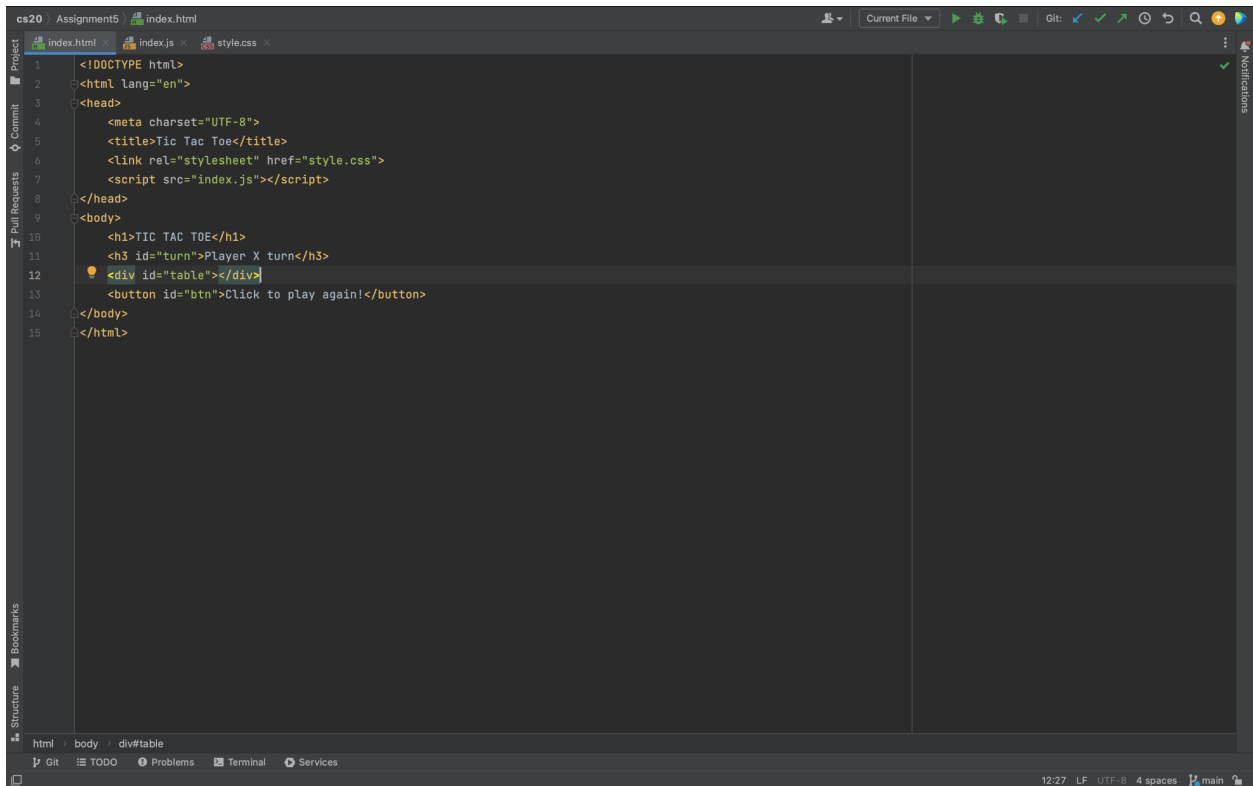
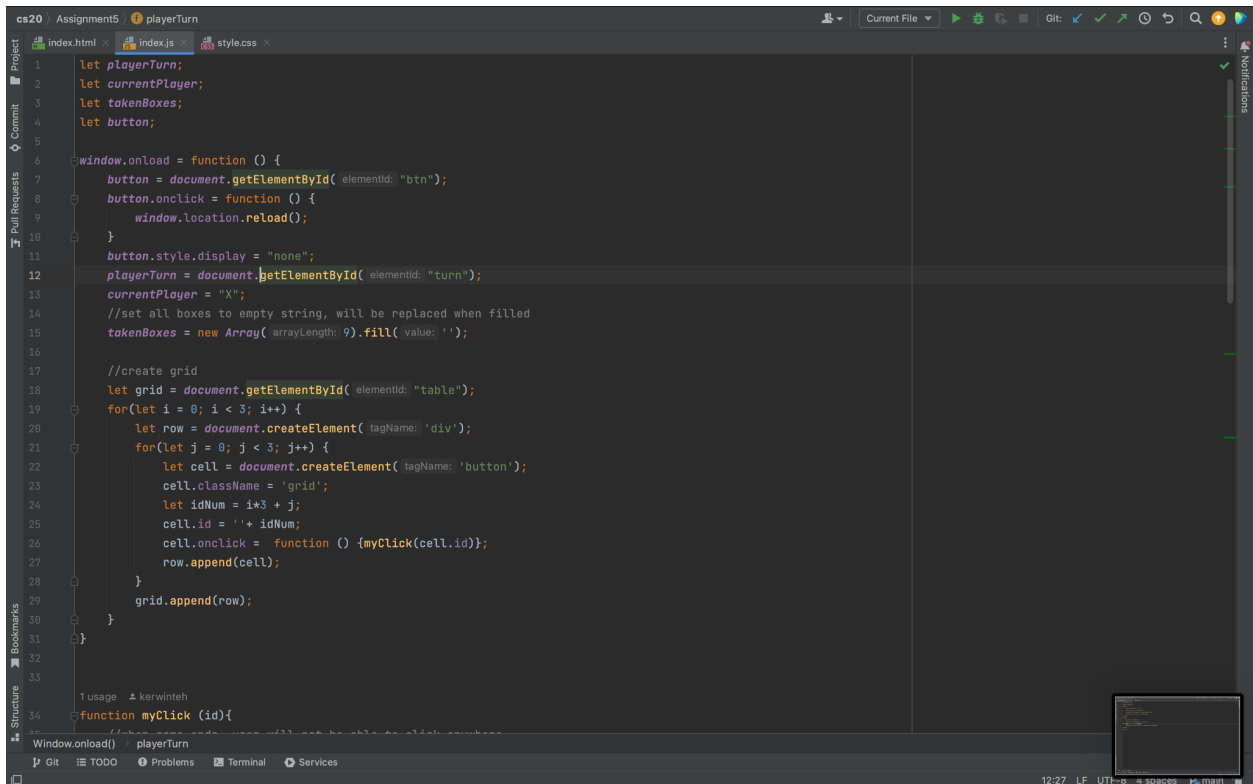


<https://kerwinteh.github.io/cs20/Assignment5/index.html>



This screenshot shows the VS Code editor with the file `index.html` open. The code defines the HTML structure for a Tic Tac Toe game. It includes a meta charset, a title, a link to a stylesheet, and a script source. The body contains a heading, a turn indicator, a table placeholder, and a button to restart the game.

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <title>Tic Tac Toe</title>
6   <link rel="stylesheet" href="style.css">
7   <script src="index.js"></script>
8 </head>
9 <body>
10  <h1>TIC TAC TOE</h1>
11  <h3 id="turn">Player X turn</h3>
12  <div id="table"></div>
13  <button id="btn">Click to play again!</button>
14 </body>
15 </html>
```



This screenshot shows the VS Code editor with the file `playerTurn.js` open. The code contains the JavaScript logic for the game, including variable declarations, event listeners for the button and turn indicator, and a function to create the 3x3 grid.

```
1 let playerTurn;
2 let currentPlayer;
3 let takenBoxes;
4 let button;
5
6 window.onload = function () {
7   button = document.getElementById( 'btn' );
8   button.onclick = function () {
9     window.location.reload();
10   }
11   button.style.display = "none";
12   playerTurn = document.getElementById( 'turn' );
13   currentPlayer = "X";
14   //set all boxes to empty string, will be replaced when filled
15   takenBoxes = new Array( arrayLength: 9 ).fill( value: '' );
16
17   //create grid
18   let grid = document.getElementById( 'table' );
19   for( let i = 0; i < 3; i++ ) {
20     let row = document.createElement( tagName: 'div' );
21     for( let j = 0; j < 3; j++ ) {
22       let cell = document.createElement( tagName: 'button' );
23       cell.className = 'grid';
24       let idNum = i*3 + j;
25       cell.id = '' + idNum;
26       cell.onclick = function () {myClick( cell.id )};
27       row.append( cell );
28     }
29     grid.append( row );
30   }
31 }
32
33
34 1 usage: kerwinteh
35 function myClick( id ){
```

The screenshot shows a VS Code editor window with the following details:

- Top Bar:** Displays the file name 'style.css' and the encoding 'UTF-8'.
- Left Sidebar:** Contains the 'Project' view showing the file structure with 'index.html', 'index.js', and 'style.css'.
- Main Editor:** Displays the JavaScript code for the 'myClick' function. The code includes comments and logic for checking game status, updating the player turn, and displaying the winner.
- Right Sidebar:** Contains the 'Run and Debug' view, which is currently empty.
- Bottom Status Bar:** Shows the time '12:27', the file encoding 'LF UTF-8', and the current file 'style.css'.

The screenshot shows a VS Code editor with a file named 'playerTurn.js'. The code is as follows:

```

64     playerTurn.innerHTML = "DRAW";
65     button.style.display = "block";
66   }
67   currentPlayer = 'X';
68 }
69
70 }
71
72 5+ usages  kerwinth
73 function checkWinner(){
74   return takenBoxes[0] !== '' && takenBoxes[0] === takenBoxes[1] && takenBoxes[1] === takenBoxes[2] ||
75     takenBoxes[3] !== '' && takenBoxes[3] === takenBoxes[4] && takenBoxes[4] === takenBoxes[5] ||
76     takenBoxes[6] !== '' && takenBoxes[6] === takenBoxes[7] && takenBoxes[7] === takenBoxes[8] ||
77     takenBoxes[0] !== '' && takenBoxes[0] === takenBoxes[3] && takenBoxes[3] === takenBoxes[6] ||
78     takenBoxes[1] !== '' && takenBoxes[1] === takenBoxes[4] && takenBoxes[4] === takenBoxes[7] ||
79     takenBoxes[2] !== '' && takenBoxes[2] === takenBoxes[5] && takenBoxes[5] === takenBoxes[8] ||
80     takenBoxes[0] !== '' && takenBoxes[0] === takenBoxes[4] && takenBoxes[4] === takenBoxes[8] ||
81     takenBoxes[2] !== '' && takenBoxes[2] === takenBoxes[6] && takenBoxes[6] === takenBoxes[8];
82 }
83
84 3 usages  kerwinth
85 function isGridFull(){
86   for(let i = 0; i < 9; i++){
87     if(takenBoxes[i] === ''){
88       return false;
89     }
90   }
91   return true;
92 }
93
94

```

The editor interface includes a sidebar on the left with 'Project', 'Pull Requests', and 'Bookmarks' sections. The bottom status bar shows 'Window: onboard()' and 'playerTurn'. The bottom right corner shows a small preview of a document.

cs20 Assignment5 style.css

```
1 body {
2   background-color: #a0d2eb;
3 }
4
5 h1, h3 {
6   display: flex;
7   justify-content: center;
8   border-radius: 10px;
9 }
10
11 h3 {
12   border: 1px solid black;
13   padding: 10px;
14   margin-left: 42%;
15   width: 15%;
16   justify-content: center;
17   align-items: center;
18 }
19
20 #btn {
21   display: flex;
22   justify-content: center;
23   padding: 5px 30px 5px 30px;
24   margin-left: 45%;
25   margin-right: 45%;
26   margin-top: 2%;
27   border-radius: 20px;
28   border: 1px solid black;
29 }
30
31 #table {
32   display: grid;
33   justify-content: center;
34 }
35
36 .grid
```

42:25 LF UTI-e spaces main

cs20 Assignment5 style.css

```
14 padding: 10px;
15 margin-left: 42%;
16 width: 15%;
17 justify-content: center;
18 align-items: center;
19 }
20
21 #btn {
22   display: flex;
23   justify-content: center;
24   padding: 5px 30px 5px 30px;
25   margin-left: 45%;
26   margin-right: 45%;
27   margin-top: 2%;
28   border-radius: 20px;
29   border: 1px solid black;
30 }
31
32 #table {
33   display: grid;
34   justify-content: center;
35 }
36
37 .grid {
38   font-size: xx-large;
39   background: #E5EAF5;
40   border: 1px solid black;
41   width: 120px;
42   height: 120px;
43   vertical-align: top;
44 }
```

42:25 LF UTI-e spaces main

Answer to question

```
//create grid
let grid = document.getElementById( elementId: "table");
for(let i = 0; i < 3; i++) {
    let row = document.createElement( tagName: 'div');
    for(let j = 0; j < 3; j++) {
        let cell = document.createElement( tagName: 'button');
        cell.className = 'grid';
        let idNum = i*3 + j;
        cell.id = '' + idNum;
        cell.onclick = function () {myClick(cell.id)};
        row.append(cell);
    }
    grid.append(row);
}
```

This was the javascript for loop I wrote to build the grid for the tic tac toe box. I was most proud of this because it took me awhile to find a way to construct a grid on the page using buttons.