

Educational Connect 4

Team Member:

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Problem Statement:

It can be hard for students to motivate themselves to study. By giving them the option to add the questions they need, then turning it into an interactive and competitive game, it will give them an easy way to begin studying and learn the material they need to know. It would be a core part of learning as any player can cross question anyone and in order to win the game the player has to know the material well. It's a scientifically proven method of learning.

Objectives:

1. Create a connect 4 game on a web page that helps by giving the user a question each time he/she places a piece in the board
2. Implement multiple-user connectivity
3. Design an interface for users to write questions for certain subjects
4. Create a login/register page for users
5. Create a database to store questions as well as users data, which is their username, password, email, scores for different subjects, overall rank, and number of questions written
6. Develop an AI system that will dynamically process the length of the game and increase the question difficulty when a user is closer to winning.
7. Time Permitting: Voting system on questions to determine if they are good or bad; questions with a determined number of negative votes would be removed

Stakeholders:

- Project Developers: Ivan Chan, Timothy Poozhikala, Ronak Bharad, Rei Orikata
- Project Managers: Ivan Chan, Ramya Vulimiri
- Project Owners: Ivan Chan, Timothy Poozhikala, Ronak Bharad, Rei Orikata
- Users: Anyone who has an exam or test they need to study for, students, professionals, etc.

Deliverables:

- A website with the ability to write questions for each dot on the connect 4 board
- A database that stores the user details and the questions.
- A database that continuously updates the questions from opponents or anyone who wish to be part of it
- Backend that interacts with the database and website efficiently.
- Online multiplayer functionality
- A ranking system for players within specific quiz subjects
- MySQL, NoSQL, Javascript, Python, A framework such as React or Vue, HTML, CSS