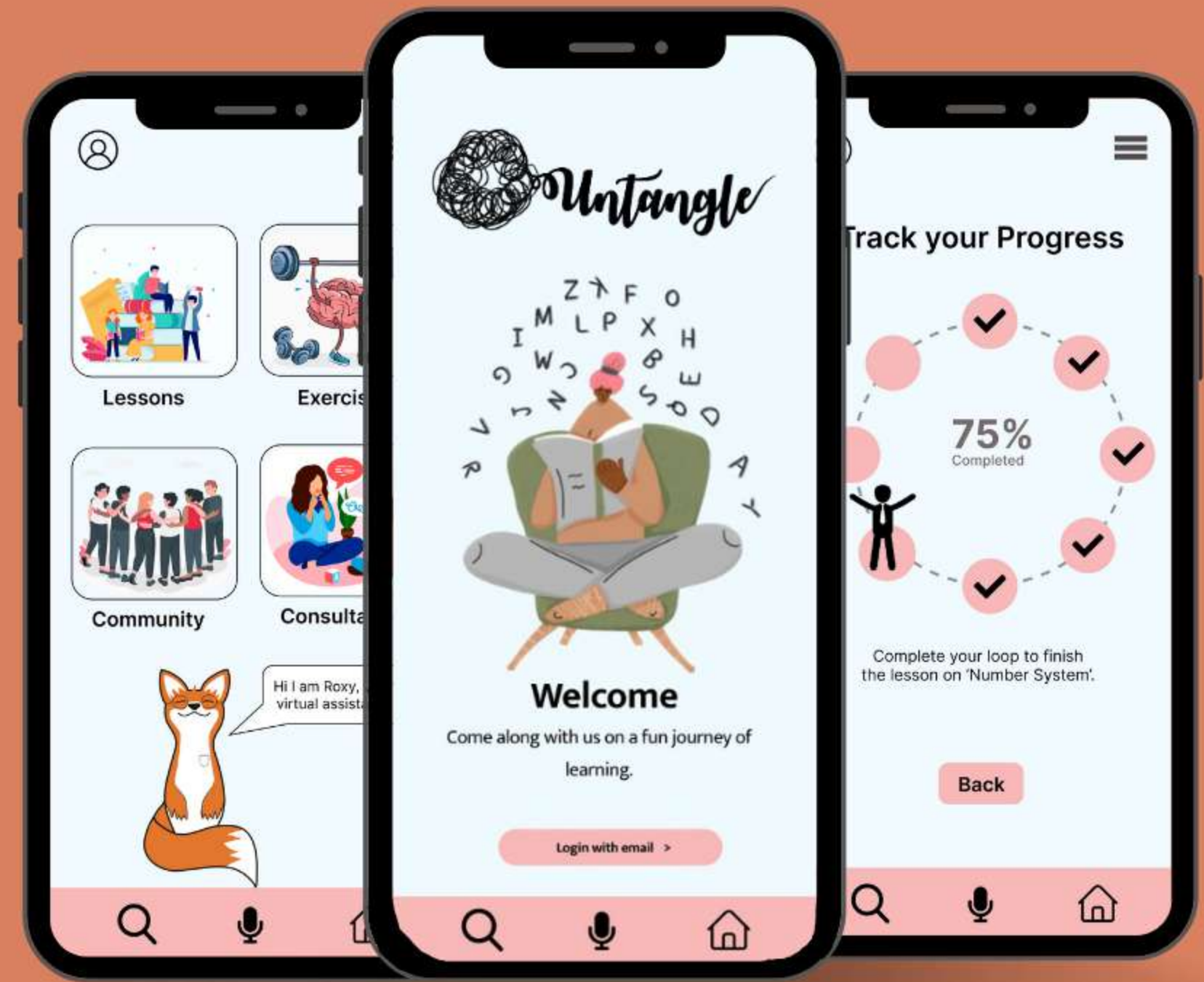


DESIGNING SOLUTIONS FOR DYSLEXIC PEOPLE



OVERVIEW

Dyslexia is not a disability, it's a different way of thinking.

Dyslexia is a learning disability that affects an individual's ability to read, write, and spell. It can have a significant impact on their academic, social, and professional lives, making everyday tasks challenging.

About the Project

Untangle is an application project for dyslexic people aims to provide user friendly, accessible digital platform that assist individuals with dyslexia in various aspects of their life. The solutions are suggestion by analyzing the problems that dyslexic people go through and their requirements accordingly.

Project Duration

2 weeks

Tools used



Figma



Canva



Procreate

Dyslexia



In our research we will be focusing on understanding the difficulties and concerns of an individual facing dyslexia in urban India.

Design Process

EMPATHISE



IDEATE



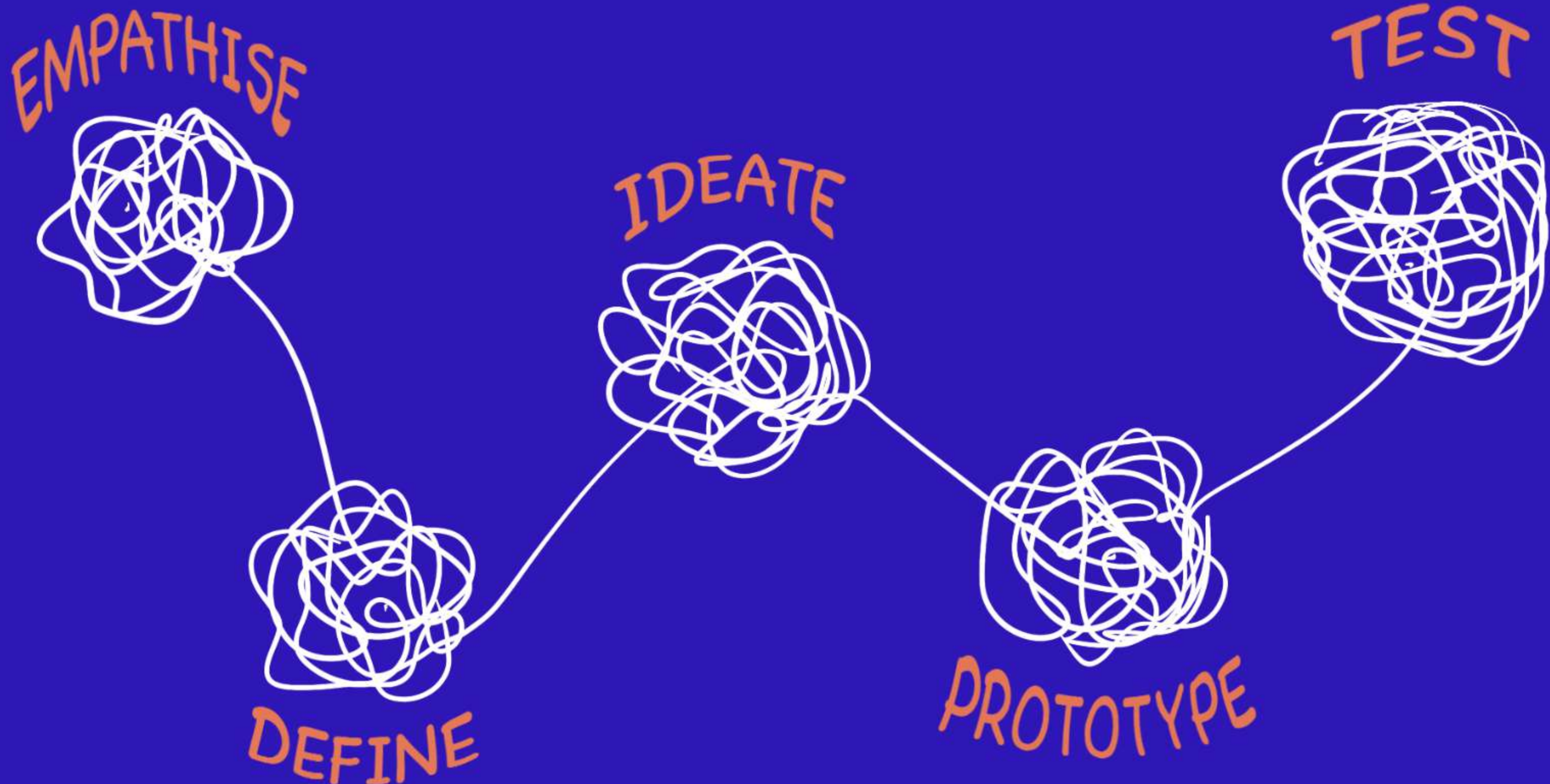
TEST



DEFINE



PROTOTYPE



Research

5-10%

suffer from
dyslexia
worldwide

18%

suffer in India

40%

of people with
dyslexia also
have ADHD.

Dyslexia
affects more
males than
females, with
3:1 ratio

- Some common symptoms include difficulty with reading fluency and comprehension, spelling, and writing.
- Individuals with dyslexia may also struggle with phonemic awareness, which is the ability to identify and manipulate individual sounds in words.
- Other possible symptoms include difficulty with organization and time management, as well as poor memory and attention.
- Although there are effective treatments that can help individuals with the condition, but There is no cure for dyslexia.
- The average reading level of an adult with dyslexia is about 5th grade.

Secondary

Interview

- What are some of the challenges that you have faced in your academic or professional life due to dyslexia?
- How do you manage your dyslexia at work/school?
- What types of accommodations or support have been most helpful to you?
- What are some common misconceptions about dyslexia that you would like to dispel?
- How has dyslexia affected your ability to learn and understand new information?
- In what ways do you feel dyslexia has impacted your self-esteem and confidence?
- Can you describe a specific instance where dyslexia posed a challenge in a work or academic setting?
- What coping mechanisms do you use to help manage the challenges of dyslexia?
- How have you communicated your dyslexia to your colleagues or classmates, and what kind of response have you received?
- Have you ever encountered any misunderstandings or discrimination due to your dyslexia, and if so, how did you handle it?

- Some common challenges include difficulty reading, writing, and spelling, as well as difficulty with organization and time management and also memory related issues.
- Some people use assistive technology, such as text-to-speech software or speech recognition software, taking notes, breaking down tasks into smaller parts, using visual aids to overcome.
- People have misconception that that it is a sign of low intelligence or that it can be cured.
- People feel overwhelmed or discouraged, leading to challenges in academic or professional settings.
- Individuals with dyslexia may encounter misunderstandings or discrimination due to their condition, such as being labeled as lazy or unintelligent.

Insights from Interview

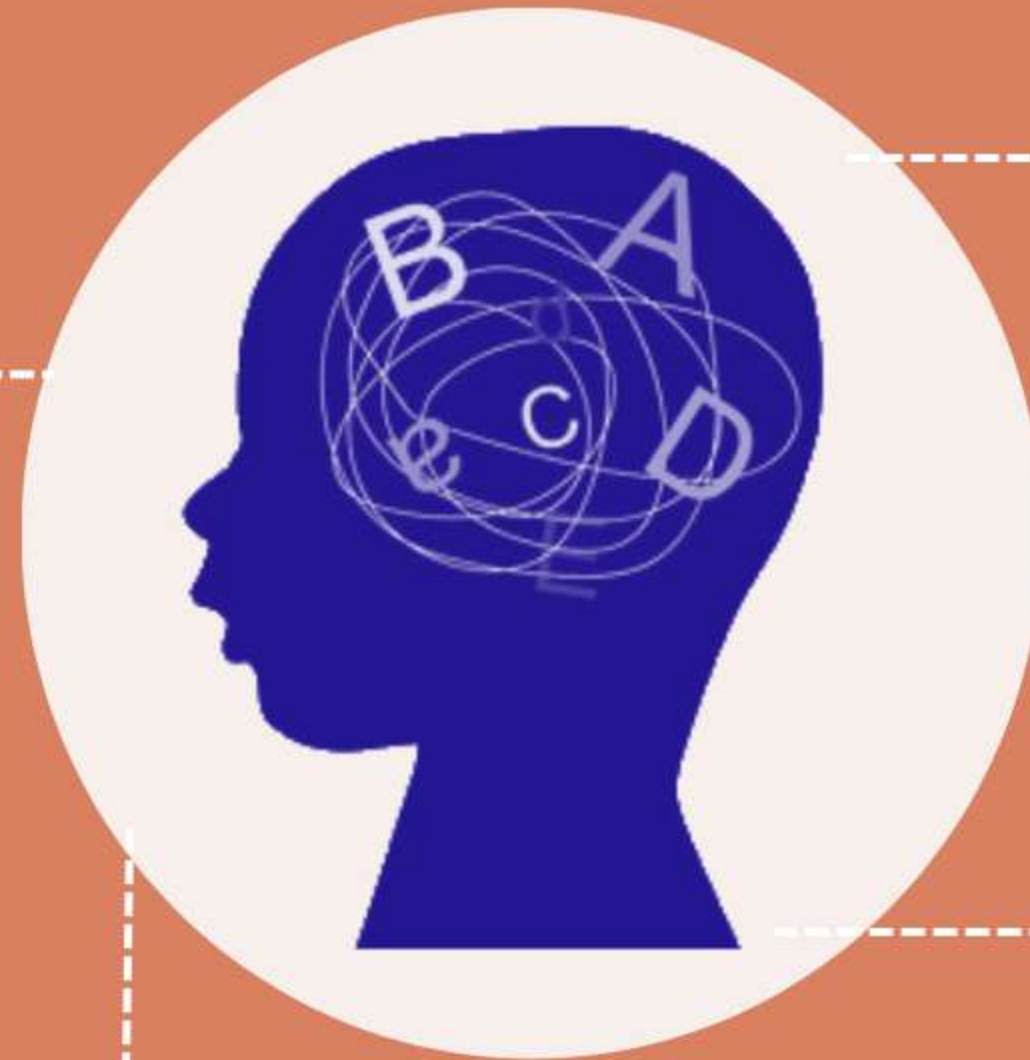
Problem

Cognitive Difficulties

- Considering the cognitive aspect dyslexia cases present the same deterioration pattern in skills like working memory.
- But there are also generally problems with reaction time, processing speed, and executive function as well.

Quality Education

- Quality adequate support is missing, colleges and schools do not have the resources or knowledge to provide specialized support for dyslexic people
- Struggle to keep up with their peers academically..



Awareness

- Stigmatized in society due to a lack of understanding about the condition
- Dyslexia may be mistakenly associated with lower intelligence.

Social and Emotional setback

- Feel isolated or excluded from their peers, and struggle with anxiety, depression, or other emotional challenges.
- Ashamed about their difficulties with reading and writing.

Identification

Empathy

Says

I have problem with words & writing

It is difficult to remember names of things

I am having problem with directions

Trouble memorizing

It is difficult to finish assignment and tests

I am uncomfortable having social interaction

Thinks

Everyone thinks I am dumb kid

I am different from others

I want to better express me

Why is making friends so difficult?

I think i can do better if learning is more fun

Does

Does handwriting practice to improve writing skills

Does more creative things

Self isolation

Takes extra time to finish a task

Have to find quite and peaceful place to read

Seeks support and treatment

Feels

Anti social from the rest of the kids

Feels insecure & misunderstood

Feels frustrated because can't keep up with other kids

Embarrassed when told to read or write

Feels underconfident in his academics

Mapping



Weepy Wednesday

Gender Female

Age 10

Personality

- Introvert
- Intelligent
- Curious

She is a 4th standard kid with dyslexia. She is smart but she face problem with reading and writing. Because of that she face academic struggle and low esteem impacting her life.

Habits

- Likes painting & listening to music
- Likes to play games
- Tries to do better
- Self isolation

Needs

- Needs support and guidance
- Needs a trainer to help with his learnings
- Needs practice
- Needs to boost his confidence
- Needs activities to learn

Challenges

- Associating sounds with letters
- Struggles with writing
- Have problem with directions
- Diificult to remember things

Goals

- To learn in a fun way
- To read and write better
- To be more social
- To be more creative
- To find something to solve the problem

Problem Statement

Dyslexia is a learning disorder that affects approximately 10% of the population worldwide. People with dyslexia goes through academic struggles, social isolation, and low self-esteem, ultimately impacting their ability to achieve success in life. Therefore, we aim to enhance the quality of life for individuals with dyslexia by creating inclusive and supportive environments that enable them to thrive.

Dyslens

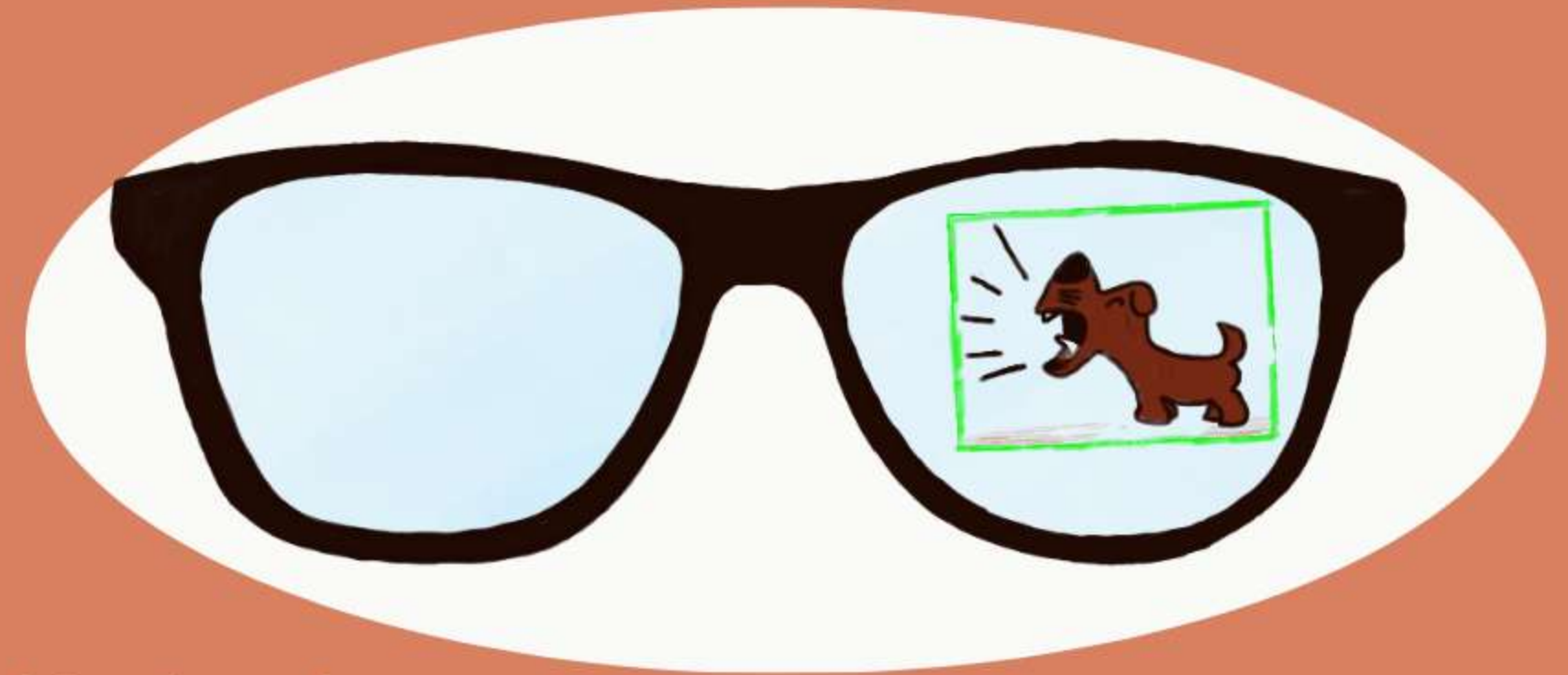
It's a spectacle for dyslexic. Since they have problem in reading texts we came up with a spectacle that has a camera sensor that scans and turns the text into images.

The spectacle has a touch sensor and camera sensor and both of them are connected to a microprocessor. We are using OCR(optical character recognition).

As OCR extracts texts from an image, vis-a-vis it can use to extract a image from text. Then it displays on the micro led display. We are using optical wave guide technology for lens display.



Dyslens



The sensor scans the text that ' the dog is barking' and shows as a pictorial form on the glass.

Logo



Ideation

Typography

Aa

Font

bestlight

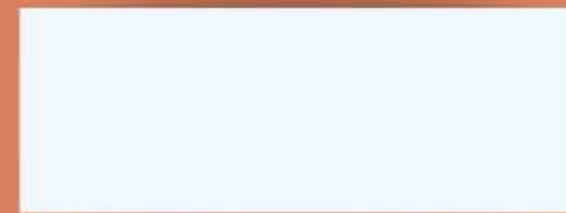
Icons Used



Color Pallete



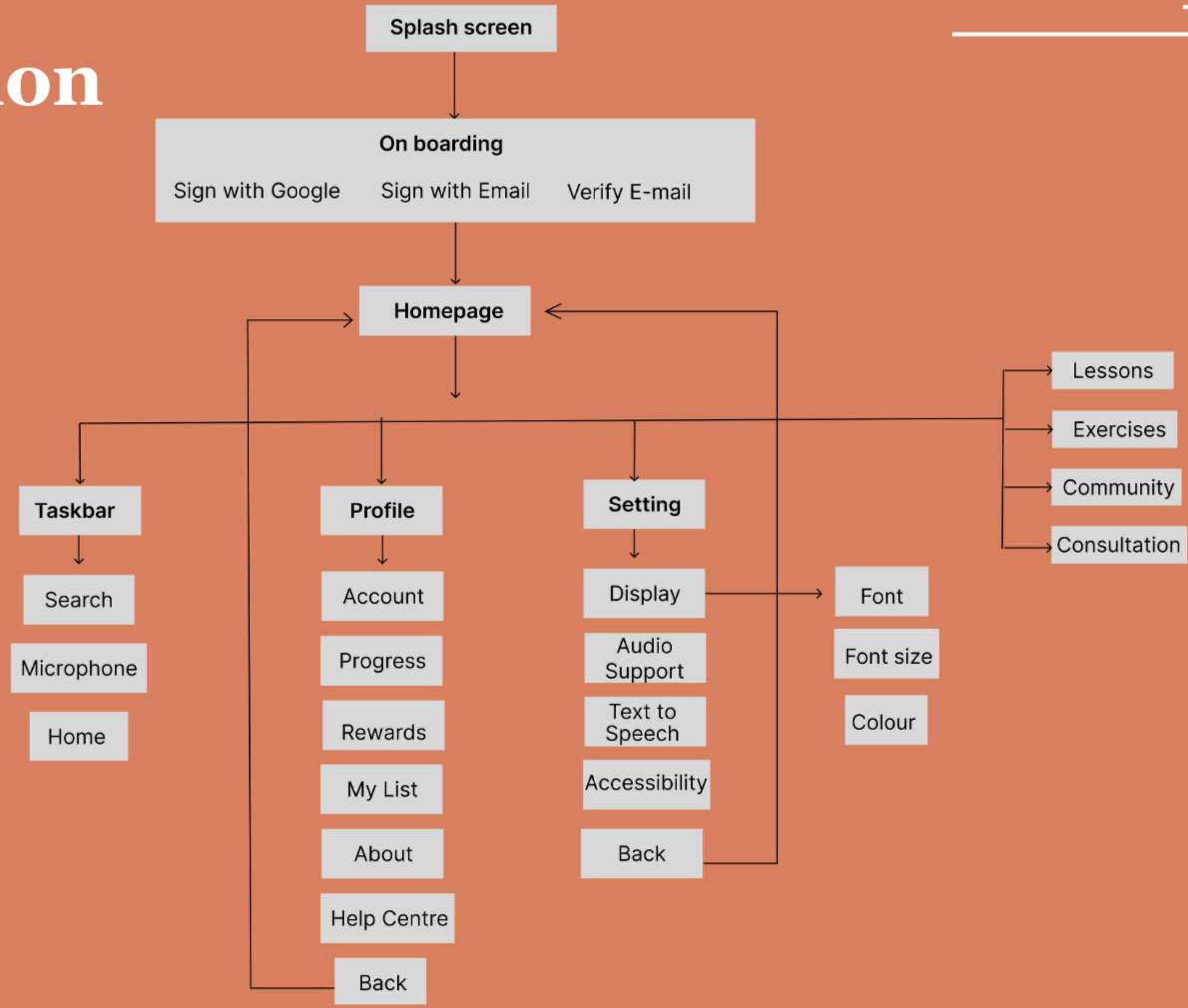
#ecb1ab



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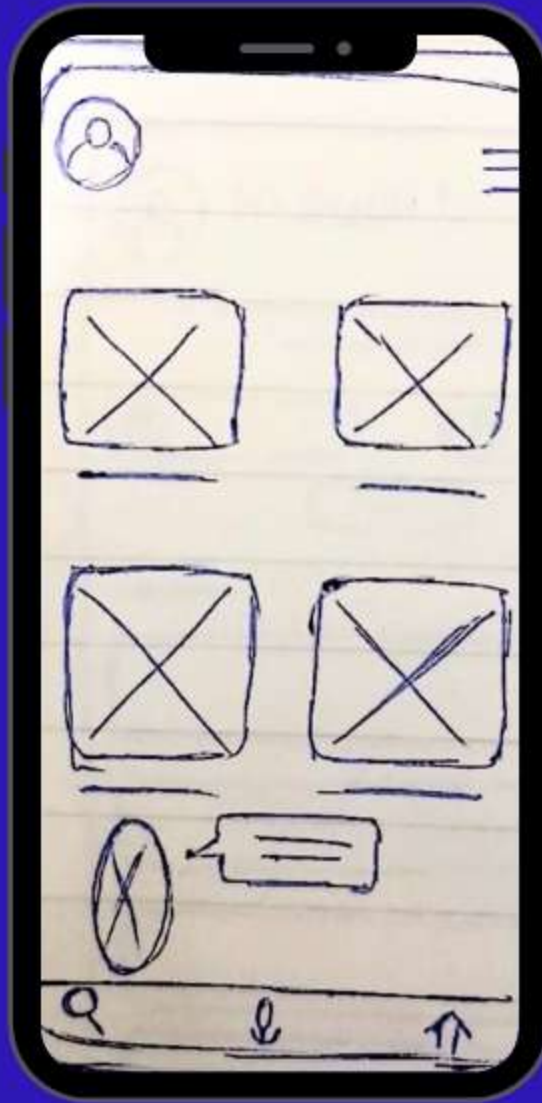
Style guide

Information

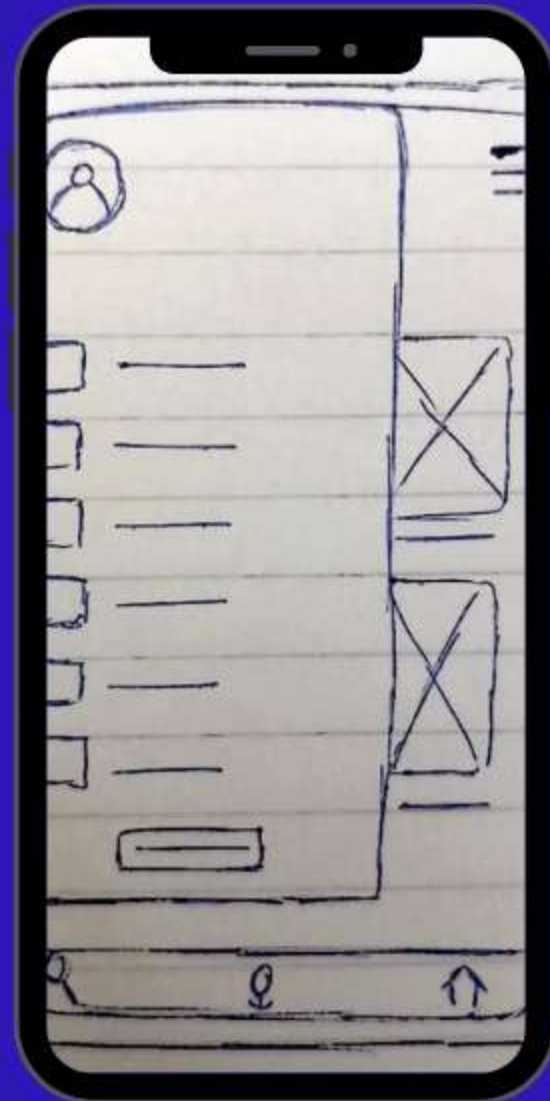


Architecture

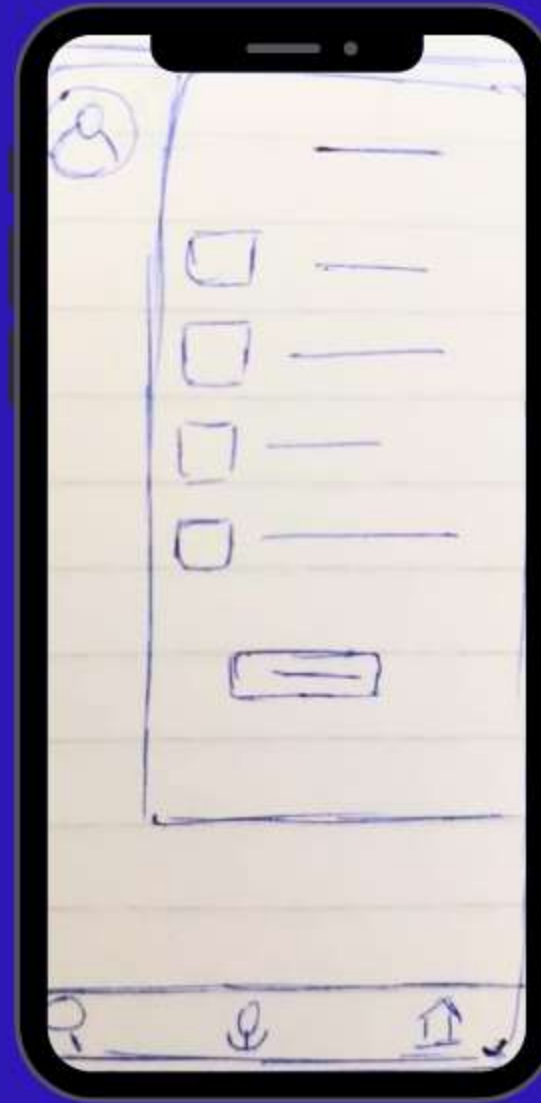
Wireframing



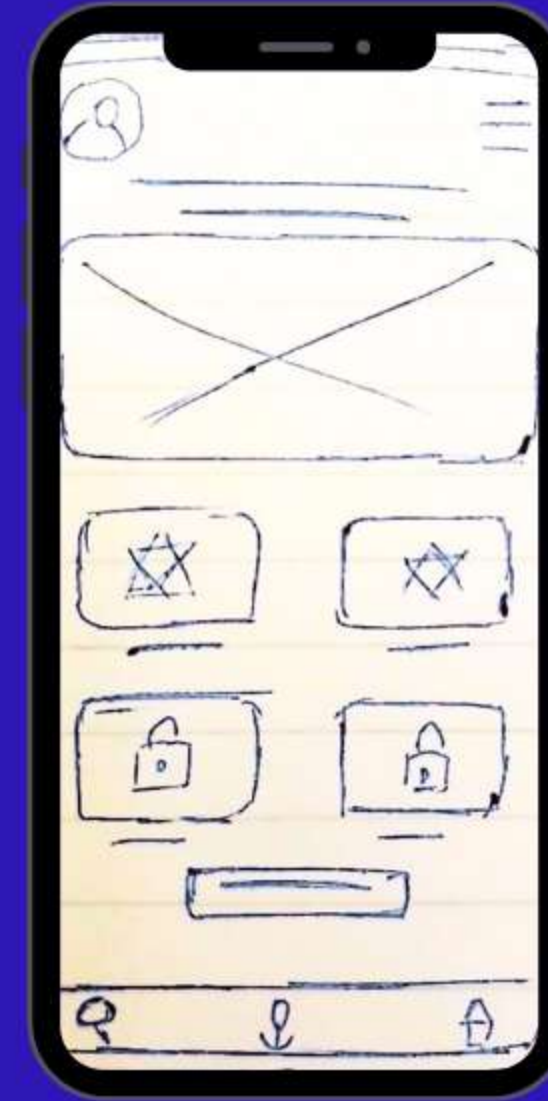
Landing page



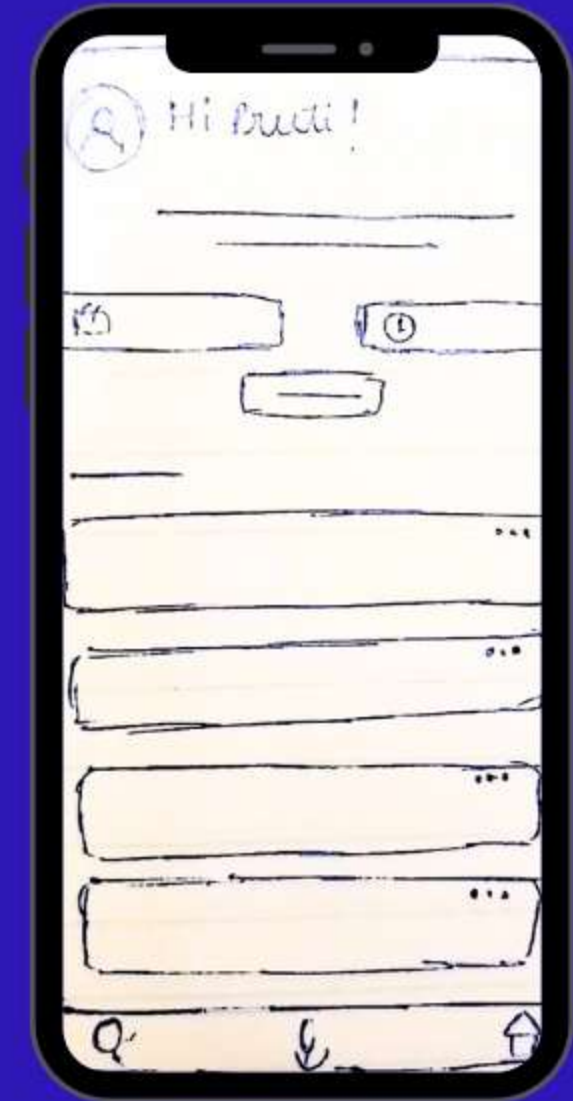
Profile page



Settings page



**Exercise and
Rewards page**

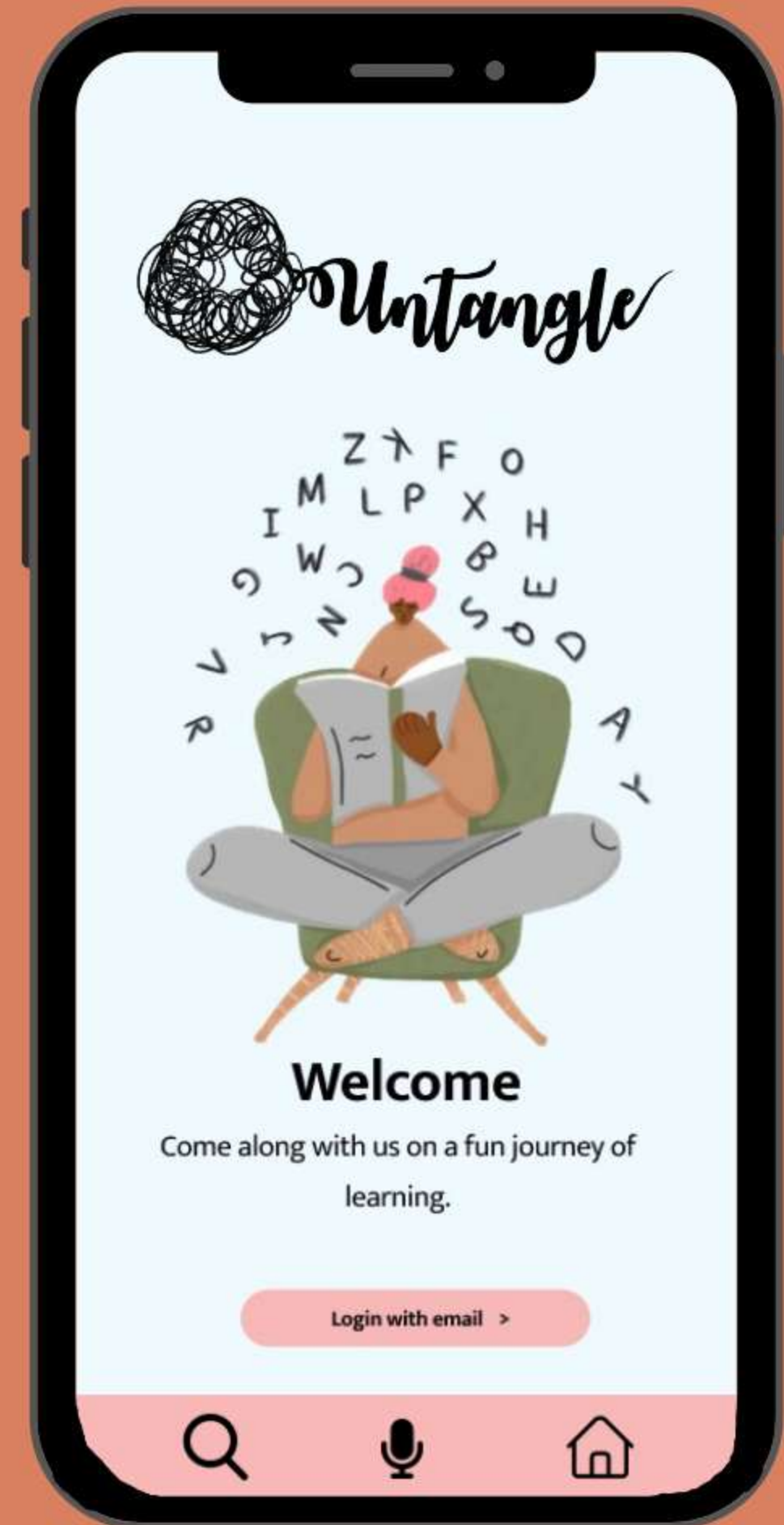


Consultation page

WHAT IS UNTANGLE?

UNTANGLE- untangle your Problems

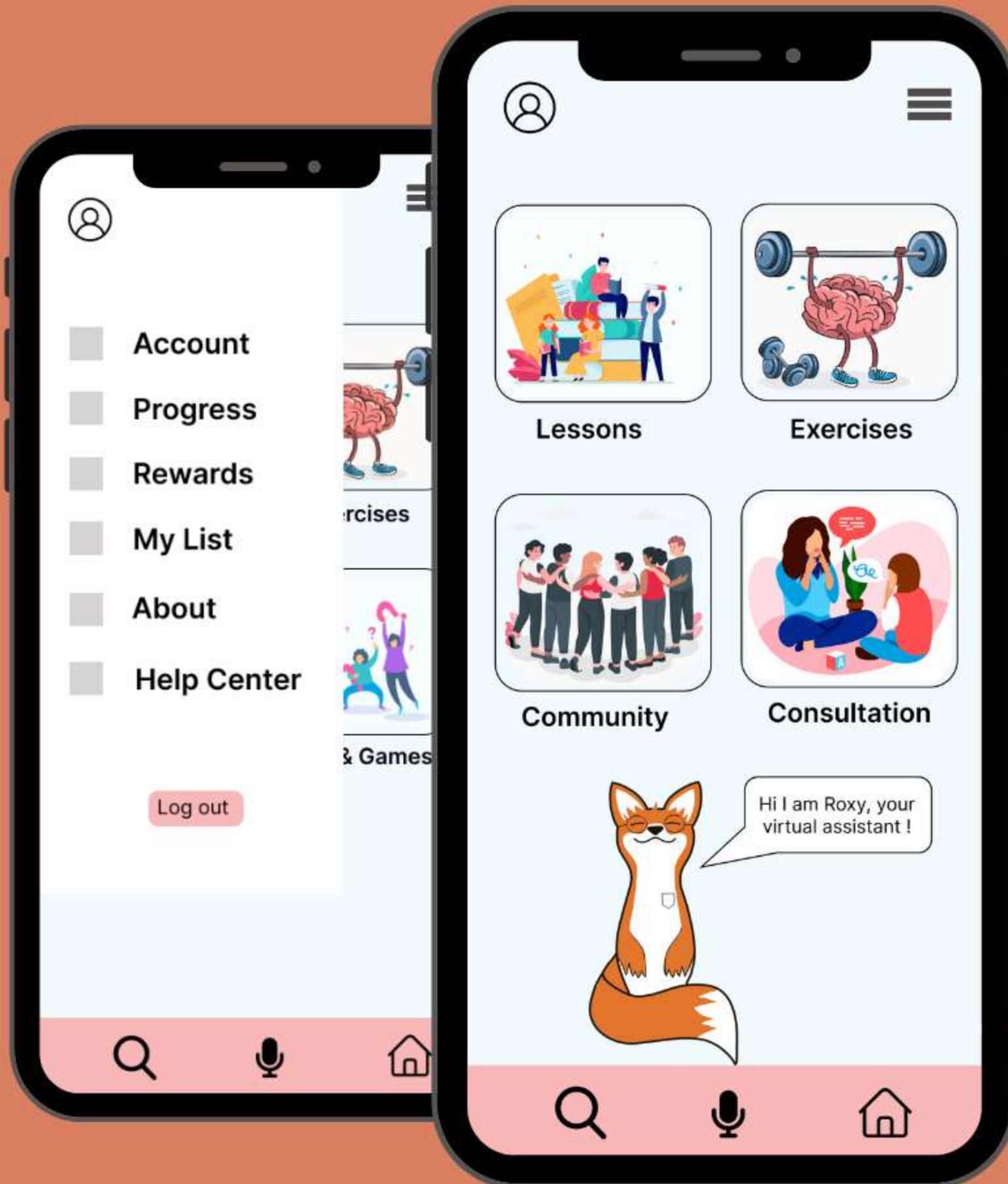
Dyslexia can be treated with a multi-sensory teaching approach and emotional support. So we have developed an app that gives people assistance in that process.



Homepage

Roxy: A virtual assistant pet to guide the user through clear instructions. It is inspired by the fox in 'Little Prince'. The main theme of the fable is expressed in the secret that the fox tells the little prince: "It is only with the heart that one can see rightly: what is essential is invisible to the eye."

Visual aids: Visual aids such as images, videos, and diagrams are used to help illustrate concepts and ideas.



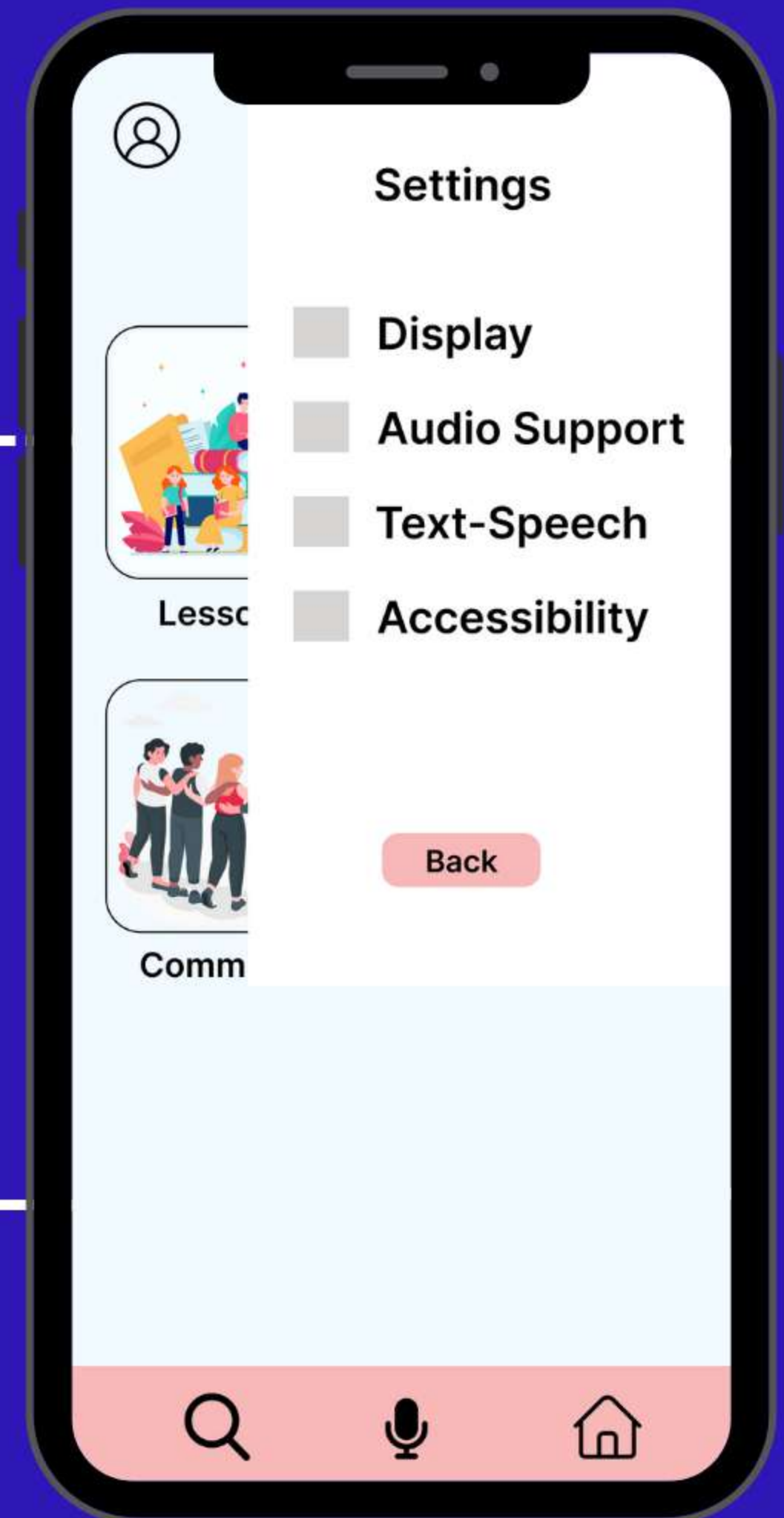
Settings

Display: Users can choose the font, size, and color of the font.

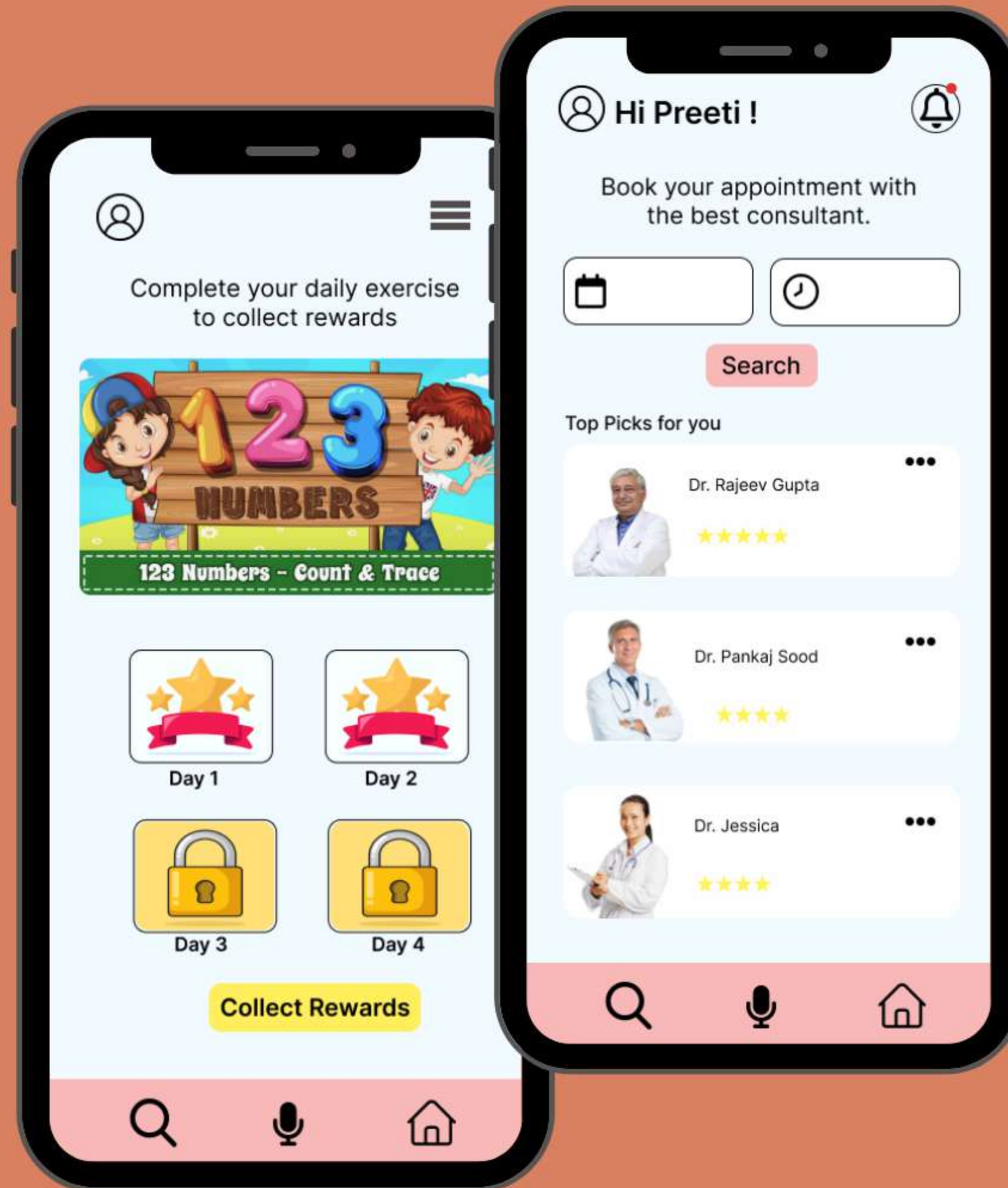
Audio Support: Microphone to make user's search journey easy.

Text - Speech: Texts can be converted to audio for better functioning.

Accessibility: Customizable screen menu, user can control gestures, hardware buttons, navigation, and more.

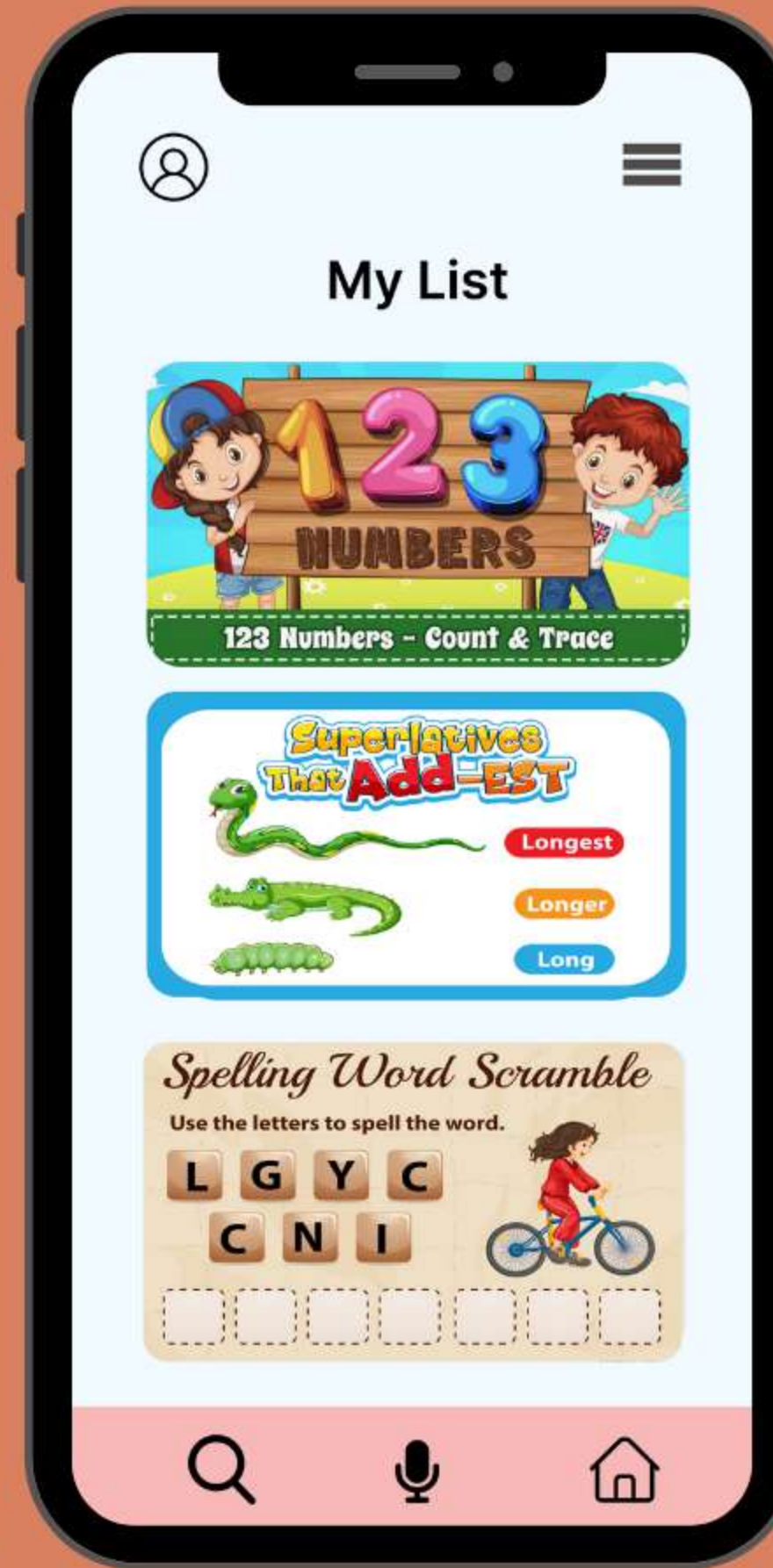
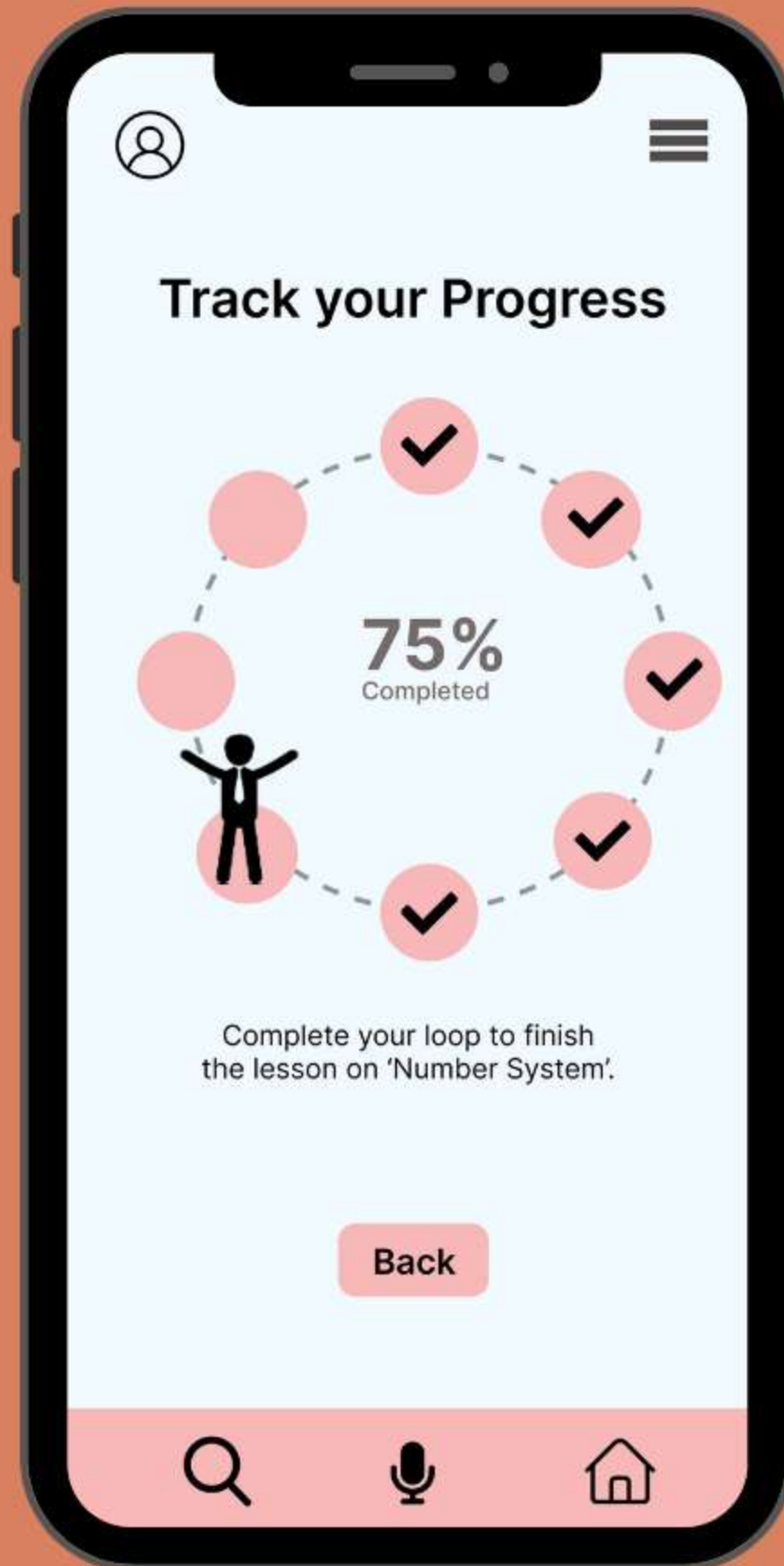


Exercises: Choose exercises and unlock levels everyday and earn rewards.

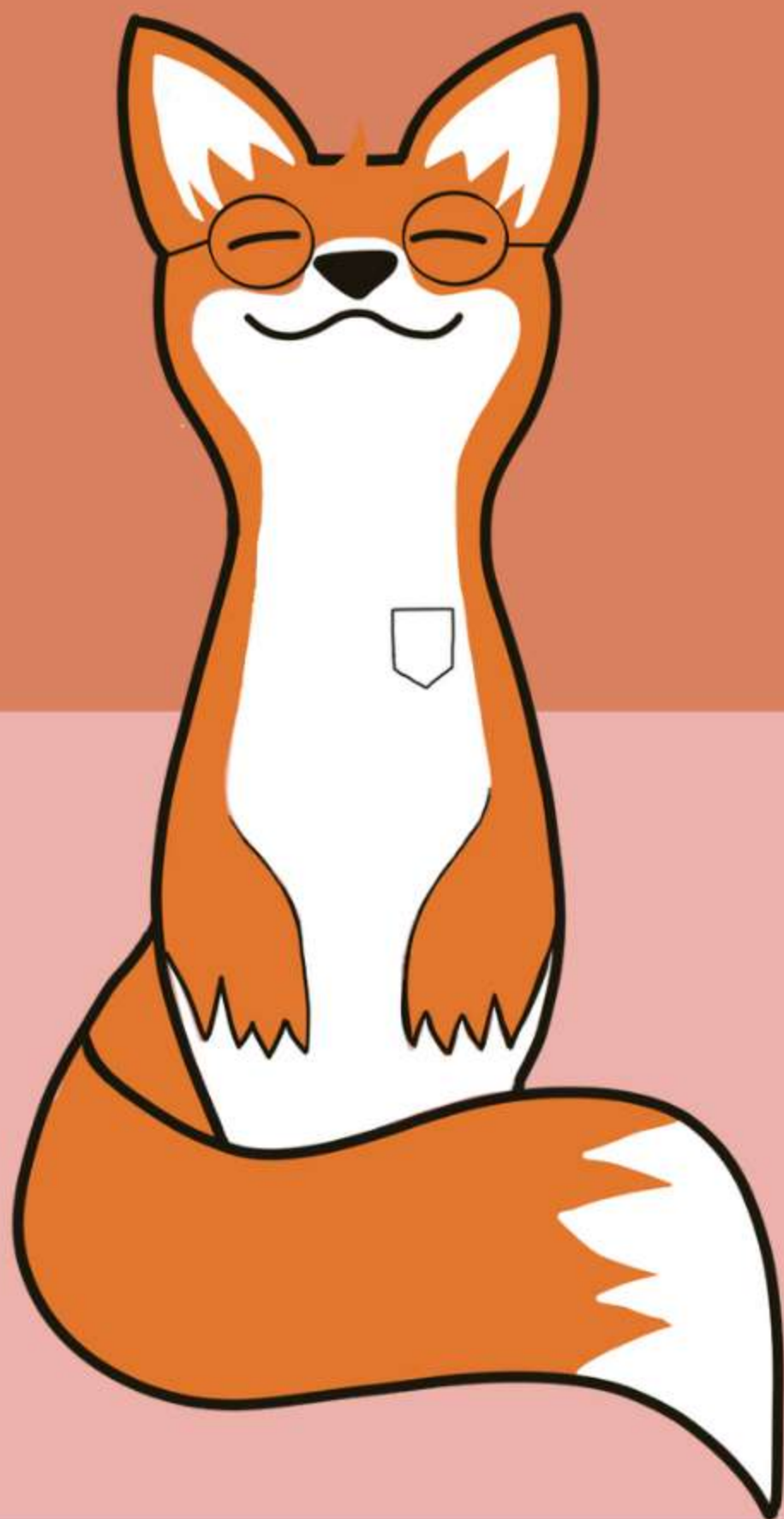


Consultation: Choose date and time according to your convenience and book appointment with the best doctor

Progress checker:
The user can track
their everyday
progress.



My list: This feature
lets the user
personalize a watchlist
of lessons.



Fin.