Assignment 2 – COMP2406A

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Purpose of the application:

The application is intended to function as a multiplayer ping-pong game that can be run in multiple windows. It is a multiplayer collaborative webpage running Javascript on a Node.js server. It uses timers and polling to update the server with paddle and ball coordinates for both players. Scores are displayed with sub-canvases that are incremented on ball collision with either back wall. Players are given points for hitting the ball on the opponent's side analogous to the real game of table tennis.

Instructions on running the application:

The application can be run by typing the following command into the command prompt (after navigating to the main directory which contains pingpongserver.js and a folder titled "html"):

node pingpongserver.js
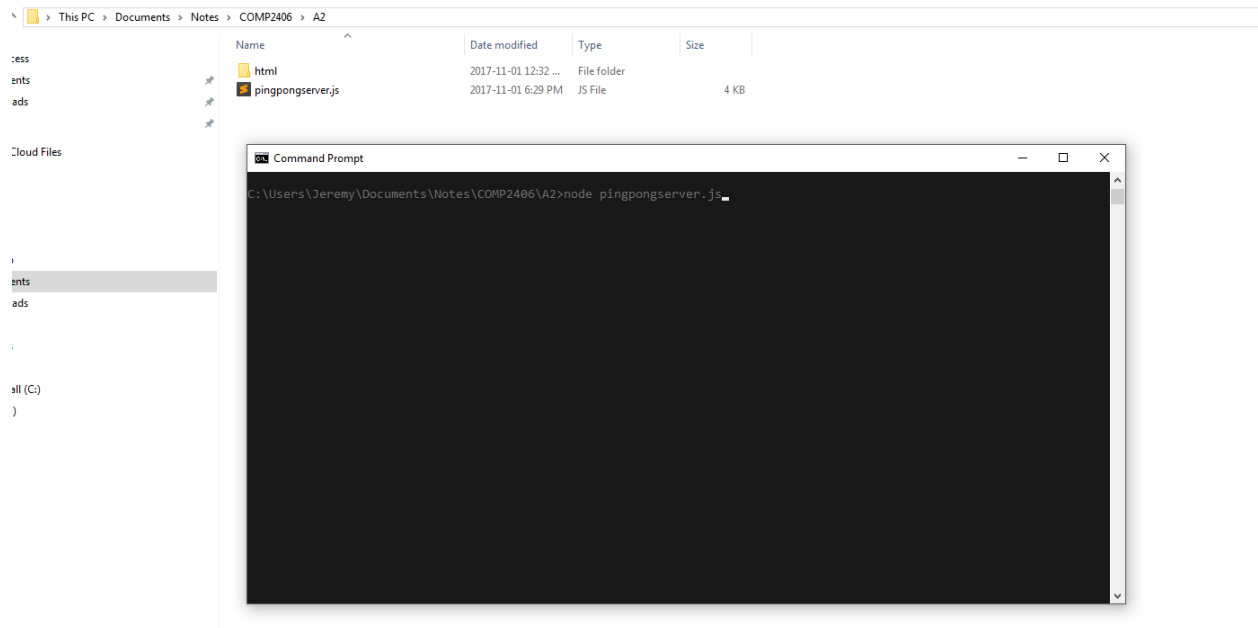
The command prompt will then display this message:

This means that the Node.js server is running and the site can be accessed.
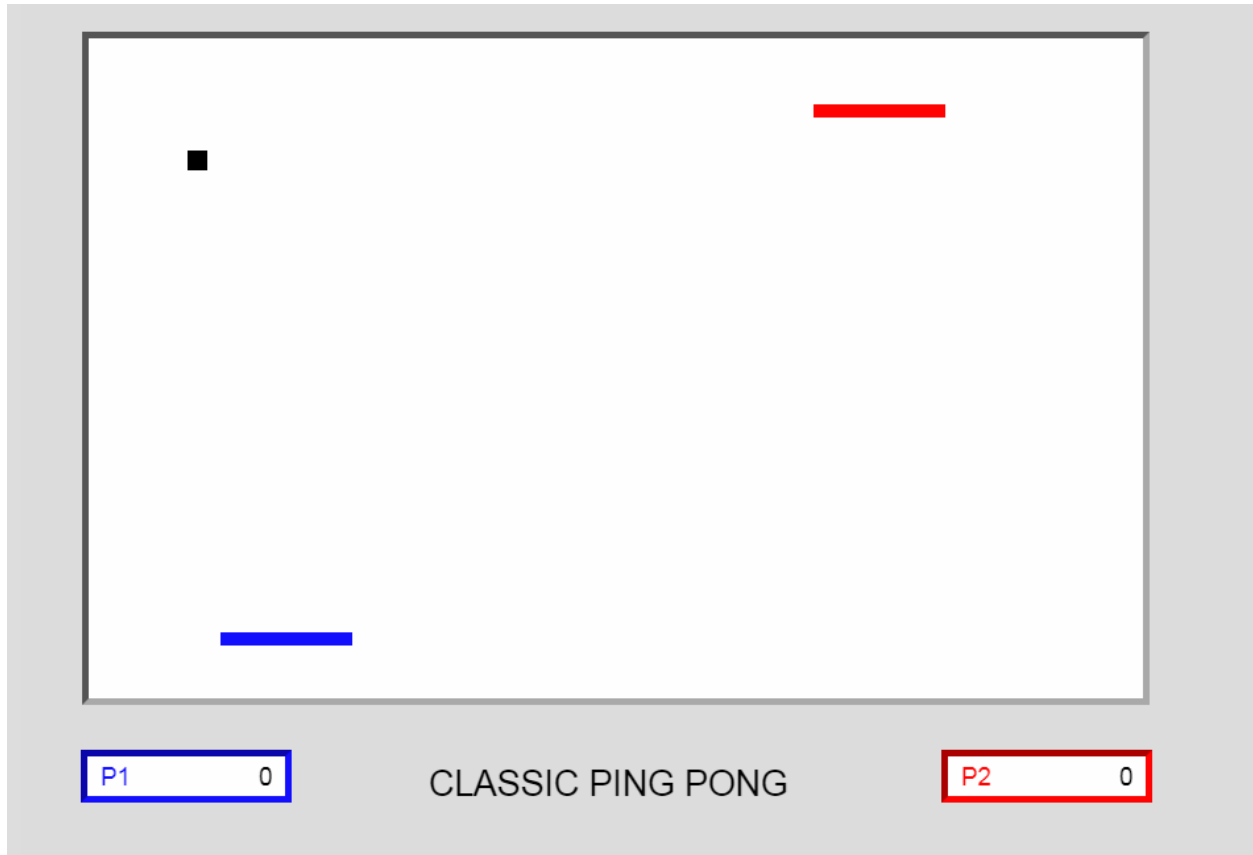
The application can then be accessed in a web browser by visiting the url:

http://127.0.0.1:3000/assignment2.html

or

http://localhost:3000/assignment2.html

Which will display a screen that looks like this:

The blue paddle can be moved with the left and right arrow keys and the red paddle can be moved with the A and D keys inside one browser.

For multiplayer gameplay cross-window, each player must select a colour and then their respective paddles will be moved with either the left and right arrow keys (for blue) or the A and D keys (for red). Scores will be automatically incremented as points are scored, and the game will end once one player reaches 5 points.

The server can be exited by pressing both the CTRL and C keys simultaneously inside the command prompt window.