

CPSC 349: Front-End Web Engineering - Fall 2019

Homework 8, due 19 Nov 2019

In the Tic-Tac-Toe tutorial you followed at the [Reactjs.org](https://reactjs.org) site, you built a Tic-Tac-Toe game that calculated who was the winner, disallowed moves after someone had won, and had a time machine that allowed a user to back up and try different combinations of moves.

In doing so, you learned some basic features about Reactjs.

The game, though, lacked some other basic features, such as:

1. It only allowed 3x3 grids (which IS the standard).
2. it didn't list the coordinates of each move (row, col).
3. It didn't **bold** the currently selected move in the move list.
4. It hardcoded the creation of the grid, instead of using two for loops.
5. It sorted the moves in descending order (which actually makes sense most of the time)
6. It didn't highlight the squares that caused the winning move.
7. It didn't display a message about draws (aka Cats' games).

In this homework assignment, you will correct each of these deficiencies. Note, they are listed in order of increasing difficulty.

For extra credit, you can add AI to your game so the computer plays against you. If you allow the computer to go first, the game will be more difficult for you to win.

Submission

Turn in the code for this homework by uploading your code to a public Github repository. You may discuss this homework assignment with other students, however, the work you submit must have been completed by own.

To complete your submission, **print the following sheet**, fill out the spaces below, and submit it to the professor in class by the deadline. Failure to follow the instructions exactly will incur a 10% penalty on the grade for this assignment.

CPSC 349 Homework Submission 8, due 19 Nov 2019

Your name:

Repository (print): <https://github.com/>

_____ / _____

Verify each of the following items and place a checkmark in the correct column. Each item incorrectly marked will incur a 5% penalty on the grade for this assignment

Finished	Not finished	
<input type="checkbox"/>	<input type="checkbox"/>	Prompt the user for the size of the Tic-Tac-Toe game; use that size to generate its grid.
<input type="checkbox"/>	<input type="checkbox"/>	List the coordinates of each move in your Time machine in (row, col) format.
<input type="checkbox"/>	<input type="checkbox"/>	Bold the currently selected move in the Time machine.
<input type="checkbox"/>	<input type="checkbox"/>	Use two for loops to create the grid, instead of hardcoding it.
<input type="checkbox"/>	<input type="checkbox"/>	Allow the option of sorting the Time machine in either ascending/descending order.
<input type="checkbox"/>	<input type="checkbox"/>	Highlight the squares that caused the winning move in red.
<input type="checkbox"/>	<input type="checkbox"/>	Display the appropriate message if the game ends in a draw.
<input type="checkbox"/>	<input type="checkbox"/>	Add AI to your game so the computer plays against you. (extra credit) .
<input type="checkbox"/>	<input type="checkbox"/>	Your game runs with no run-time errors in the React developer tools console of Chrome.
<input type="checkbox"/>	<input type="checkbox"/>	Your code was built using parcel.
<input type="checkbox"/>	<input type="checkbox"/>	Push your code to a public Github repository.
<input type="checkbox"/>	<input type="checkbox"/>	

Comments:

Fill out and print this page, and submit it on the day this project is due.