Exploratory Testing:

Set a timer for 10 minutes and familiarize yourself with the application. Take some time to inspect the webpage as well with the Dev Tools.

Findings:

Critical:

- Bug: Message notifying who won is reversed. If 'X' wins it says they lost, if 'O' wins it says they lost
- Bug: The computer doesn't make more than three moves
- Bug: the computer opponent overwrites the players move when the player clicks on the top right square by replacing the players mark on the middle square on the left
- Bug: You can overwrite the computer's mark on a square and replace it with your own

Non-critical:

- Bug: Not all of the 'O' Characters are consistent. At least one pops up as a lowercase 'o' (middle square on the left

Steps to reproduce the Bugs:

Bug: Message notifying who won is reversed. If 'X' wins it says they lost, if 'O' wins it says they lost

1. Open the application and click on the start button next to Tic Tac JS
2. Click the top right square
3. Click the middle right square
4. Click the bottom right square
5. Message should appear at the top of the screen declaring 'X lost'
6. Refresh the application
7. Click the start button once more
8. Click the middle square
9. Click the bottom middle square
10. Click the bottom left square
11. Message should appear at the top of the screen declaring 'O lost'

Bug: Bug: The computer doesn't make more than three moves

1. Open the application and click on the start button next to Tic Tac JS
2. Click the top right square
3. Click the middle square
4. Click the bottom right square
5. Click the bottom middle square
6. At this point you should see that the computer did not fill in the last square on the bottom left to win. Any number of combinations that require the computer to make more than 3 moves also produce similar results

Bug: the computer opponent overwrites the players move when the player clicks on the top right square by replacing the players mark on the middle square on the left

1. Open the application and click on the start button next to Tic Tac JS
2. Click the middle square
3. Click the middle left square
4. Click to top right square
5. At this point you should have seen the computer overwrite the players mark with an 'o'
   a. This is also the only case of a lowercase 'o' in the application, it may also be a '0' and should be changed to maintain consistency

Bug: You can overwrite the computer's mark on a square and replace it with your own

1. Open the application and click on the start button next to Tic Tac JS
2. Click the top right square
3. Click on the 'O' the computer place in the top left
4. At this point you should have seen the computer's mark replaced by the player's mark
5. Click the second 'O' the computer placed in the top middle square
6. At this point you can see you can erase all marks made by the computer and overwrite them with your own

Automation Testing Plan:

The purpose of this testing plan is to test known bugs to verify their presence as well as application functionality following the latest version update. The tests will include verifying the victory message has the appropriate response, the computer will make more than 3 moves, verifying the computer does not overwrite a player's mark, verifying a player cannot overwrite the computer's mark.

Test Steps:

The team member assigned to manual testing should follow the steps to reproduce the bugs found earlier in this document to perform manual testing in future versions. Additional findings, failed tests, and new bugs should be documented and logged by the team member and delivered to the team upon discovery to ensure this document can be updated with the newest information.

Test Environment:

Windows 10 OS, Chrome Version 93