# Project: Implementation of Multiplayer Quiz App

Champlain College - Lennoxville

Course: Transactional Web Applications 2

## Objective: Develop a multiplayer quiz app with real-time features using JavaScript frameworks and WebSocket.

### Design Requirements:

#### Teacher's Point-of-View:

* Creation of a New Room: Create quizzes, set timers, select difficulty and number of questions, and generate a unique code for users.
* Monitoring the Quiz: View progress without interference.
* After the Quiz: View scores and winner.

#### Player's Point-of-View:

* Joining a New Room: Enter quiz code and name.
* While the Quiz is Running: Participate simultaneously, real-time synchronization, interactive countdown, intuitive UI, and view results after each question.
* After the Quiz: View scores and winner.

#### Scope:

* No persistent leaderboard or ability to interrupt a launched quiz.

#### Evaluation Breakdown:

1. Use Cases: Host can create a new quiz, wait for players, start a quiz, monitor a session, and see results. Player can join a session, play the quiz, and view results.
2. User Interface and User Experience: Easy navigation, intuitive design, consistent theme, and efficient input controls.
3. Grading Criteria: Use cases are graded on completion ease, design efficiency, information provided, and WebSocket events usage. Ranges from Flawless (100%) to Problematic (50%-).

#### Submission:

* Push code to a GitHub repository and share the repository with the instructor.