2/28/2018 apcsp-ttt

```
1 // Necessary modules
  2 const rl = require('readline-sync') // Allows accepting user input and actually waiting for it.
                                                   readline-sync is not my own:
  4 // Colors for POSIX-compliant terminals
                                                   https://www.npmjs.com/package/readline-sync
 5 let green = '\033[0;32m
 6 let cyan = '\033[0;36m'
 7 let red = '\033[0;31m'
8 let boldGreen = '\033[1;32m'
 9 let boldCyan = '\033[1;36m
10 let boldGray = '\033[1;37m
11 let boldRed = '\033[1;31m
12 let yellow = '\033[0;33m'
13 let reset = '\033[0m'
 14 let clear = '\033[H\033[2J'
15
16 // Initializing required variables
   let turn = `${cyan}X` // Switches around to control what gets placed.
                          // What to log for the "Turn: " label next to the board
18 let logTurn
                          // Whether or not to log the "Already taken" error
19 let logTaken
                          // Whether or not to log the "Not 1-9" error
20 let logOOR
21 let winner = 'none'
                          // Will change when there is a winner
22 let boardState = [] // Initializing array for the state of each chunk
23 let boardChoices = [1,2,3,4,5,6,7,8,9] // Choices possible; with the "Not 1-9" error
24 let winConditions = [] // Initalizing conditions for how the letters must match in order for the game to be
won
28 // Win Checks
29 let checkWins = () => {
     winner = 'none'
                        // Double checks that winner variable is set to right thing at first
      let drawCheck = 0
32
      for (let i = 0; i < winConditions.length; i++) {</pre>
        if (winConditions[i][0] !== 0) {
          if (winConditions[i][0] === winConditions[i][1] && winConditions[i][0] === winConditions[i][2] &&
34
winConditions[i][0] === 1) {
            winner = 'x'
          } else if (winConditions[i][0] === winConditions[i][1] && winConditions[i][0] === winConditions[i][2] &&
36
winConditions[i][0] === 2) {
           winner = 'o'
          } else if (winConditions[i].indexOf(0) === -1) {
           drawCheck += 1
40
      if (drawCheck === 8) {
       winner = 'draw
46 }
48 let board =
              ###
                           ###
49
                           ###
              ###
                           ###
   58
              ###
                           ###
              ###
59
                            ###
              ###
60
###
              ###
64
                           ###
67
                           ###
68
69 // Template board for numbers
70 let numBoard =
74 ----
```

2/28/2018 apcsp-ttt

```
78
  79 let topLeft = [
        80
                                                                                                                       ${cyan}X ${boldGray}#\n ${cyan}/
  81
  83 let topMid = [
87 let topRight = [
88 \${boldGray}# \n# \n# \n# \n# \n# \n########\,
89 \${boldGray}# \${cyan}\\ / \${boldGray}\n${boldGray}# \${cyan}\\ / \${boldGray}\n${boldGray}\n${boldGray}# \${cyan}/ \\
${cyan}X \${boldGray}\n${boldGray}# \${cyan}/ \\
${boldGray}\n${boldGray}########"]
 91 let midLeft = [
92 `${boldGray}########\n ${boldGray}#\n ${boldGray}#\n ${boldGray}#\n ${boldGray}#\n ${boldGray}#\n ${boldGray}#\n ${boldGray}#\n ${boldGray}#\n ${cyan}\ / ${boldGray}#\n ${cyan}X ${boldGray}#\n ${cyan}\ / ${boldGray}#\n ${cyan}X ${boldGray}#\n ${cyan}\ / ${boldGray}#\n ${cyan}X ${boldGray}#\n ${cyan}\ / ${boldGray}#\n ${cyan}\ / ${boldGray}#\n ${cyan}X ${boldGray}#\n ${cyan}\ / ${boldGray}#\n ${cyan}\ / ${boldGray}#\n ${cyan}X ${boldGray}#\n ${cyan}\ / ${boldGray}#\n ${cyan}X ${cyan}X ${boldGray}#\n ${cyan}X ${boldGray}#\n ${cyan}X 
                                                                                                                                                                  ${cyan}X
  95 let midMid = [
                                                                                                    ##\n##
                                                                                                                              ##\n##
98 `${boldGray}#########\n## ${green} \ ${boldGray}##\n## ${green} | ${boldGray}##\n## ${green} | ${boldGray}##\n######### ]
99 let midRight = [
100 `${boldGray}#########
                                                                                                                             ${yellow}----\n#
 ${yellow}4 | 5 | 6\n${boldGray}# ${cyan}X
${vellow}7 | 8 | 0\nc(boldGray)# $
                                                                               \n${boldGray}#########"]
103 let botLeft = [
107 let botMid = [
111 let botRight = [
114 \{boldGray}########\n# ${green}  ${boldGray}\n${boldGray}# ${green}|  | ${boldGray}\n${boldGray}\n${boldGray}\n${boldGray}\n${boldGray}\n${boldGray}\n${boldGray}\n${boldGray}\n${boldGray}\n$
${green} <u></u>
115
16
117 // 0: blank, 1: 'x', 2: 'o'
117 // 0: blank, 1: 'x', 2: 'o'
       let drawBoard = (boardArray) => {
        tl = topLeft[boardArray[0]].split('\n')
tm = topMid[boardArray[1]].split('\n')
         tr = topRight[boardArray[2]].split('\n')
ml = midLeft[boardArray[3]].split('\n')
mm = midMid[boardArray[4]].split('\n')
122
         mr = midRight[boardArray[5]].split('\n')
```

2/28/2018 apcsp-ttt

```
12
       b1 =
            botLeft[boardArray[6]].split('
126
       bm = botMid[boardArray[7]].split('\n')
       br = botRight[boardArray[8]].split('\n')
128
       for (let i = 0; i < tl.length; i++) {</pre>
         console.log(tl[i] + tm[i] + tr[i])
       for (let i = 0; i < ml.length; i++) {</pre>
132
         console.log(ml[i] + mm[i] + mr[i])
134
       for (let i = 0; i < bl.length; i++) {</pre>
135
           logTurn
                                  Turn: ${turn}${boldGray}`
137
         } else {
           logTurn = ''
140
         console.log(bl[i] + bm[i] + br[i] + logTurn)
 12 }
143
144 // Main procedure
144 // Mark procedure

145 mode = 'local' // Old thing for wh

146 if (mode === 'local')

147 boardState = [0,0,0,0,0,0,0,0,0]
                  // Old thing for when I build in global functionality
148
      let alreadyTaken = []
149
       console.log(`${clear}${boldGray}`)
      drawBoard(boardState)
      while (true) {
         if (winner === 'none') {
154
           console.log(`${boldGray}\nWhat is your move?`)
           if (logTaken) {
             console.log(red + '\033[1BAlready taken! Try Again!\033[2A' + boldGray)
158
             logTaken = false
           if (logOOR) {
             console.log(red + '\033[1BNot 1-9! Try Again!\033[2A' + boldGray)
162
             logOOR = false
           let move = rl.question('> ')
164
165
           if (alreadyTaken.indexOf(Number(move)) > -1) {
             logTaken = true
           } else if ((boardChoices.indexOf(Number(move)) > -1) === false) {
168
             logOOR = true
169
           } else if (turn === `${cyan}X`) {
170
             boardState[Number(move)-1] = 1
171
             alreadyTaken.push(Number(move))
             turn = `${green}0
173
             console.log(turn)
           } else if (turn === `${green}0`) {
174
175
             boardState[Number(move)-1] = 2
176
             alreadyTaken.push(Number(move))
             turn = `${cyan}X'
178
179
           console.log(`${clear}${boldGray}`)
           drawBoard(boardState)
           winConditions = [
         [boardState[0],boardState[1],boardState[2]],
         [boardState[3],boardState[4],boardState[5]],
[boardState[6],boardState[7],boardState[8]],
184
         [boardState[0],boardState[3],boardState[6]],
186
         [boardState[1],boardState[4],boardState[7]],
         [boardState[2],boardState[5],boardState[8]],
188
         [boardState[0],boardState[4],boardState[8]],
         [boardState[2],boardState[4],boardState[6]]
189
190
           checkWins()
           console.log(`\n${yellow}GAME OVER!`)
if (winner === 'draw') {
194
             console.log(`${boldRed}DRAW! ${boldGray}Nobody Wins!`)
           } else if (winner === 'x') {
196
197
             console.log(`${boldCyan}X ${boldGray}Wins!`)
           } else if (winner === `o`) {
198
199
             console.log(`${boldGreen}0 ${boldGray}Wins!`)
200
201
           break
202
203
204 }
```