

### Gamified Language Learning Platform

## Speak Easy

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## Elevator Pitch





### Struggle

"Traditional vocab learning strategies are boring. Younger audiences especially, will have lower retention"

## LIVE DEMO

https://group-2-project-gl8w.onrender.com

	Tool	Purpose/Application	★ Rating (1-5)
0	Github	Version control, pull-requests, code reviews	****
TK TK	Miro	Ideaboard, Brainstorm	****
ex	Express / Node.js	REST endpoints, game routes	****
GX	Google Translate API	Dynamic vocabulary translation for all games, the key to our application.	****
MOČHA	Mocha + Chai	Unit tests for routes and logic	****
(J)	PostgreSQL	Database for users & scores	****
-	Docker	Containerizing application, everyone running the same thing	****
•	Render	Cloud Deployment	****
~	Handlebars (HBS)	Server Templating	****
<b>B</b>	Bootstrap 5	CSS framework for UI	****

### Architecture Diagram + Script + Design



### **User Interface**

User interacts with handlebar rendered interface. Includes all fancy styling.

### **Frontend Logic**

Main javascript + game side javascript will be ran client sided.

### **Web Application**

When user choose language, game sends fetch request to Node/Express server. Server hits the API to dynamically update words

### **Google Cloud API**

Translation API that helps translate anything involved in our application, user interactive too.

### **PostgreSQL**

Scores, users, login are all stored within PostgreSQL containerized with Docker. Everything now runs on render for smooth deployment



### Challenges we faced

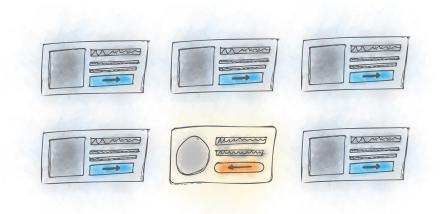
0

"Frequent merge conflicts due to multiple pushes under main branch"

Incomplete gitignore (node modules pushed every time)

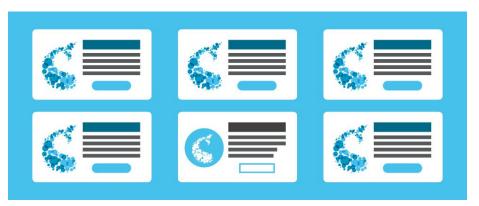
Finally learned and properly used personal branches (e.g., feature/dragdrop-game, login-Bootstrap).

Set clear Git rules: pull before push, open Pull Requests, request for reviews.



### Challenges we faced

"Design consistency due to multiple people working on the project at once"



Created a style guide with fonts, colors, text styles, spacing, etc.

Verified that text should look the same on every screen, colors and fonts should match, and the way users interact with the navigation bar, games, and settings should follow the same logic.



# Future Scope + Enhancements

<u>Multiplayer Leaderboard System</u>: Persistent player profiles and a global leaderboard.

<u>Learning Analytics Dashboard</u>: Help users track their language learning journey.

<u>Wider Difficulty–Based Word Pools</u>: Possibly tie into translation API for rare words or idioms.

Group messages & Discord

Communication



### Primary Communication Tool:



Group Text Messages (iMessage / SMS)

- Quick Daily Updates
- Coordinated Meeting times
- Notices on merges, tasks, and deadlines
- Fastest way to keep everyone in sync

### Shared Workspace:

### Discord Server

- File sharing (e.g., images, drafts, links, files)
- Used for sending longer messages and many files

"If you were to use this app, what other language features would you love to see?"

**End Demo** 

### Q&A?

We're happy to take any questions you have about

- The game logic or language integration
- The Google Translate API
- How we styled the game
- Team collaboration and workflow