

Assignment - Language Learning Game

Objective

The objective of this assignment is to create a language learning game that helps users improve their language proficiency through interactive exercises and activities. The game should include frontend UI components, backend logic for scoring, and a database to store user progress and language data.

Requirements

Frontend Development

- Design and implement an interactive and user-friendly frontend for the quiz.
- Provide clear instructions and feedback to users during the exercises.

Backend Development

- Develop backend APIs to handle the language learning logic and scoring system.
- Implement an authentication system for user registration and login.
- Create endpoints to fetch exercise questions and submit user answers for evaluation.

Database Management

- Set up a database to store user language proficiency levels, progress, and exercise data.
- Design the database schema to efficiently manage user data.

Language Selection

- Allow users to choose the language they want to learn from a list of available languages.
- Implement language-specific exercises based on the user's selection.

Scoring and Progress Tracking

- Implement a scoring system to evaluate user performance in each exercise (0-5).
- Scoring should be based on how difficult the question is. For a easy questions it can be 1 and very difficult question can be 5.
- Track and display the user's progress in the game, including completed exercises and proficiency levels.
- Leaderboard
 - Create a leaderboard to display the top-performing users, fostering healthy competition and encouraging engagement.
 - Leaderboard based on the language

Quiz question pattern

- Show questions based on how the user is performing. (e.g If user is not able to answer questions properly give them more easy questions and if they are able to answer give harder question)

User Profile and Settings

- Create a user profile page where users can view their progress and update their language preferences.
- Allow users to reset their progress if they want to start over.

Bonus Points

To earn bonus points and showcase your exceptional skills, consider implementing the following additional features and enhancements:

- Mobile Responsiveness
 - Ensure the application is responsive and works smoothly on different devices, including desktops, tablets, and mobile phones.
- Dynamic Content Updates:
 - Implement a content management system that allows administrators to add new exercises and update existing ones without modifying the codebase.

Submission Guidelines

- The code should be well-organized, modular, and follow best practices for frontend and backend development.
- Include a README file with clear instructions on how to set up and run the application locally.
- Codes should be commented.

Documents to refer

<https://www.usingenglish.com/quizzes/29.html>