**Final Project Documentation**

Project Link:

<http://ec2-13-58-46-217.us-east-2.compute.amazonaws.com/MccdqwFinalProjectS20/>

My web application is the arcade game, pong. The home page shows the user this and allows the user to login so that they can start playing. The game is protected with a login and they must use “test” as the username and “pass” as the password. There is an about page that explains the rules of the game, but I will explain the rules in this document as well. Once the user logs in, the game will start. The first player to 10 wins the game. Player 2 is controlled with the up and down keys, and player 1 is controlled with the w and s keys. The user can also create an account if they are using the site for the first time. I wanted to implement a part that tracks data such as wins, losses and games played, but I wasn’t able to for now.

Requirements:

1. The HTML5 DOCTYPE and the 5 required tags are on my web pages. For an example, the loginForm.php file has the 5 required tags lines 1-85. I also use CSS3 for layout. The finalProject.css file uses CSS3.
2. The pages that make up the web application have a consistent layout and design. There is a consistent color scheme of gray, black and white. There is a navbar that can help the user navigate between pages. The navbar can be found on all pages, but for an example, the index.html file has it on lines 20-39.
3. The navbar characteristics are implemented using bootstrap, so its elements should be consistent across all pages.
4. In order to access the game, the user must login first, using “test” and “pass” for the username and password. There is also an option to logout on the navbar once the user is logged in. Once they log out, they cannot go back to the game unless they login again.
5. The username “test” and password “pass” work to gain access. You can find this error check in the login.php file lines 106-126.
6. An example of php is in the game.php file, lines 1-23.
7. GET can be found in the about.html page, line 144. POST can be found when handling the login. Look in login.php file lines 41-42.
8. There is a create user form, which can be found in the createUser\_form.php file.
9. In the login.php file lines 106-126, there is error checking to make sure the user enters the correct username and password.
10. In the about.html file, there are 2 images, located on lines 114 and 117.
11. In the about.html file, there is an embedded YouTube clip of the original pong arcade game, lines 99-100.
12. An example of JavaScript can be found in the game.php file. The draw() function renders the game and updates the score as the game progresses using javascript. The draw() function can be found on lines 183-282.
13. An example of jQuery can be found in the loginForm.php file. When the user hovers over the submit button on the login form, the jQuery used on lines 11-15 makes the button look more real and lets the user know they are hovering over it.
14. The navbar was implemented using a bootstrap interface. The link to this can be found in the index.html file line 6.
15. AJAX is used to get the rules of the pong game. This can be found in the about.html page lines 128-146.
16. This web application is a game, which serves a purpose of entertaining. I would be happy to show this application to a client because it is a game with logic as well as a full application with a login and create user option.

Resources:

I used code from lectures as well as online resources to help with the game code. I commented in the code the link to a resource so that I was explicitly citing where I got my code from. The loading dots for the AJAX request in the about.html file was used from lecture code, created by Professor Wergeles.