

# 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.