TIC-TAC-TOE

Project 1 for SEI

The Plan

1. To create a # column in html using css and to allow two players to switch their turns
2. Each player will have their own symbol in the game
3. When one player place his/her symbol in one block, he/she is not allow to change decision. Another player is not allow to choose those occupied blocks
4. To have a function to check whether there is another matching line after each player's turn
5. If there is a winner, immediately disable all blocks and announce the winner. If all blocks taken up, announce draw.
6. To record the score for each player or time of draw. Scores will continue to increase unless you refresh the page.

Challenges

1. How to check matching line? If there is matching line, how do we know who is the winner?
2. To insert audio
3. To assign score
4. To strike through the winning line / to change color for the winning line - Fail
5. To put timer so that each player only have 10 seconds to make decision on which block to place their symbol - Fail
6. A pop out to announce winner - Fail

How to check for win

1. How to define matching line ? - To have
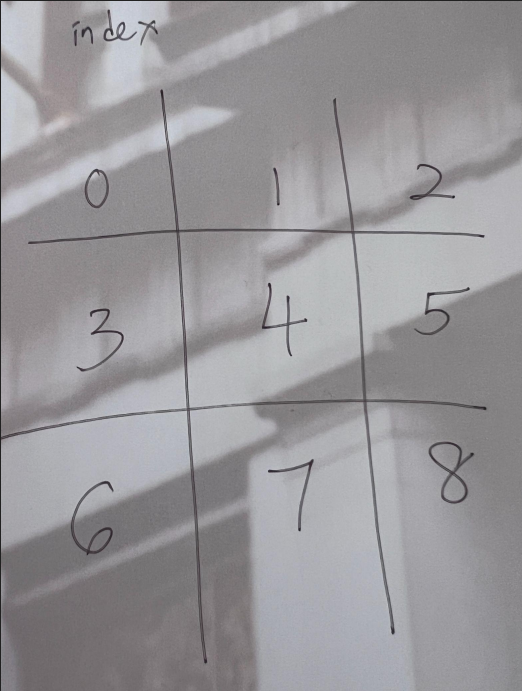
   three same symbol in a line.

   Eg. indexA = indexB = indexC

2. List out which line to check

   [0,1,2] , [3,4,5] , [6,7,8]

   [0,3,6] , [1,4,7] , [2,5,8]

   [2,4,6] , [0,4,8]

How to check line by line for those indexes?

1. Create a function to check for same text content first.
2. Create a function to check for matching for those possible lines.
   - A for loop to check row by row
   - Another for loop to check column by column
   - And also to check the two cross lines
3. Once we have a matching line, return the first block in the winner line.
4. Extract the text content in the winner block and check whether it is player 1 or player 2

Lessons Learned

1. How to use grid to create a # box
2. How to insert audio and trigger it
3. How to check for matching lines using for loop
4. How to record the score for players
5. How to decorate the page although my page now still doesn't look good

How would you do it differently

1. To let user insert their preferred symbol to represent themselves
2. To create a game mode for letting 1 player to play with the computer
3. To think of another method for checking the matching line
4. Put more effort in researching so that I can do more with CSS eg. fancy background, pop out to show winner, nicer font

The End

Thank You