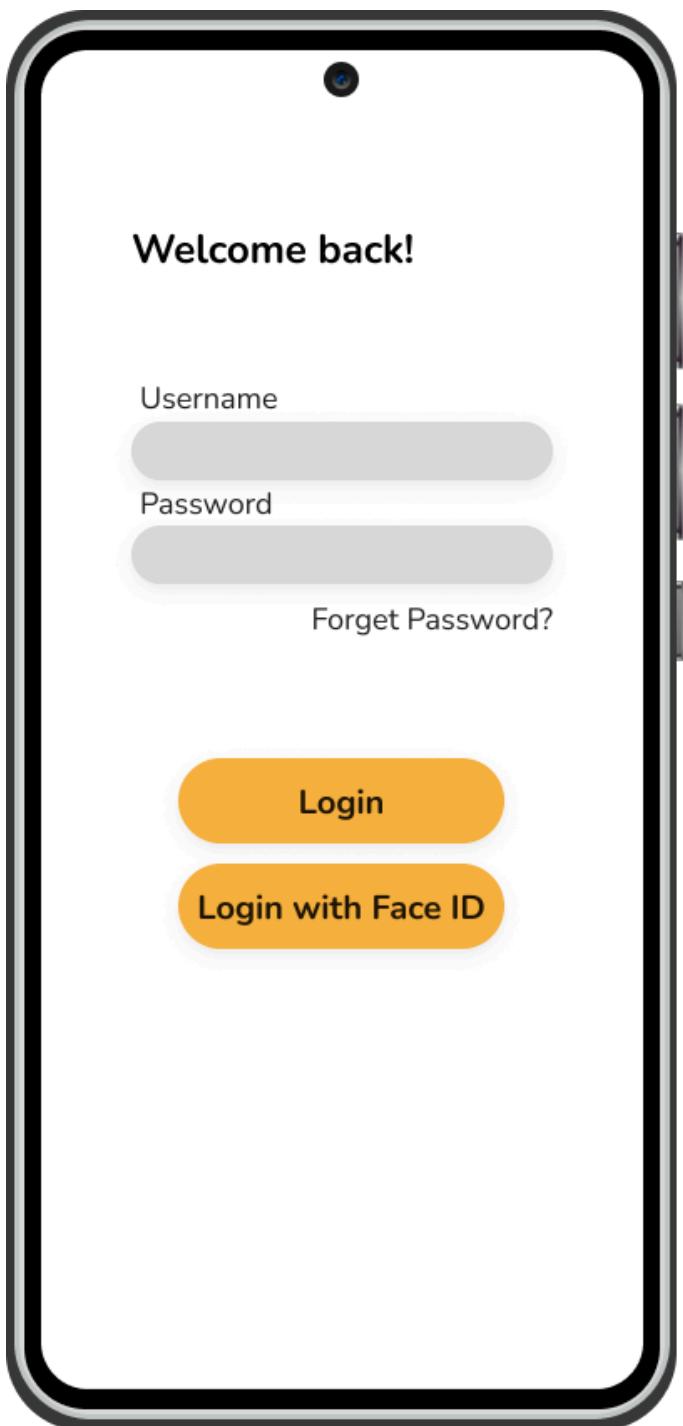
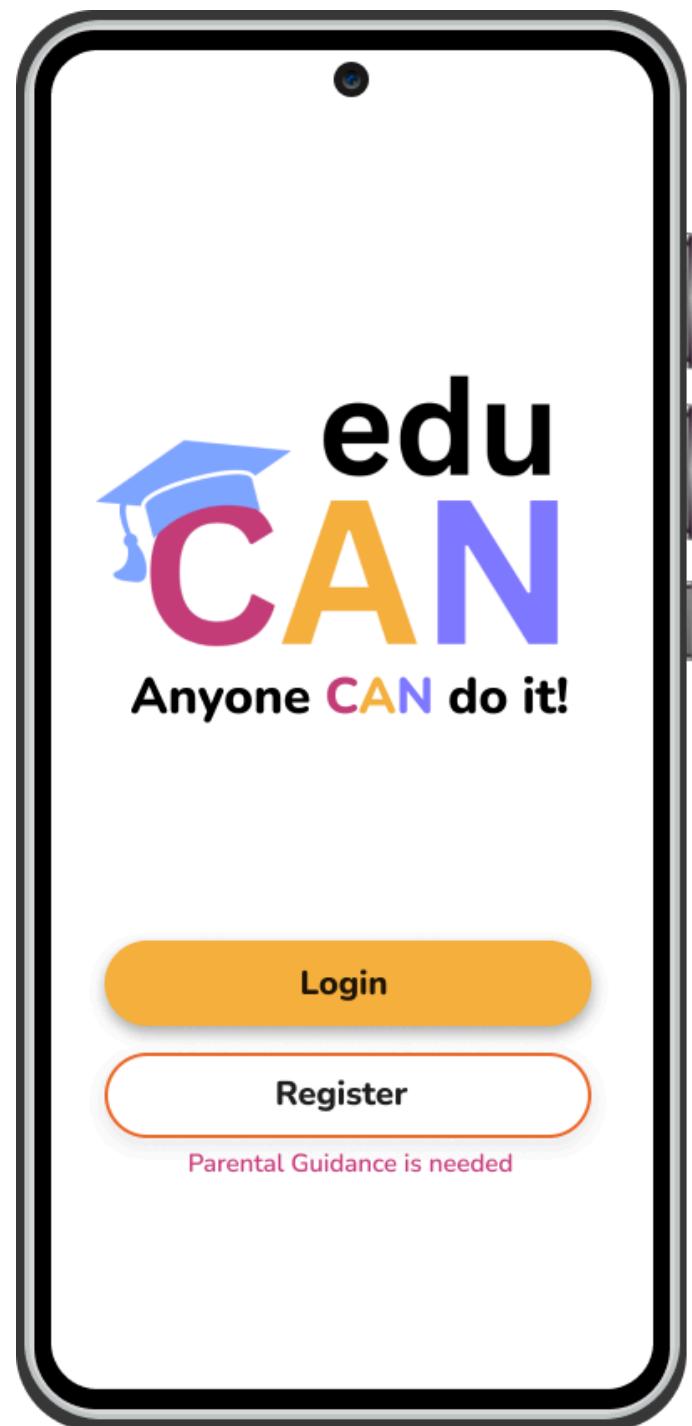
7 Rewards



1

Login and Register

The login and register process is needed to obtain data to differ each user

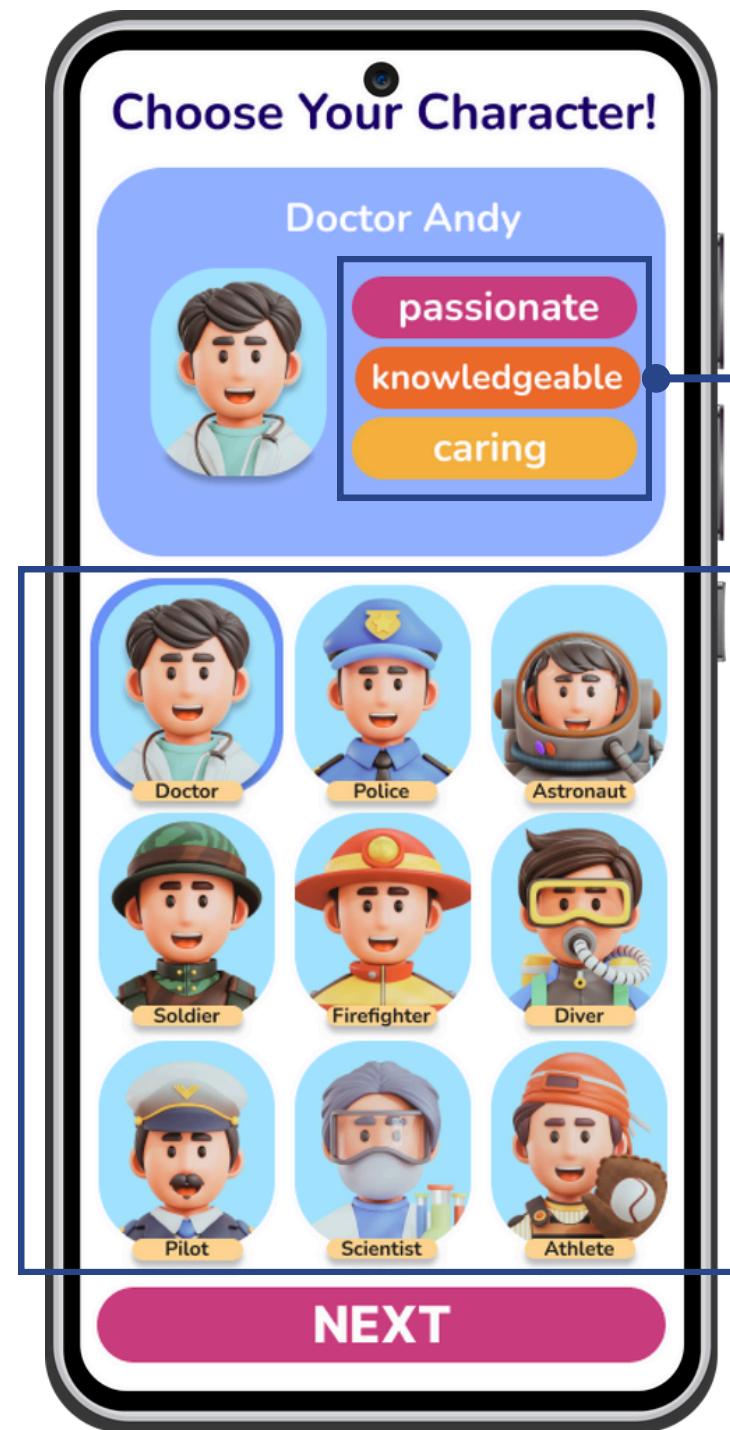


Easy registration without email and additional verification

2

Characters

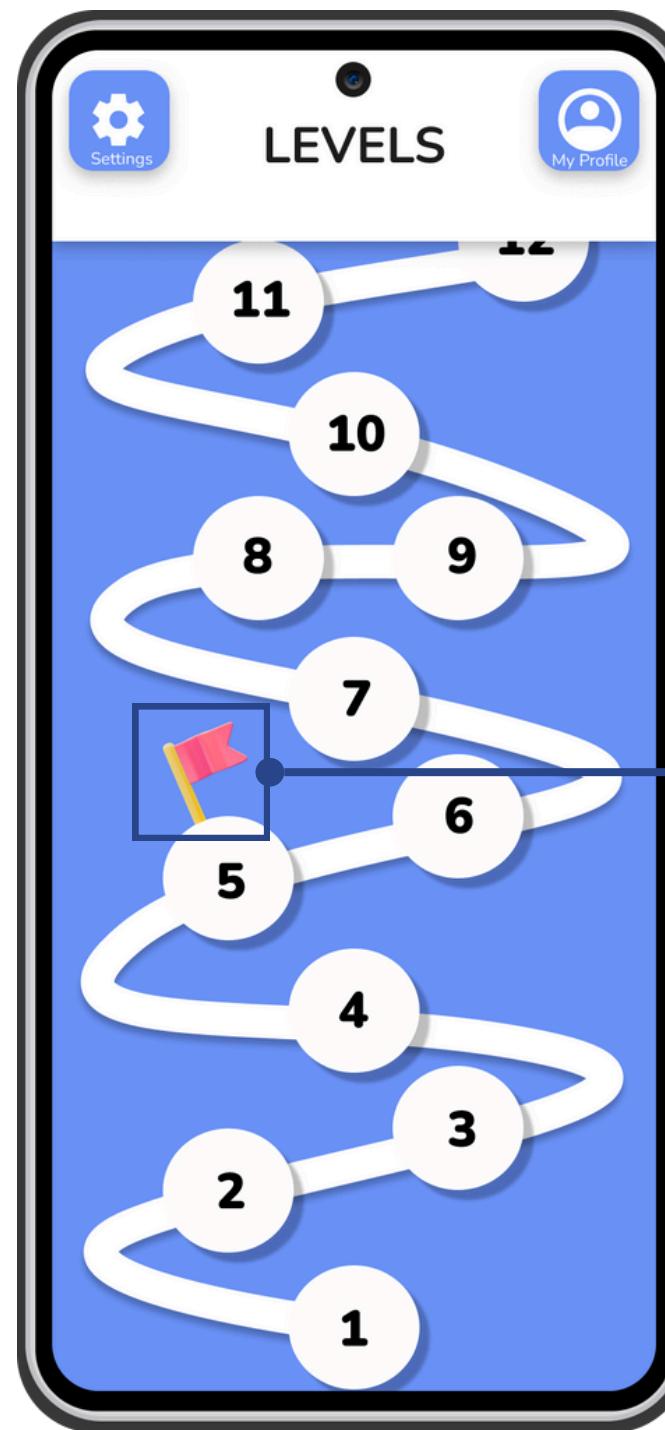
Characters that will inspire the children to have a dream



3

Levels

Ensure children's learning growth is step-by-step and serves as a reminder of their progress



Character Description

Character Selection

Variety of characters, each representing a different profession. The child can select the character that represents their dream job.

Level Flag

Indicate the user's current level

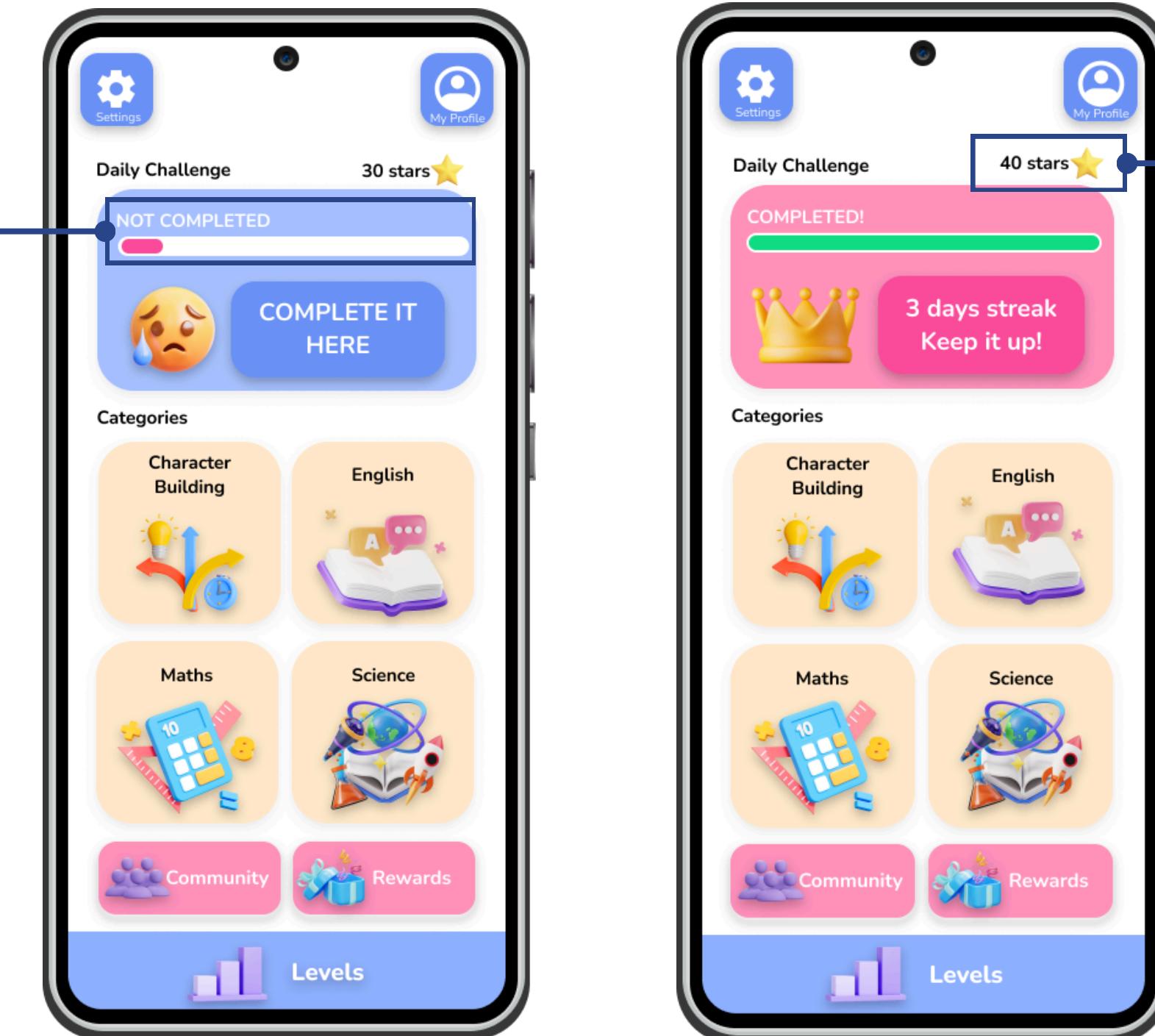
4

Dashboard

Shows daily progress and allows user to access lessons and other features

Completion Bar

Children can find their daily challenge completion status here



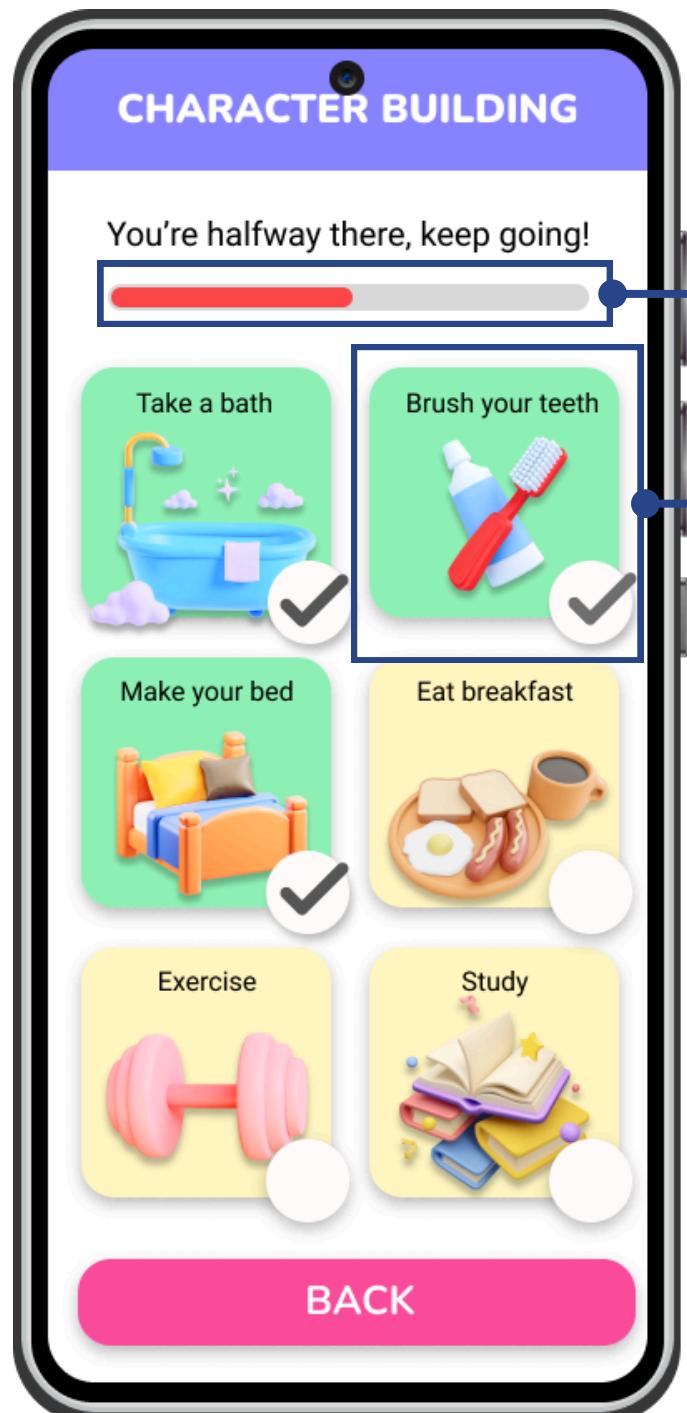
Stars Accumulation

Stars accumulated as a reward from completing the daily challenge is shown here

5 Subjects

Character Building

Teaching good daily habits and proper conduct while being considerate to others



Progress Bar

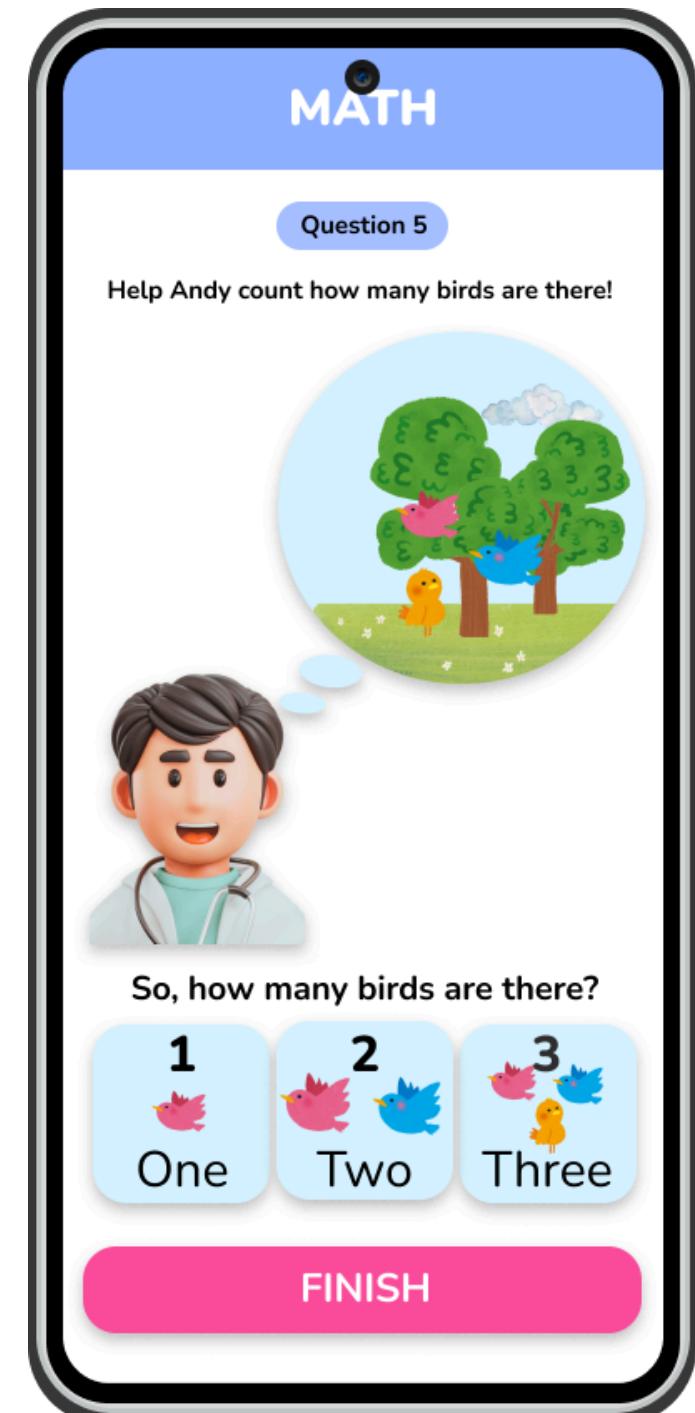
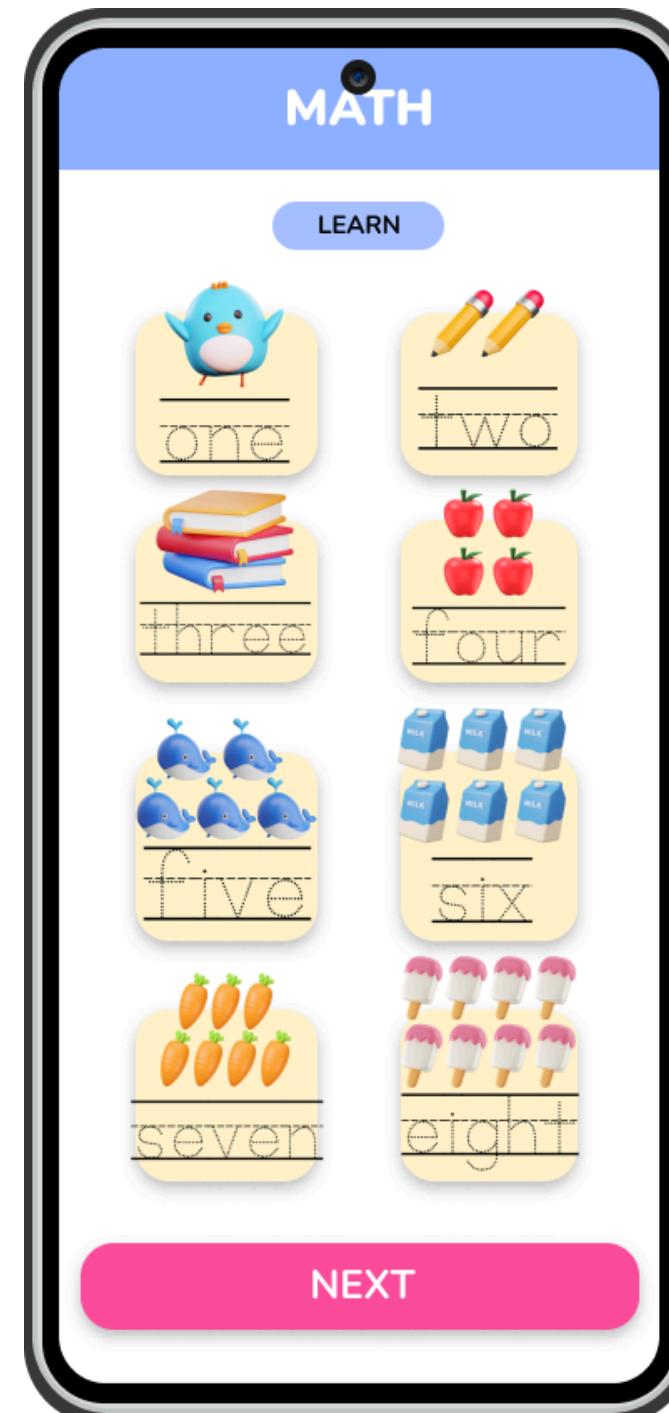
Shows the progress of the tasks

Green Background and Check Mark

Indicate the completion of the task

Math

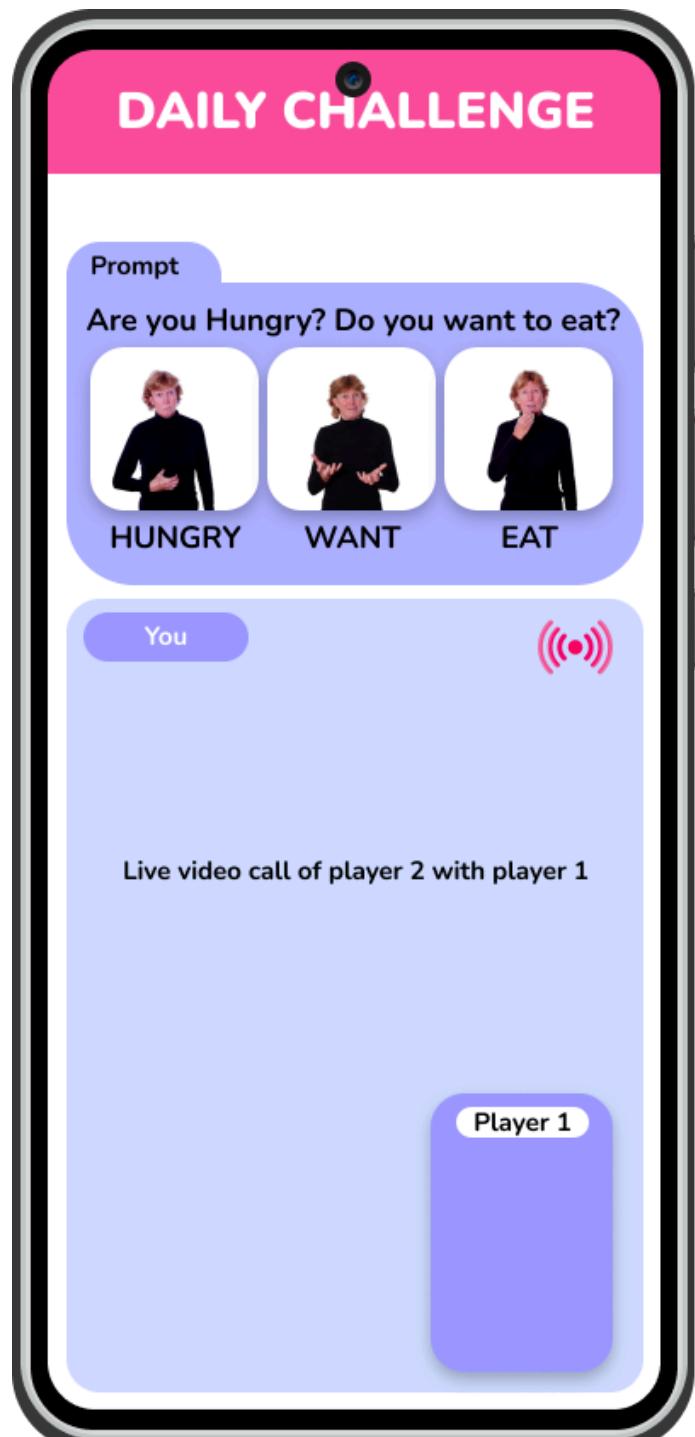
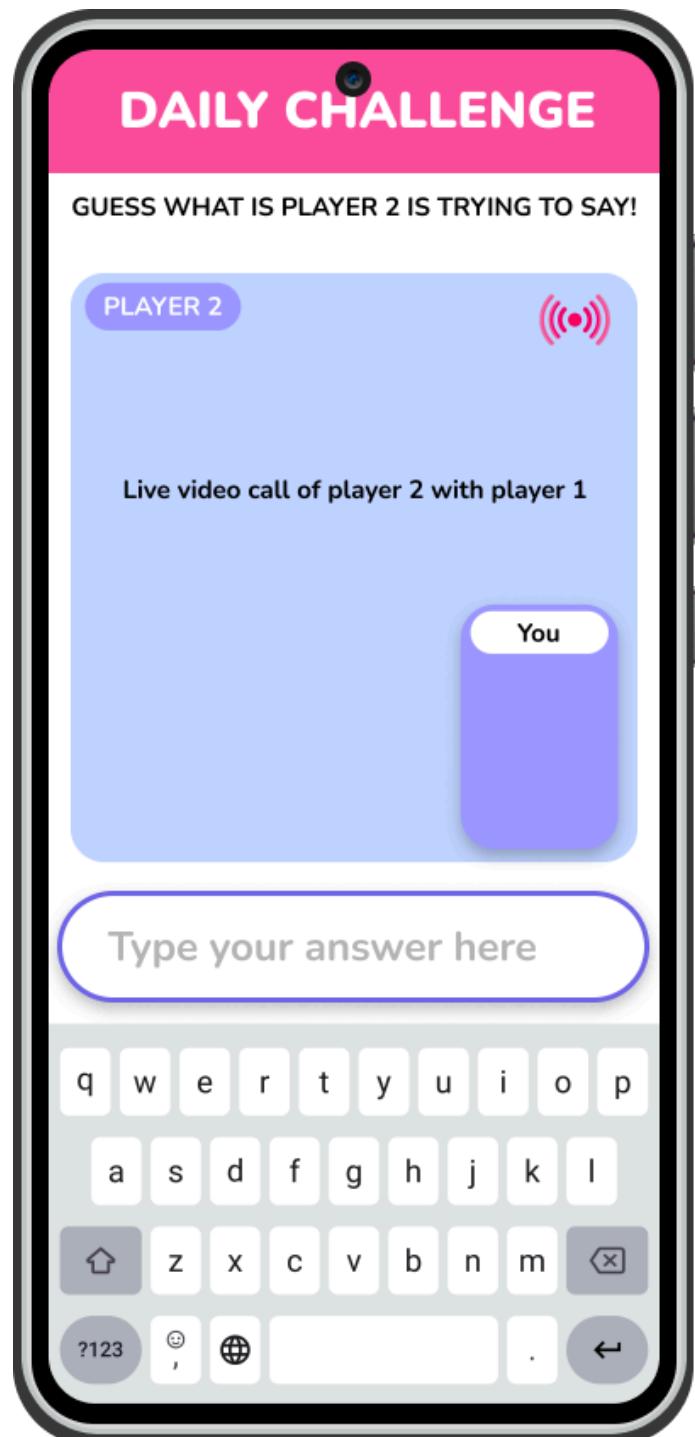
Interactive lessons followed by fun quizzes



6

Daily Challenge

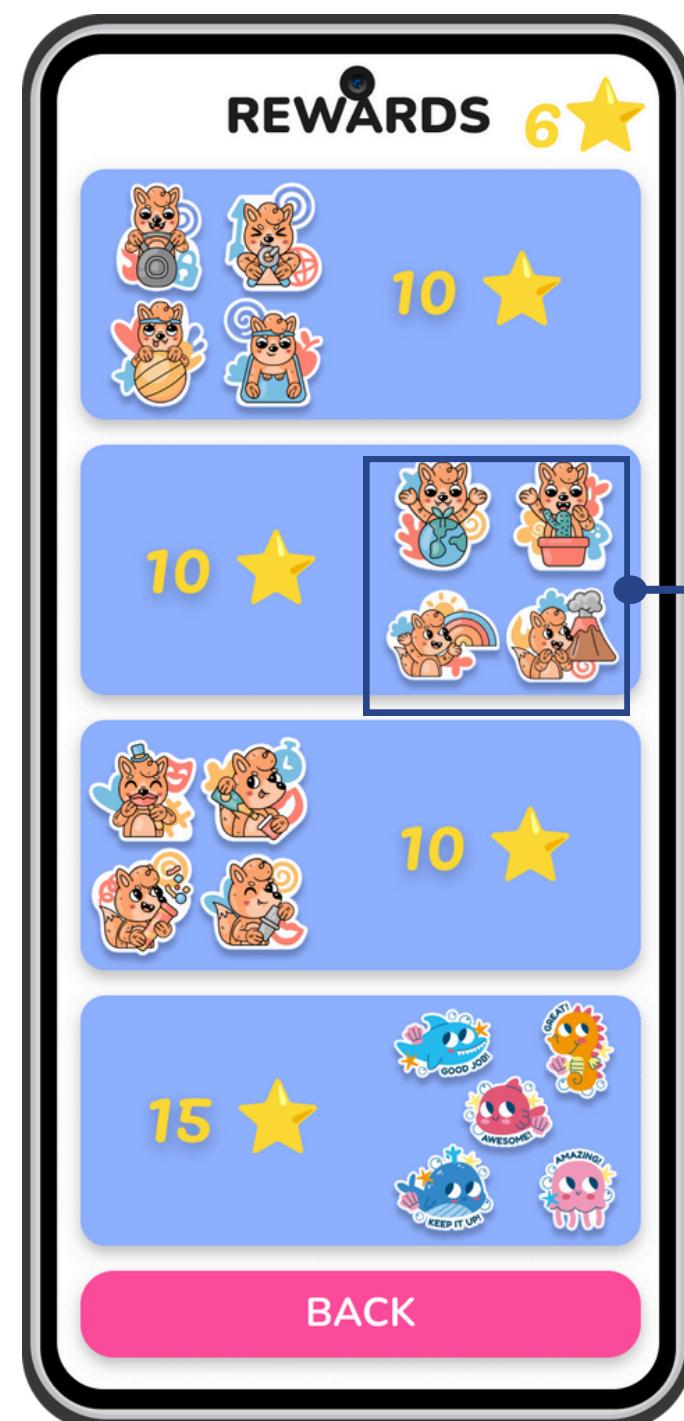
Unique and synergistic challenges to build social skills and teach other methods of communication while earning stars with every correct answer



7

Rewards

Motivate children through the exchange of stars with stickers that can be used when chatting



Stars Redemption

Redeem stars for stickers which can be used in text messages within the app

8

Community

Ignite a competitive spirit through the implementation of a level-based leaderboard

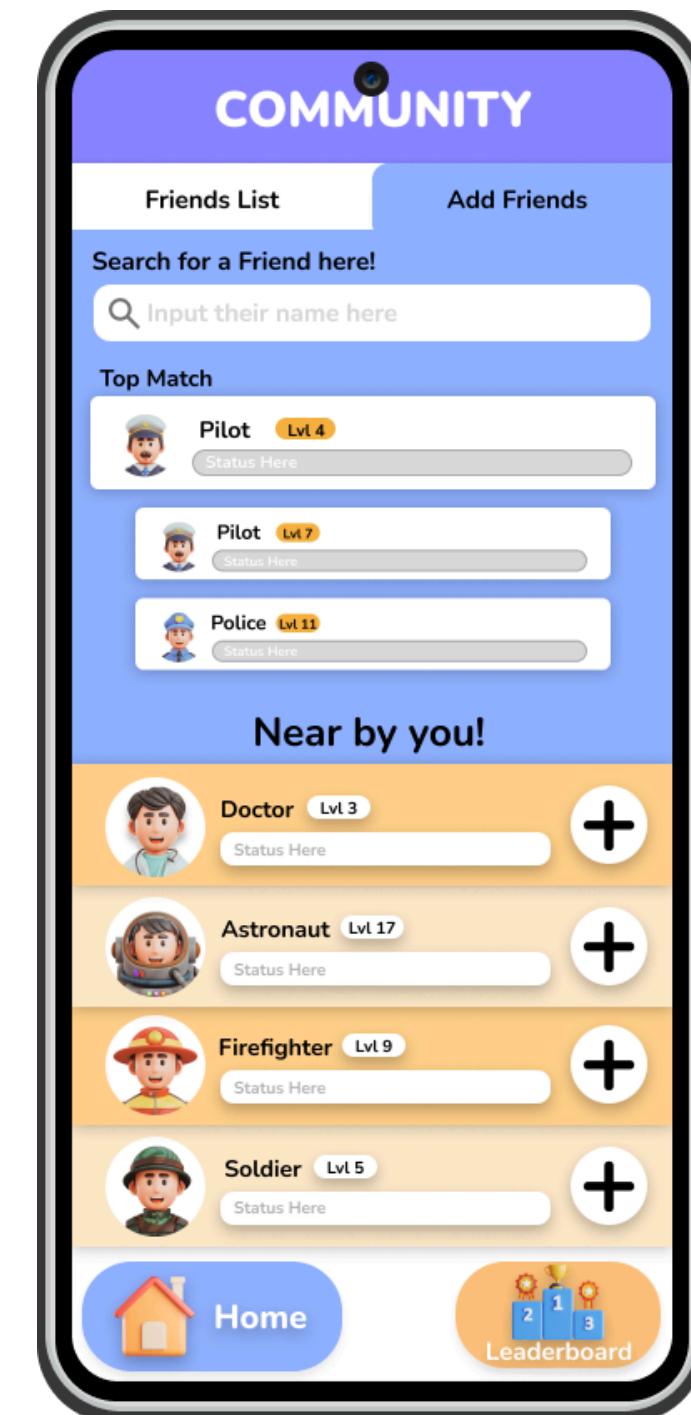
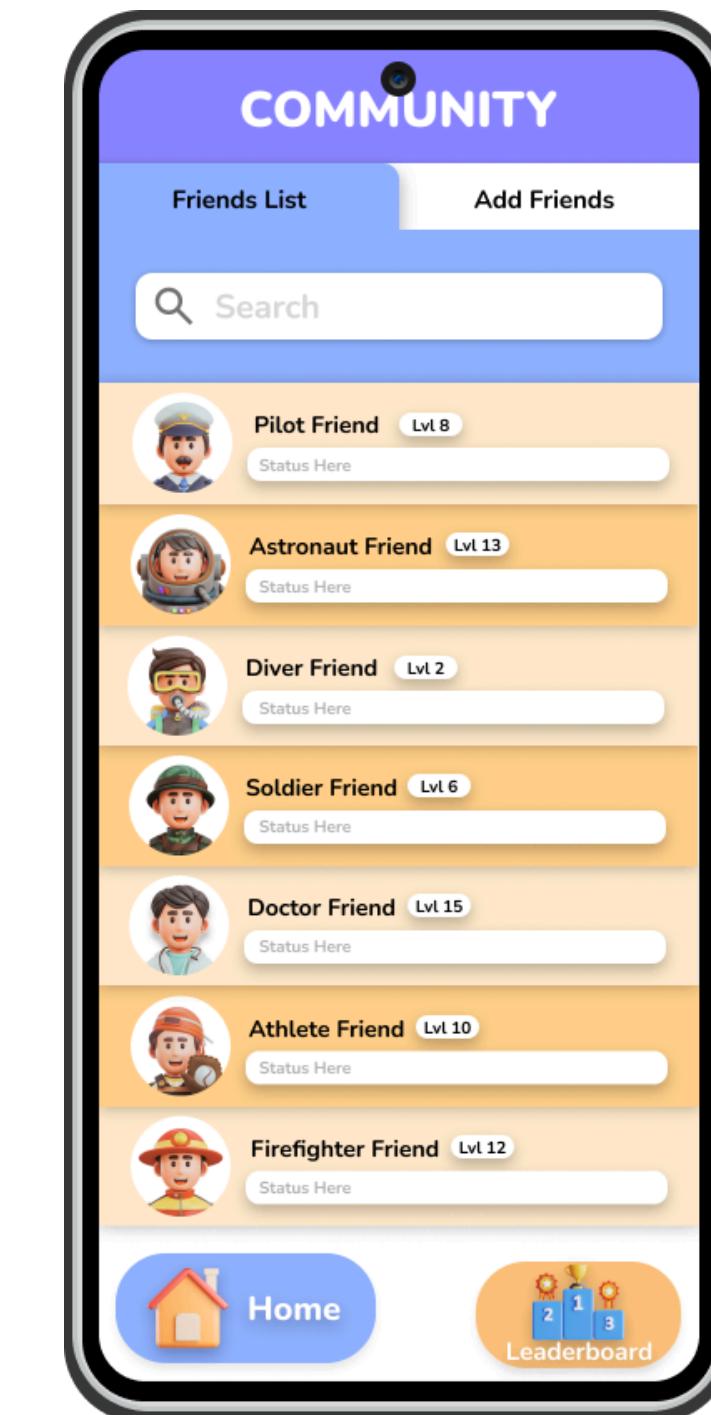
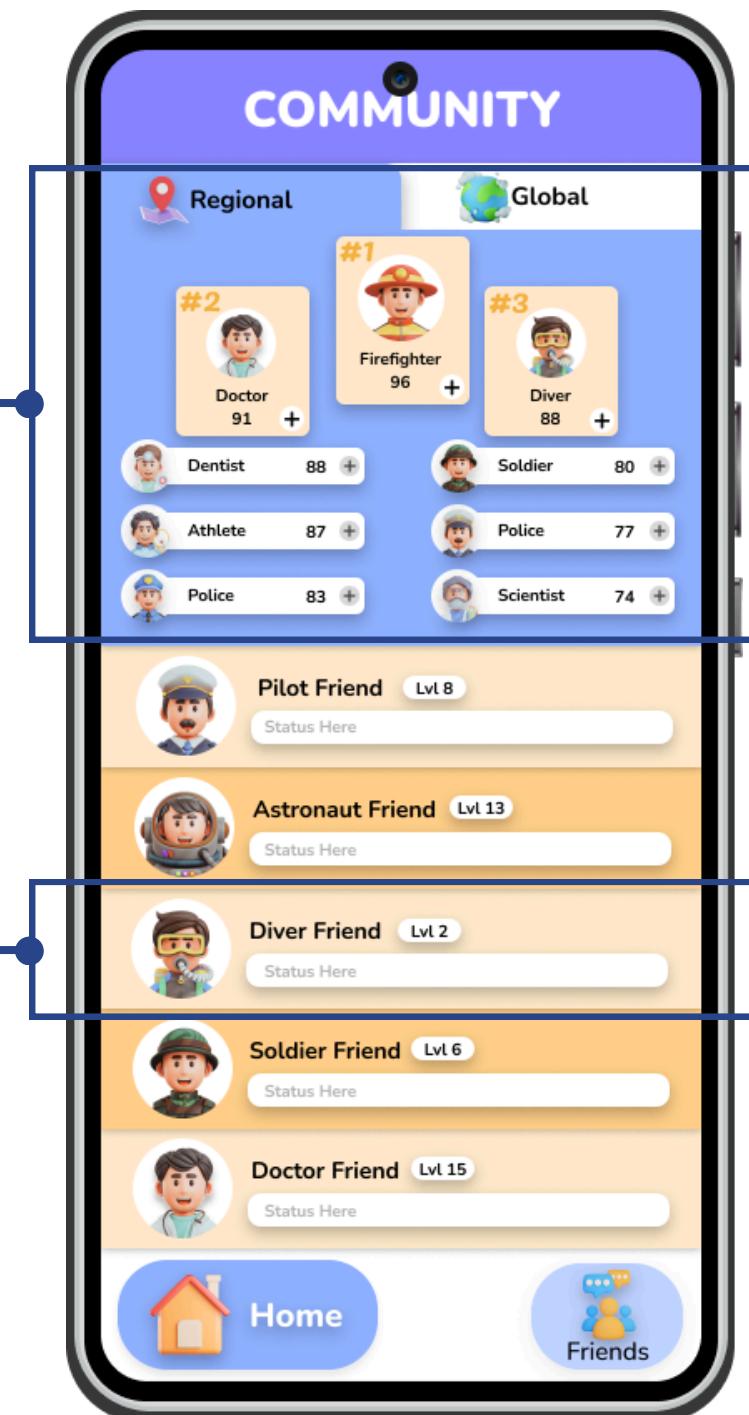
Connect with others on the same journey both near and far

Regional and Global Leaderboard

A ranking of the day's challenge scores of those on the same level as the user

Friends

Who you can chat and connect with



9

Chat

Chatting made easier with the use of AI; automatic text-to-speech and speech-to-text input for the blind, and automatic transcription for the deaf

Text-to-Speech

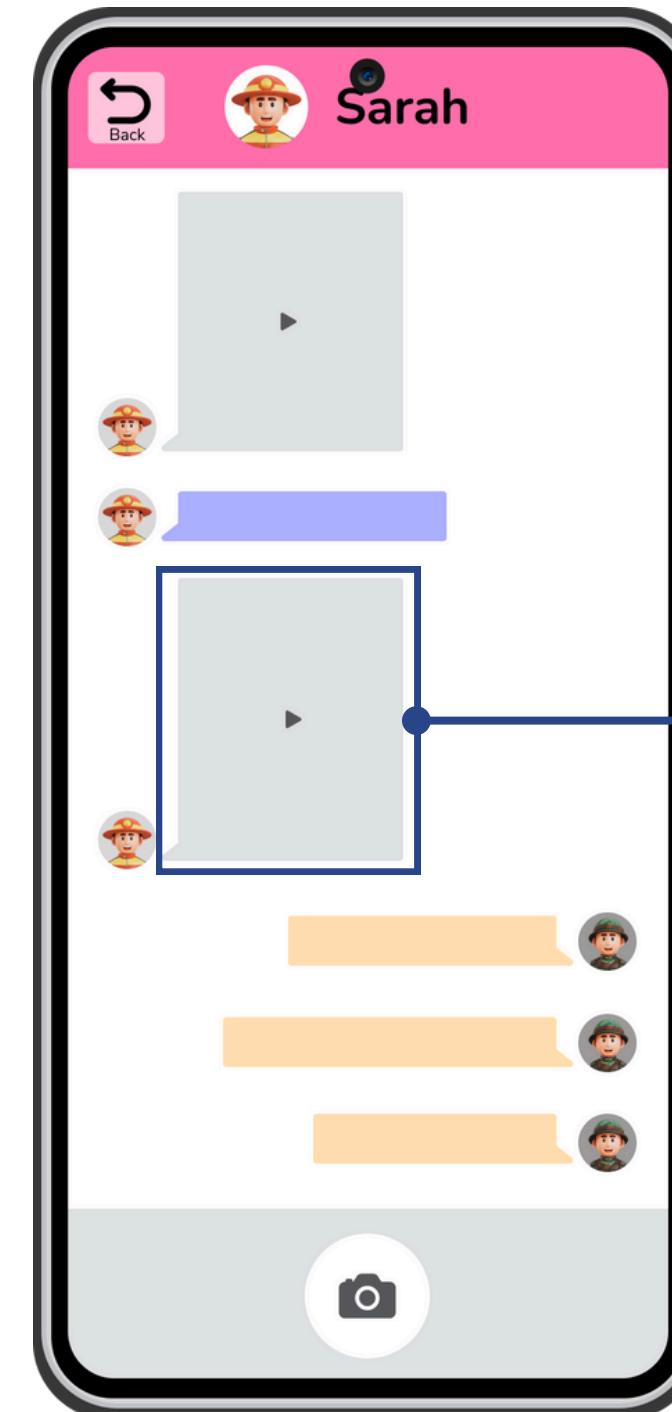
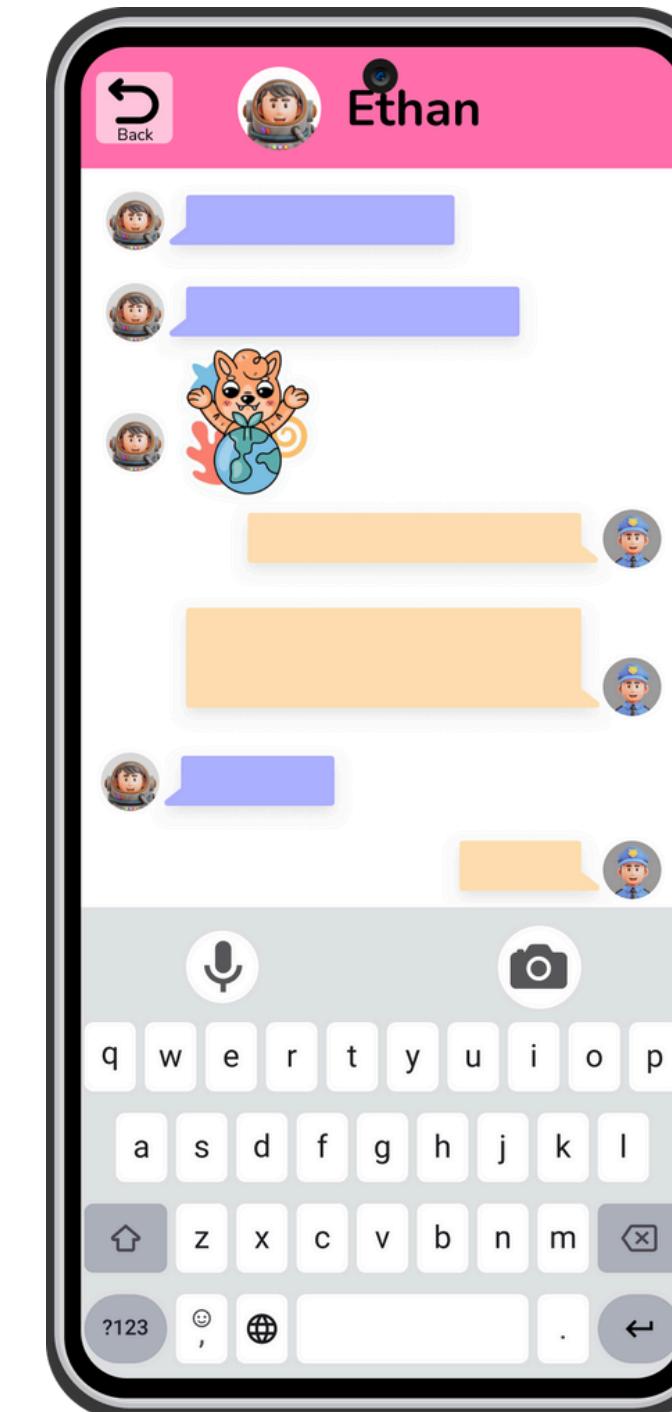
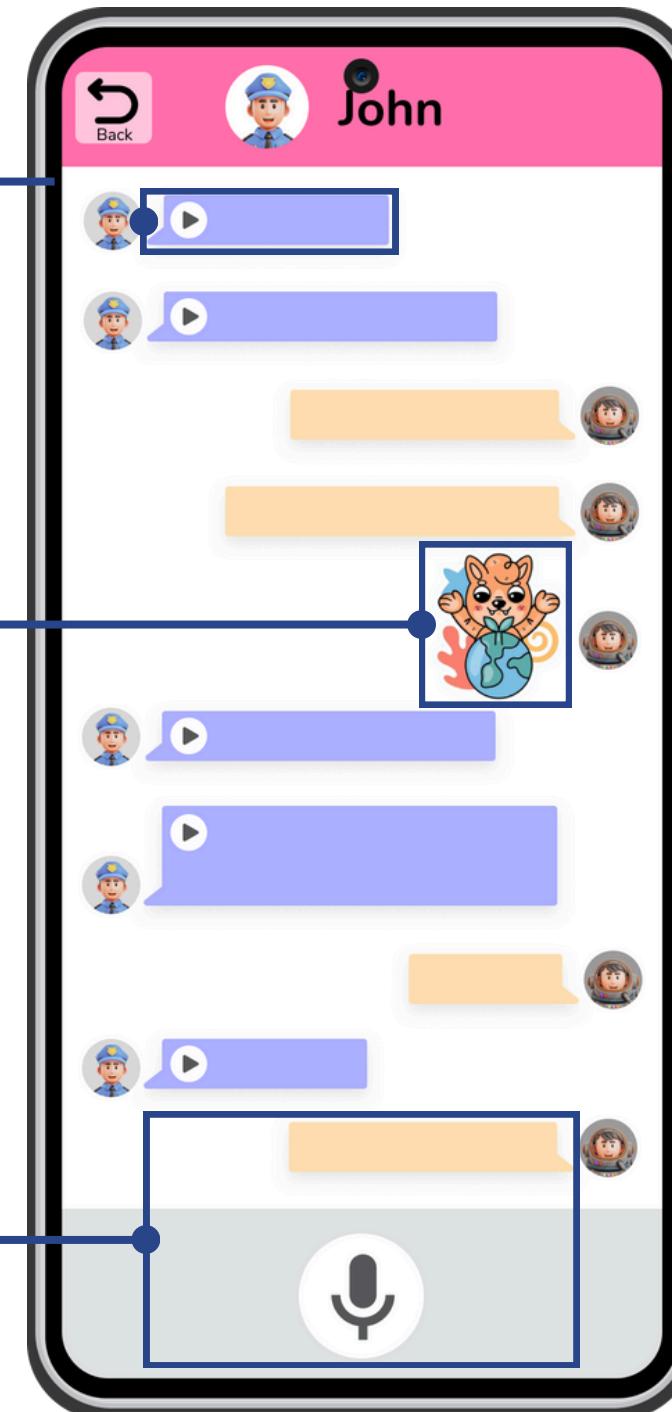
Aids the blind to read others message

Stickers

Redeemable through rewards

Speech-to-Text

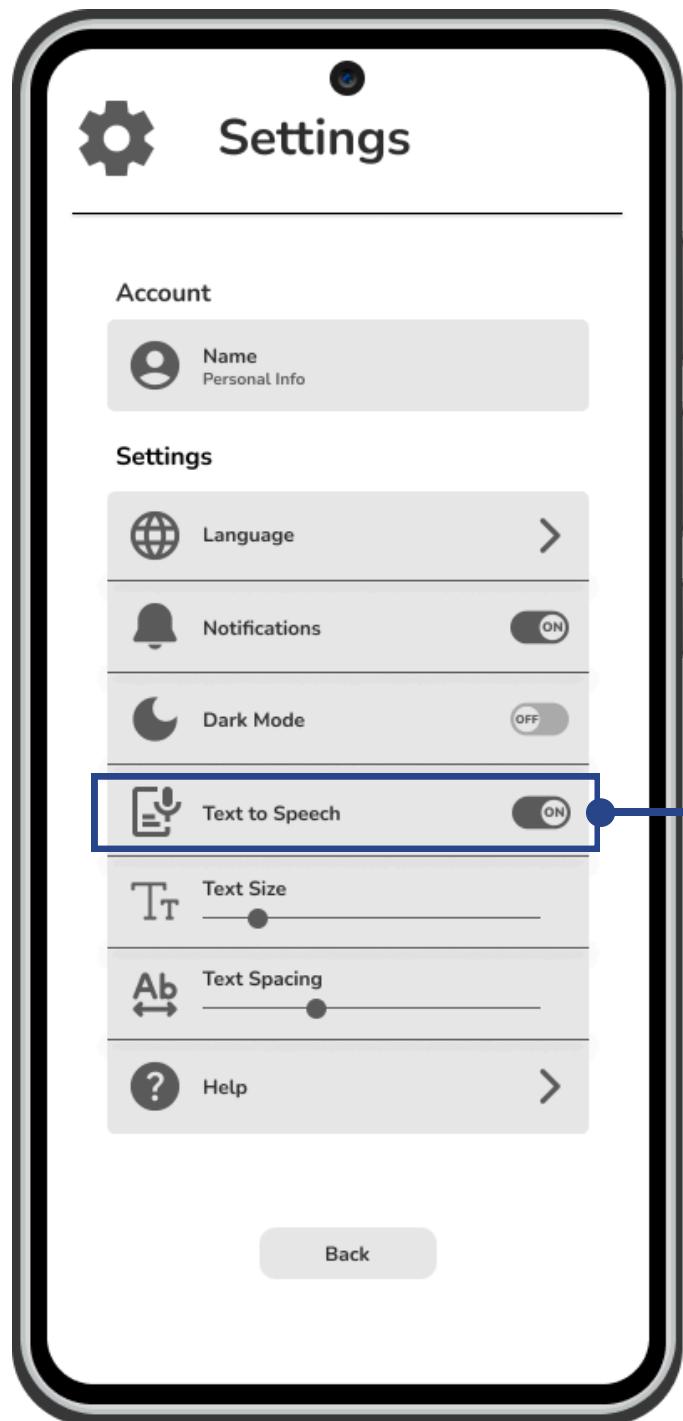
Allow the blind to text just like any other



Video Message
Allows for visual communication

10 Settings

Customisation for the most comfort while using the app



Screen Reader

Option to turn off the text to speech feature



