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## **Milestone 4 Individual Project – Connect 4**

### **To Run:**

- Ensure that node and npm is installed. This can be done by going to the command line/terminal (can be from your IDE if IDE is capable)/git bash terminal and using “node -v” and “npm -v”.
- If you have it installed use of the 3 above (command line, terminal, git bash terminal) and navigate to where you have unzipped the zip using “cd”.
- Once there you will need to install the dependencies like express, socket.io and jQuery that were used to create the project. To do this run “npm install”.
- Once the install has been completed, use “node server” to start up the socket.io server.
- You can confirm it has been started as it should print out “running” in the command line. This listens on port 4000 so go to localhost:4000.
- This uses cookies so make sure to use different browsers (incognito and normal count as different browsers).

### **Once Running:**

- When you first visit the site, it will generate for you a random string of multiple words, you can change this by replacing the text in the text box and pressing enter/change name button.
  - o **NOTE:** I do not allow user to have the substring ‘@#\$\$%’ in their username as I concatenate the theme after the username using this substring to help me store both in 1 cookie.
  - o I do not allow multiple users to have the same username as it may allow for one user to change the wrong user’s theme.
- If you are returning (assuming cookie hasn’t expired yet) it will display the username you previously had before reconnecting to site.
- To play a private game with friend, have one of you create a private room, in that private room you will be given a room code in which you can share with your friend so that they can join the room using the text field and join room button.

- To play a random opponent, press the find random opponent button and if there is someone already waiting you will join their game, otherwise you will be moved to a room, and must wait for a random opponent.

### **In Room/Game:**

- In the room you may choose to change your color theme whenever you want which will change the color of the game board. This theme will be stored in user cookie.

### **Playing**

- If it is your turn you can move the move across the board and there will be an indicator of where your piece would place if you were to play/click there, **IF NO INDICATOR SHOWN THEN IT IS INVALID MOVE AND GAME WILL WAIT FOR YOU TO MAKE VALID MOVE.**
- IF it is not your turn you cannot see any indicator on hover and the only thing you can do is change the theme of your board.

### **GAME OVER**

- Once game is finished via tie or someone won then user MUST reload page to get back to home page in which they can look for another game.
  - **Site does not check if one of the users has disconnected mid-way through the game, if this occurs then the user remaining in room will be left waiting for eternity/until they reload page to find another game.**
    - If it is their turn, they can make they turn but...
      - Once it is opponent's (opponent being person that left mid-way through) turn then remaining user will be left waiting.

### **Other things to Note**

- User who was waiting for opponent to join whether it be for a friend in private or for a random in random search will be person to make the first move.