Immigrant Welcome Center

Final Presentation

Fall 2024

Overview

Client Background and Requirements

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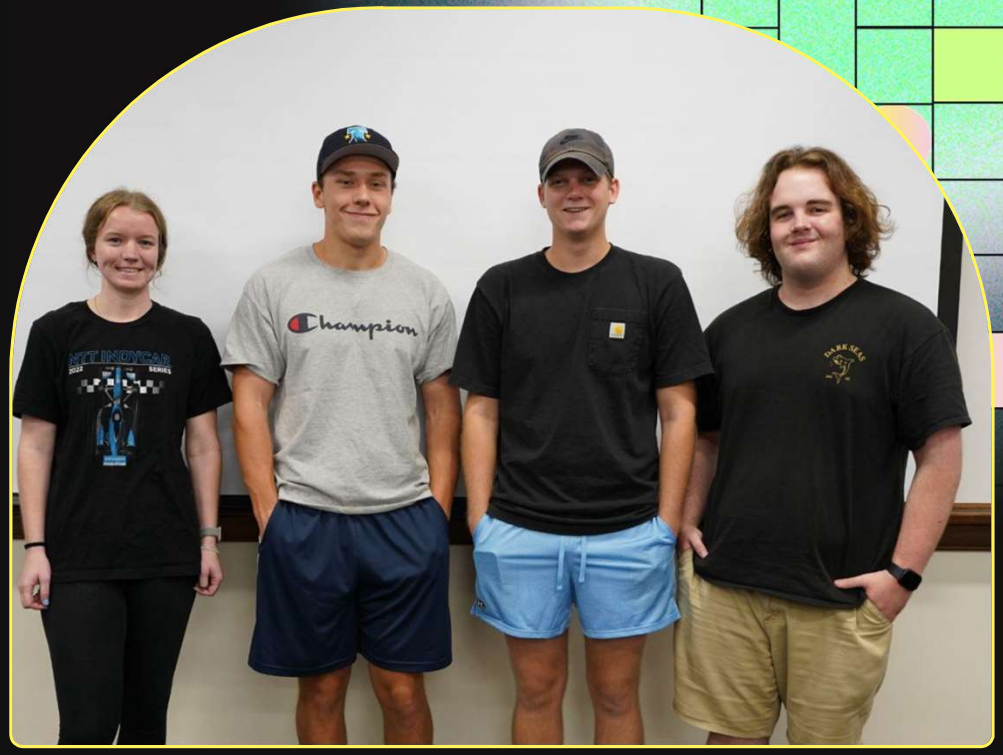
Our Team

Jacob Shank: Team Leader
Will Denning: Documentation
Rachel Tebbe: Ui/Ux Developer
Nathan Szadowski: Primary Developer



Immigrant Welcome Center

Pathway to Literacy

What We Do Statement : “Providing comprehensive immigrant support, community integration, and advocacy.”

- Classes for English Language Learners

Mission Statement : “ To be a trusted partner and advocate for all immigrants”

Contact : Ginger Kosobucki - English Language Learning Director, Pathway to Literacy Assessment Team

Original Requirements

Language Test

Web Application to administer tests for English Language Learners. Employ non text forms of instruction.

Accessibility

Application should be free and accessible for everyone.

User Interface

User Interface should be clean, simple, and efficient for all users.

Tracking Scores

'Remember Students' and their test scores. Teachers should be able to view their scores.

Accomplishments and Future Work

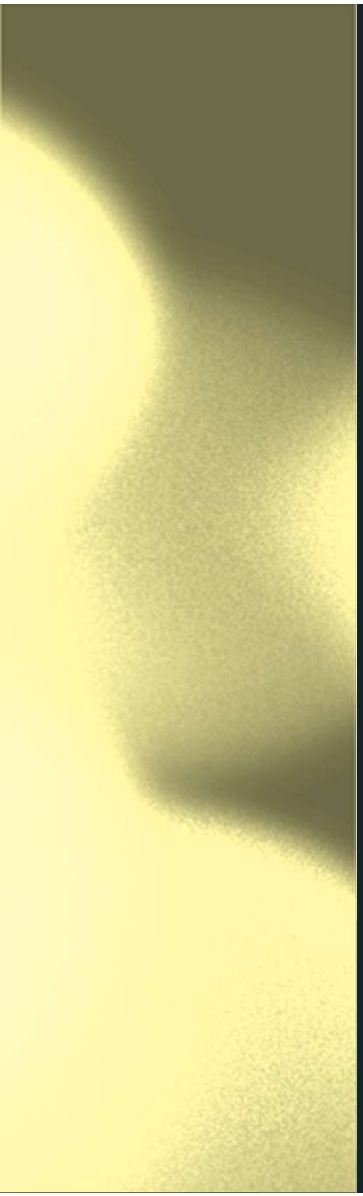
What we achieved, and future work required

Technical Architecture

RESULTS

Codebase Overview

- -Tech Stack
- -Design Features



Codebase Overview

Fron Back API

React/Vite

- Role-based UI for Teachers & Students
- React Router for navigation
- Context & hooks for state management
- CSS modules & responsive design
- Fast dev builds via Vite

PostgreSQL

- Relational schema supporting Users, Tests, Assignments
- Foreign keys, ENUM types, JSONB fields
- Transactional operations & parameterized queries
- Reliable data integrity & secure storage

Node.js/Express

- RESTful API endpoints (Auth, Tests, Assignments, Students)
- JWT-based authentication & access management
- Environment-driven configuration & error handling
- Modular routes, middleware, and services for maintainability

Future Work

Minimal Backend

The application is in a state where the backend had lots of support. Changes and feature additions should happen mostly on the frontend.

Application Focus

Tailor the application more specifically to the client's desires.

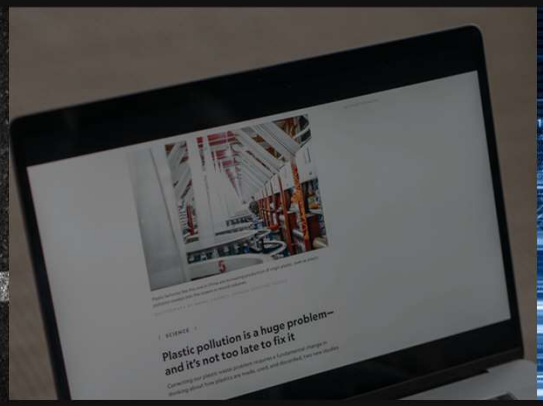
More Features

The application still has key features missing, these should be top priority for future groups.

Challenges and What we Learned

Technical Issues, the difficulties of web development, and the importance of documentation

Our Challenges



Starting from Nothing

Made the difficult decision to tackle the project with our own ideas

Angular

Frustrating to work with. Decided to try something else

AWS Issues

AWS Amplify and lack of support. Not user or beginner friendly

Lack of Experience

As a team, we had very limited experience in JavaScript

What Did We Learn?

Web Development is hard

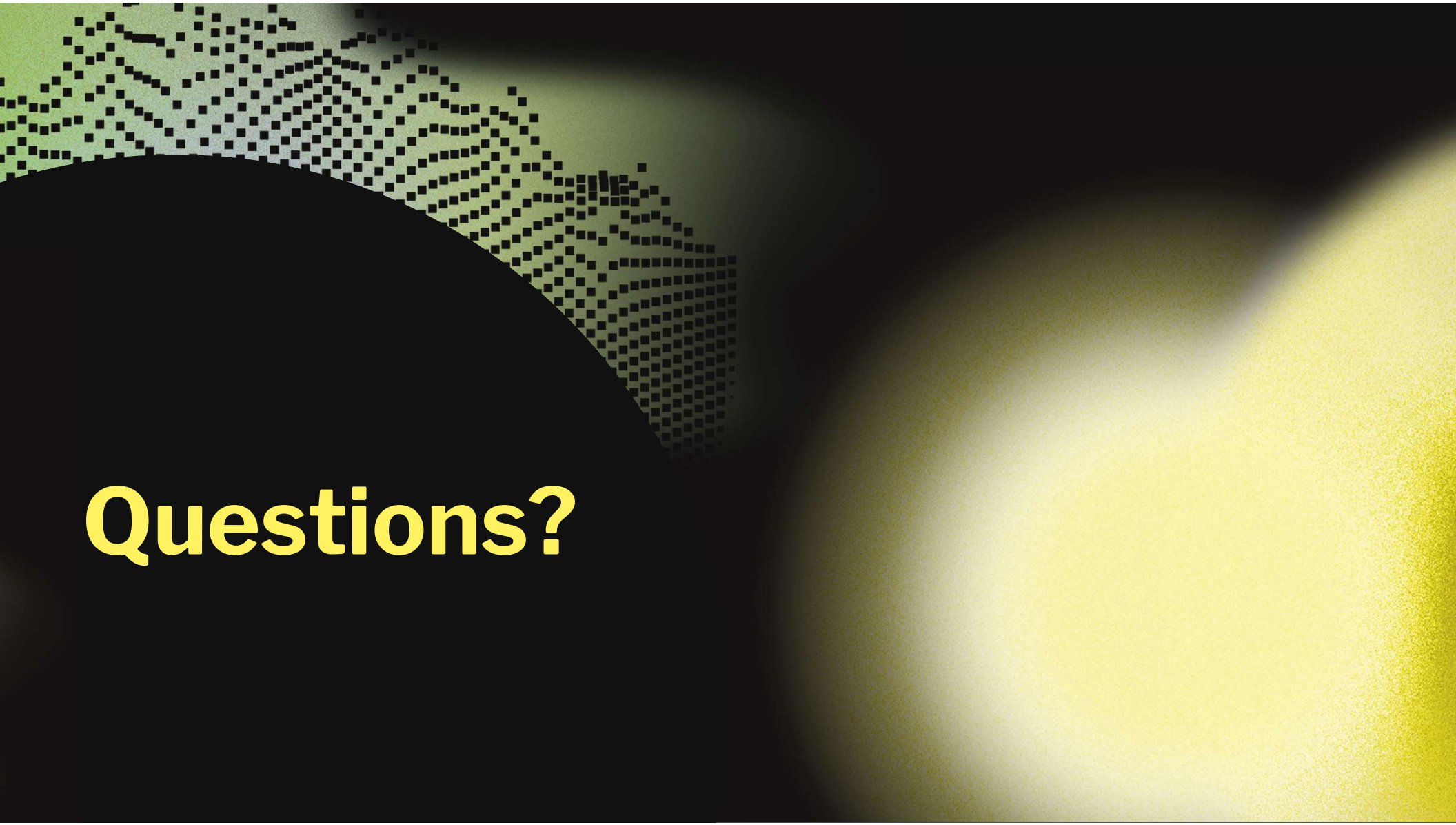
Web Development requires a large number of tools and technologies for both development and deployment. Web development is full stack by nature.

Non-Technical Client Interactions

We learned valuable skills in communication, especially with nontechnical clientele. We also had the opportunity to practice timely communication and development

The Importance of Documentation

Documentation is vital both for understanding code and helping future developers. We made our installation and application information guide to assist the group who will be taking on this project next.


Questions?