

CMPE2950  
Automatic Connect 4 Game  
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**Specification**

**Binary:**

- Will a user interface that consists of 3 buttons that will allow users to play against four different modes, easy, medium, hard, and vs. "versus"
- Will Detect token placement, and players turn
- Will Record the Position of the dropped Token as POST
- Will have a Solenoid Dispense token in the dropper
- The project will have a web browser interface to play game
- MicroBoard will send dropped token data as an API POST call showing token placement on the browser "Microcontroller"
- Once the game is won Players name will be saved in the database with wins and win rate percentage

- mention the "Versus" goal.

Don't need to specify protocol. Maybe MQTT would be better

**Numerical:**

- The Stepper Motor will hold a hopper and travel between one to 34 inches to drop a piece within the board.
- Calibration of the board would be one minute
- Stepper motor time would be 5-15 seconds to travel between beginning to end
- The process of dispensing and dropping the token would be 40 seconds
- The process of showing the token on the web browser would be 40 seconds

Seems too long.  
you should be able to move the whole width in 5 secs easily, and drop a token nearly instantly.