

Brainwave e-learning Platform

Interim Progression Demonstration(IPD)

Made by: Pakapon Pakdesupaphol

Supervisor: Sadaseevam Nagandiram



Brainwave Website Introduction

This e-learning platform supports students and adults seeking a new learning experience, offering high-quality education in a variety of styles.

Main point:

- Personalised
- Self-paced
- Instruction-led learning

Subject cover:

- English
- Mathematics

Project Stakeholders

The Brainwave website is designed for students, parents, and adults interested in learning about languages and mathematics.

- Students (primary level)
- Parents
- Tutors/Instructors
- Developers
- Supervisors/Project Owners
- Competitors



Roles, Interests, and Influence

Students (Primary Users):

- **Roles:** Use the platform to learn foundational English and Math.
- **Interests:** Easy, engaging, self-paced learning.
- **Influence:** Shaped interactive features and user-friendly design.

Parents (Supporters):

- **Roles:** Monitor students' progress and ensure platform value.
- **Interests:** Progress tracking, curriculum alignment, affordability.
- **Influence:** Led to the inclusion of dashboards and accessible pricing.

Tutors/Instructors:

- **Roles:** Provide content and instructor-led support.
- **Interests:** Tools for customisation and virtual teaching.
- **Influence:** Enhanced tutor tools for seamless interaction.

Roles, Interests, and Influence

Developers (Technical Team):

- **Roles:** Build and maintain the platform.
- **Interests:** Scalable and maintainable design, efficiency.
- **Influence:** Choose an optimised tech stack (HTML, CSS, JavaScript, PHP, SQL).

Supervisors/Project Owners:

- **Roles:** Oversee project alignment and delivery.
- **Interests:** Timely completion, cost efficiency, and scope realism.
- **Influence:** Ensured realistic goals (e.g., foundational courses only).

Competitors (Industry Influence):

- **Roles:** Set benchmarks through competing platforms.
- **Interests:** Offer competitive and innovative solutions.
- **Influence:** Highlighted gaps (e.g., gamified, beginner-friendly design).

Requirement

Functional

Interactive lessons for English and Mathematics.

Gamified learning elements to increase engagement.

Self-paced and instructor-led learning modules.

Non-functional

Intuitive and engaging user interface.

Platform compatibility with modern web browsers.

High performance with minimal load times.

System architecture

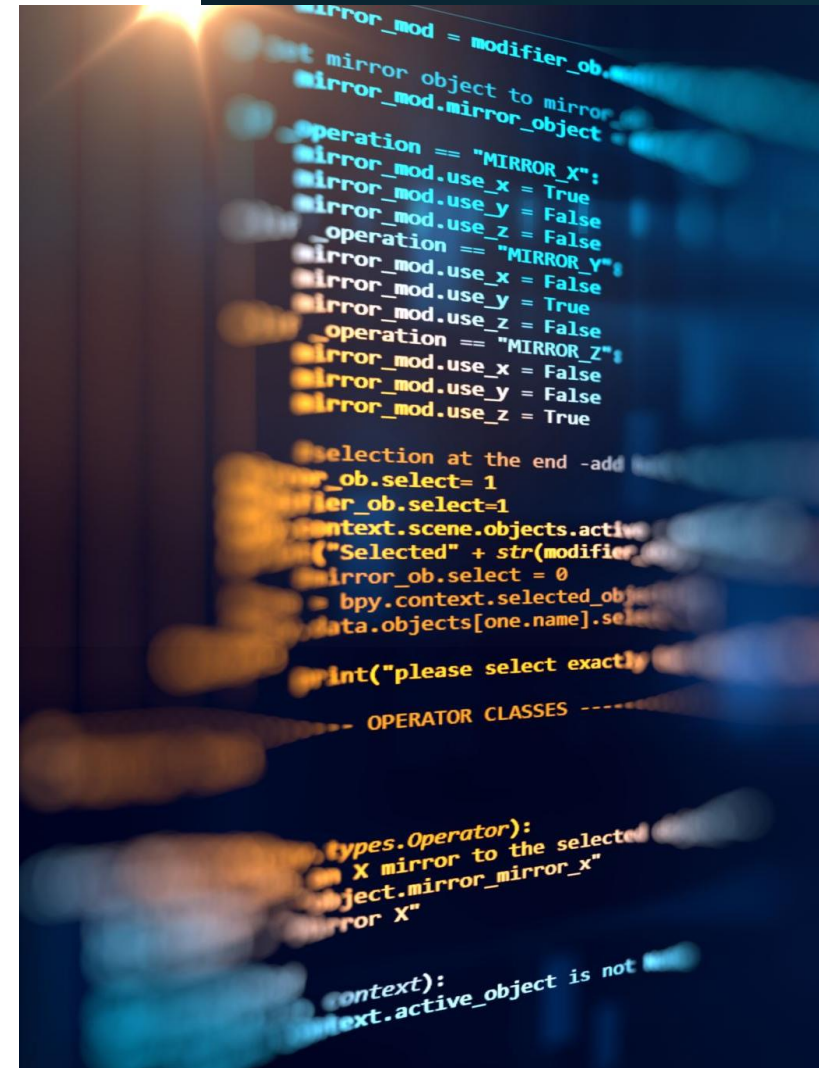
User Interface

Simplistic and engaging front-end using

- HTML
- CSS
- Java script

back-end and database using

- PHP
- SQL



System architecture - Core Components



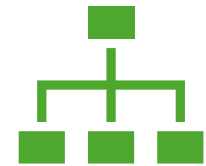
Learning Content Module



Gamification Engine



Dashboard



Administration and Content
Management Tools

Project progression

The demolition of the system is out, and this will be include:



The system signs up/logs in and ensures the user data is in the database.



The testing of some mathematics learning content



The testing of some English learning content

Conclusion



Identify
stakeholders



Function



System
architecture



Deadline of the
project