



EL-SERAG

Literacy platform for special needs

Supervised By:

Dr. Hussein Elshafie

Dr. Hosny Ahmed Abbas



Team Members



Mohamed Abelrahman Elkhlawy

Amina Younis Mohamed

Norhan Nageh Elabd

Manar Hussian Mohamed

Omar Mohamed Elhassan Madany

Sara Nabil Mohamed Kamel



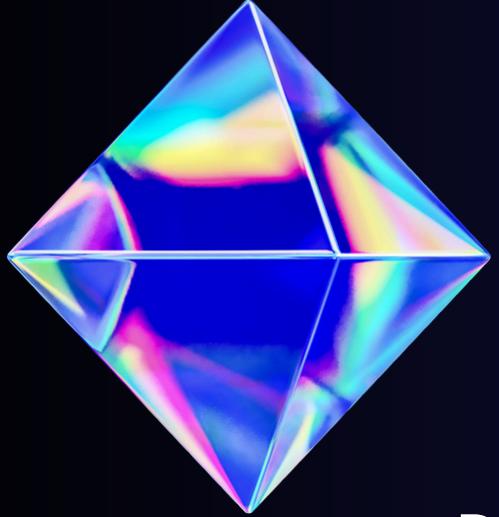
Table of contents

1. abstract
2. problem formulation
3. proposed solution
4. system overview
5. results
6. implementation
7. Needs & Hardships

Abstraction

Understanding Special Needs:

Special needs encompass a diverse group facing various challenges like physical, intellectual, sensory, or developmental issues such as autism, Down syndrome, and ADHD. Tailored support is crucial for their education, social interaction, and healthcare.

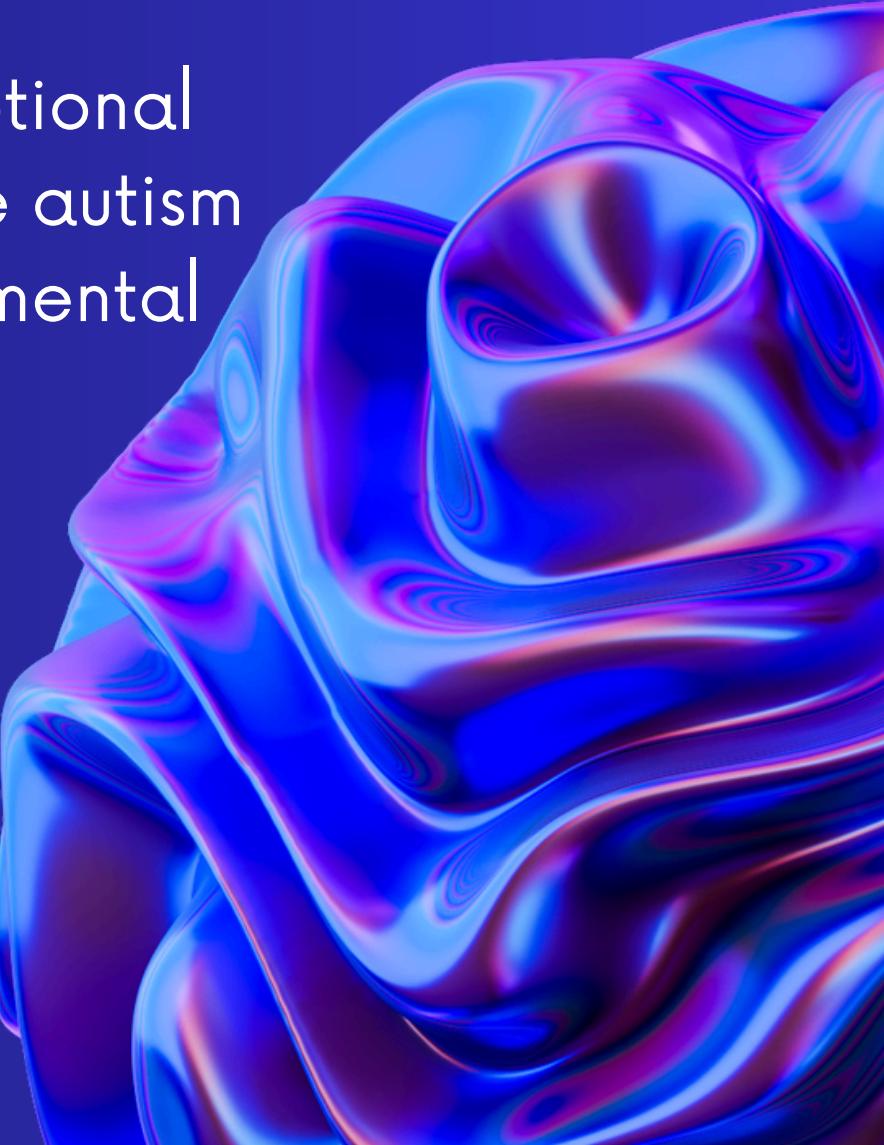


Types of Disabilities:

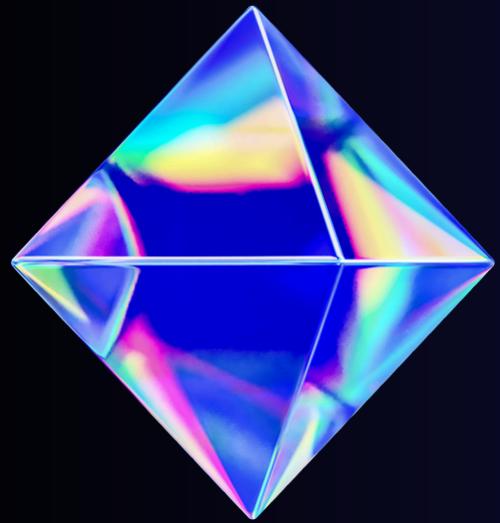
Disabilities range widely, affecting physical, cognitive, sensory, or emotional functioning. They include physical impairments, cognitive challenges like autism and dyslexia, sensory disabilities such as blindness and deafness, and mental health conditions like depression and anxiety.

Blindness Focus:

Blindness presents unique obstacles in accessing information, communication, and mobility. Prioritizing blindness in our literacy platform project aims to empower blind individuals with accessible digital content, assistive technologies, and inclusive design. Our goal is to make education and information universally accessible, fostering personal growth and societal participation for the blind.

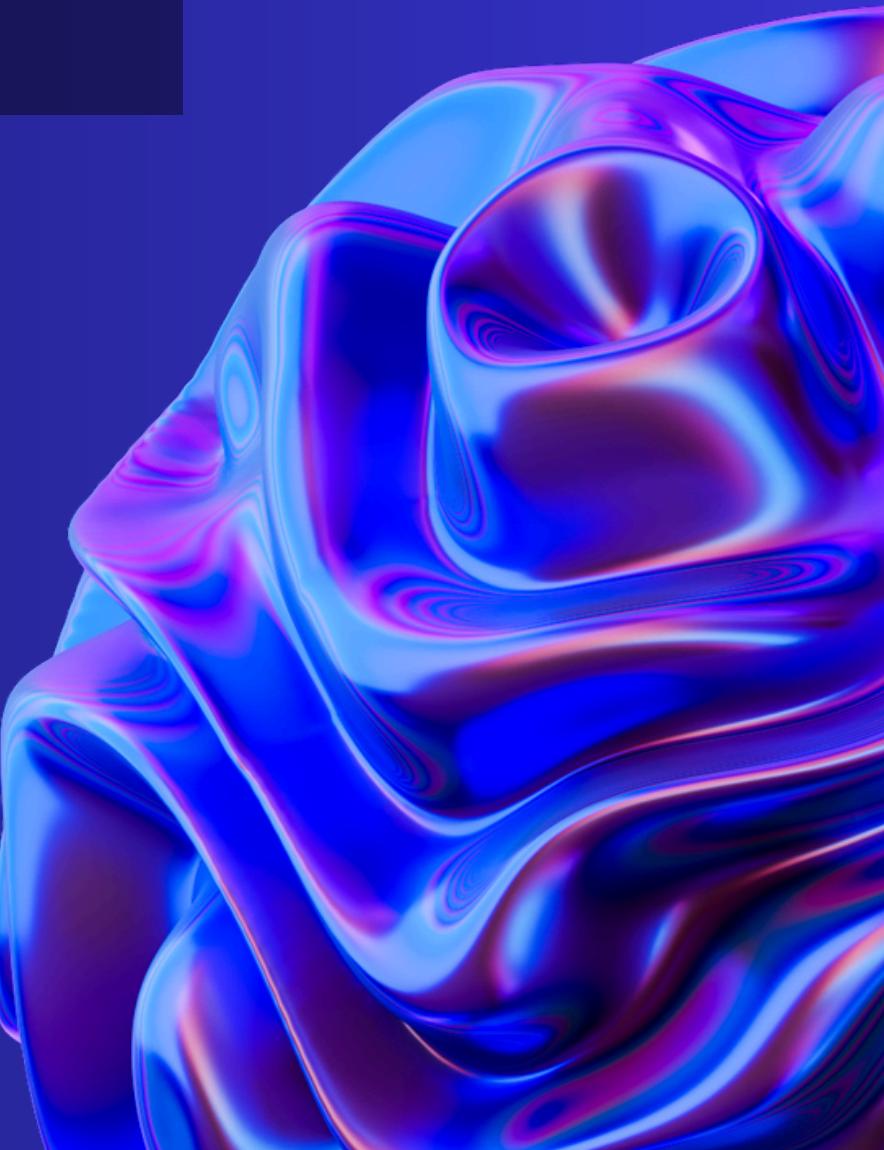


Problem Formulation

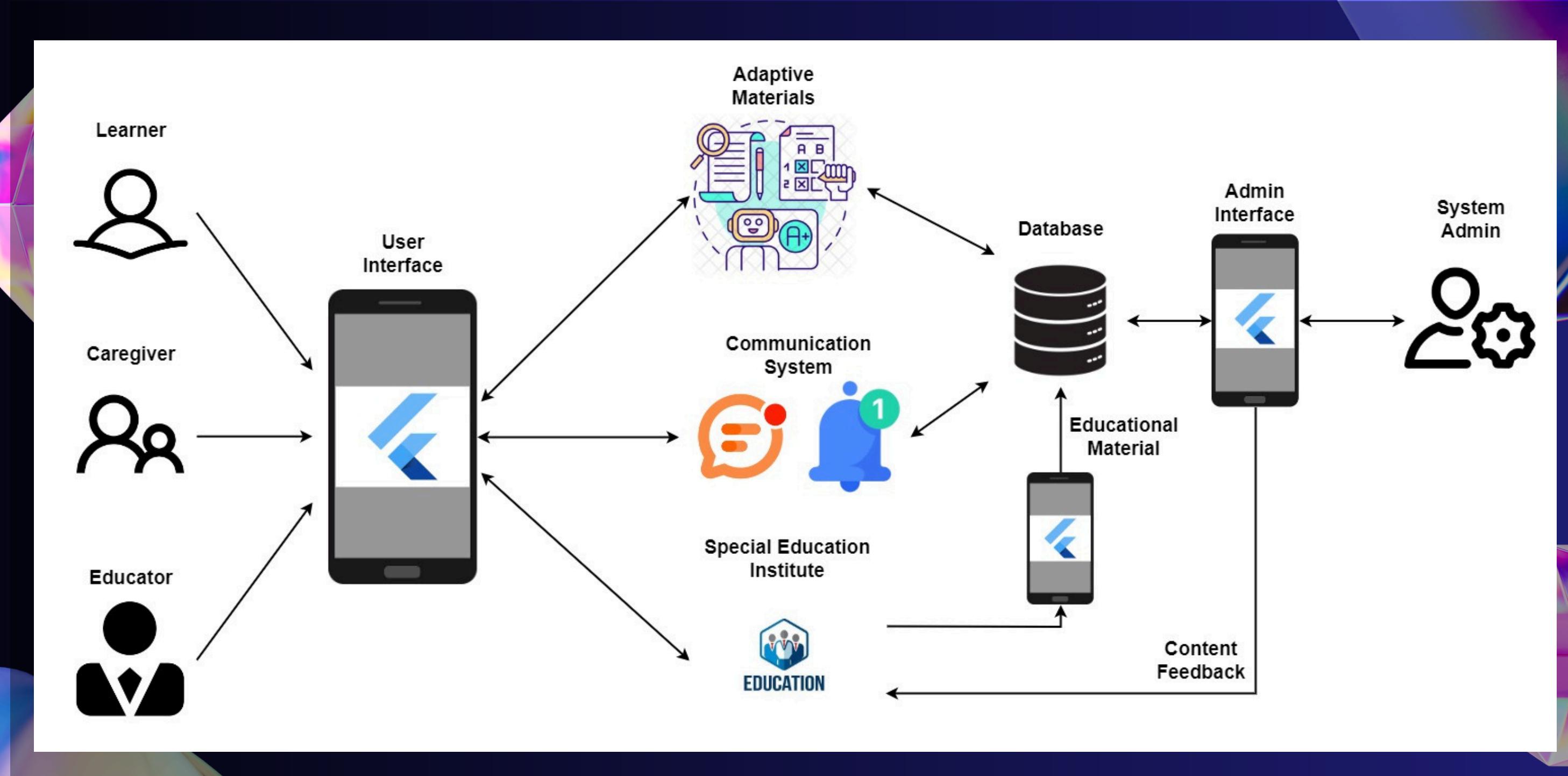


- Access to Learning Materials
- Limited Visual Learning
- Lack of Hands-On Experience

- Social Isolation
- Lack of Proper Training and Support
- Transportation and Mobility Challenges

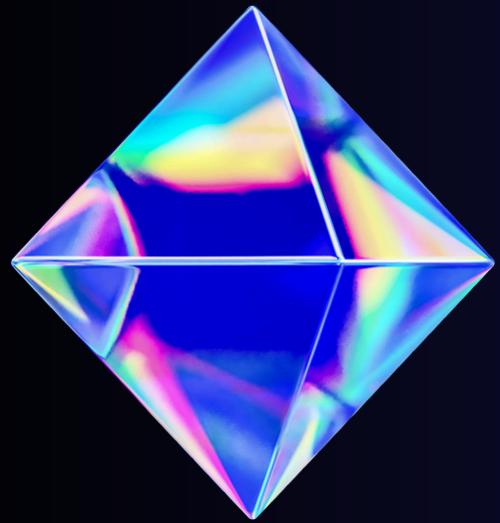


Proposed Solution



System Architecture

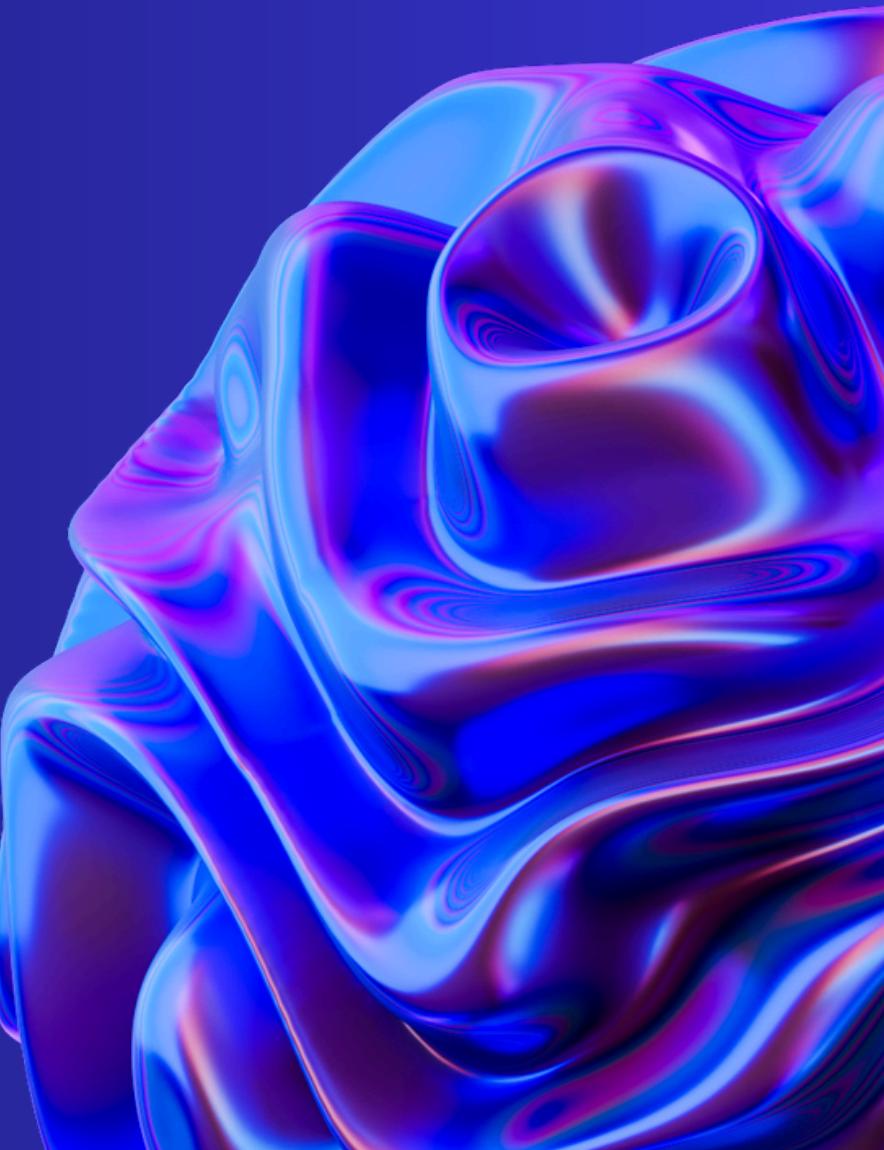
System Overview



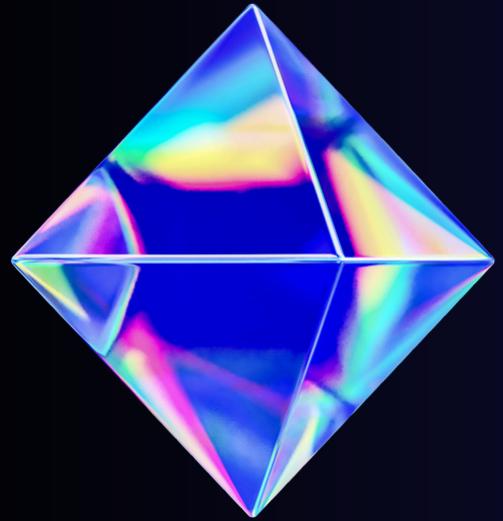
upon that we developed literacy platform for special needs and we started with blind people as a first version so we find that better to initialize it in mobile application so it can be available for everyone

Application features :

- Friendly interface
- Braille Support
- Customization options
- progress tracking and feedback



System Overview



So in nutshell we finished 70 % of the project front end is finished and the backend is mostly finished we only have some points as chat system and link the back to front and uploading the project into the server

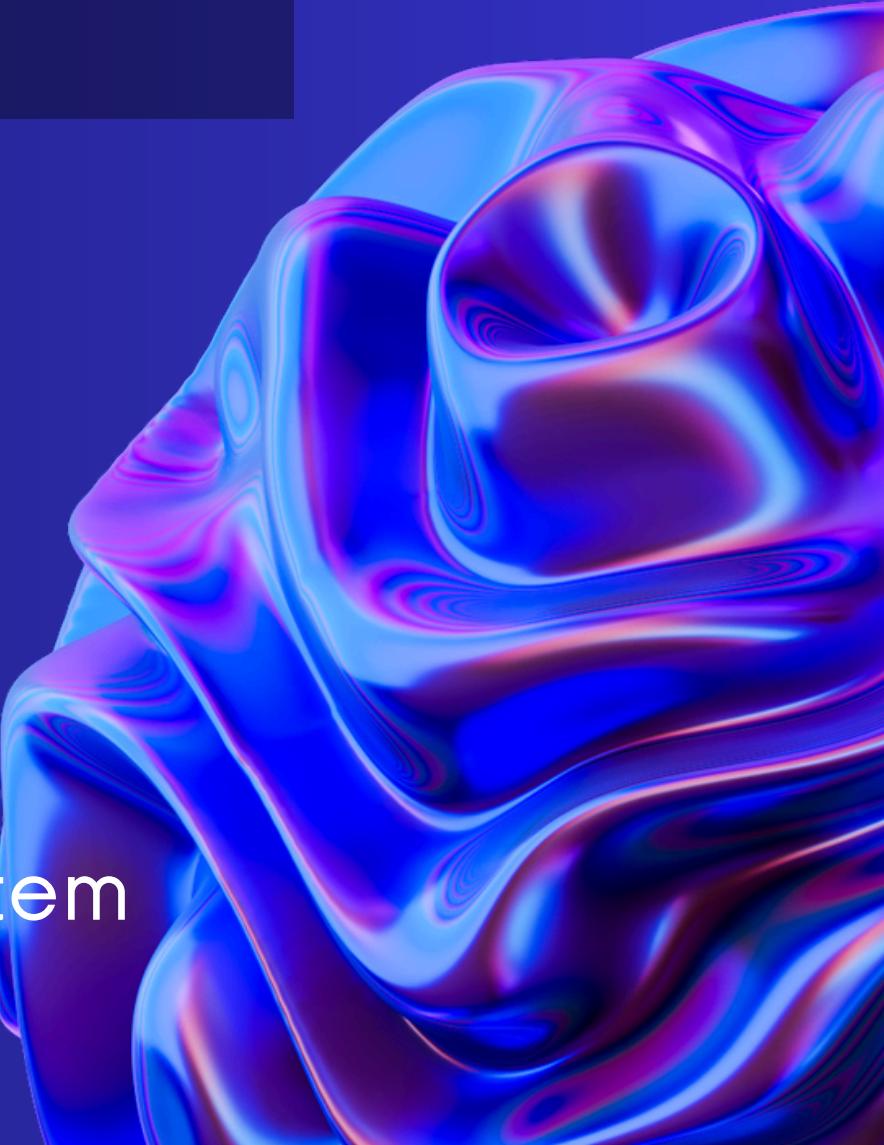
Tools :

Front-end

- Dart
- Flutter for interactive front

Back-end

- MySQL as a DBMS
- PHP as server-side
- Stripe Library for subscription system



results

Front-end

1. login & signup screens and intro lessons for all users
2. users interface:
 - a. feedback
 - b. notifications
 - c. profile page
3. Student interface:
 - a. subscription page
 - i. access to a private teacher and specific training
 - ii. Student can choose if he wants to go premium
 - b. lessons
 - c. trainings
 - d. joined subject groups(premium section)
4. Teacher interface:
 - a. lessons upload
 - b. group creation
 - c. teacher subject role
 - d. chats with other users(student/cargiver)
5. Caregiver interface:
 - a. student profile viewer
 - b. teacher he deals with them

results

Back-end

1. login & signup creation and authentication
2. users interactions:
 - a. feedback
 - b. profile info
3. Student interactions:
 - a. subscription system
 - b. lessons & training progress
 - c. joined subject groups(premium section)
4. Teacher interaction:
 - a.lessons upload
 - b.group creation
 - c. teacher subject role
5. Caregiver interaction:
 - a.student profile viewer

Presenting implementation



train interface

presenting implementation



Student Preview

presenting implementation



Student preview 2

presenting implementation



CareGiver Preview

presenting implementation



Educator Preview

needs and Hardships

Needs

- chat system establishment
- notifications sending and responding in mobile app
- monitors assists :
 - front and back linking
 - server uploading
- document template

Hardships

- The lack of experience
- Content Accessibility
- User Training and Support
- Privacy and security
- voice assistant



Thank you
for
listening

