System Test Procedure

Stanley C. Kemp

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1 Testing Requirements

- Two players on computers

- An empty test server loaded with the game `Automata Football`

- A *secure* and *certain* internet connection for both players

  - It shouldn't matter the browser they are in

2 The Test Procedure

- The players connect to the URL of the empty test server

  - The players enter in any non-taken names
    * If they have been taken, try again with a different name
    * Repeat until they have been submitted successfully

- The players are in the lobby

  - They assert that they are matched together

- The players play against each other

  - The players build gliders on their own sides of the court
    * Any other game of life terms are fine too, we are checking to make sure that game of life works
  - The players submit their turns to the server, they should get feedback in the console of their browser that the information has been sent

* We are now checking to see whether the server recieves information
    - The players now see their side and the other side simulated for ~20 secs
        * The players see if the mechanics are right
    - The players compare the state of the game screen to see if they are the reverse
        * We are checking to see if the game is the same for everyone, regardless of where or how they connect from

- One of the players disconnects
    - They hit the × on the browser tab
        * The browser tab closes
            · We are checking to see if disconnection is handled correctly
    - The other player receives a message that the other player has disconnected
    - The other player is victorious
    - The other player enters the lobby by hitting the "continue" button on the

- The player who has disconnected reconnects
    - They enter in their name
    - They match with the other player

- The players play one complete game
    - We must assert that:
        * The game has four rounds
        * The game has the same mechanics as the Game of Life
        * The game keeps score correctly
        * The person who wins gets the victory screen
        * The person who loses gets the defeat screen

- The players enter another game
    - One of the players turns their wifi off

    ∗ We are testing to make sure that if one of the players has faulty internet that won't connect, that game is handled correctly.

   – The time limit for the player runs out

   – The server tries to ping the client

    ∗ Does not receive a pong

   – The server behaves the same way that it would in the case of disconnection, in effect:

    ∗ The player who had faulty internet loses

    ∗ The other player wins the game

- One of the players enters practice mode

   – Practice mode does not connect to the server through a web socket

   – Practice mode simulates Conway's game of life

   – The player creates a glider

   – The player uses the `Step Forward` button to move the glider.

- Everything is working as it should