

# JS Modules

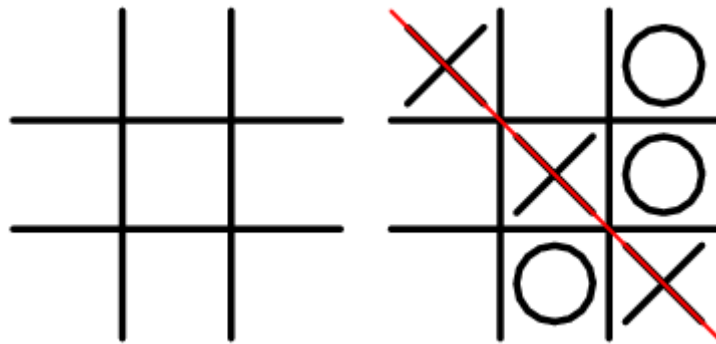
**DEADLINE:** 14/02/2022

## FOLDER STRUCTURE

FL18\_HW10/ \* \* - required

- ├─ task
- ├─ homework/ \*
- │ └─ all of the necessary files, no specific ones

## TASK



You'll need to implement a well-known game for 2 players. Rules are very simple: Players are marking by turns the spaces in a 3x3 grid with X or O. The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row is the winner.

The page should have a 3x3 grid, player names with their marks and scores, 'New game' and 'Reset' buttons. It's up to you to make it 'player vs player' game or 'player vs computer'.

## GAME FLOW

- The game should randomly decide which player has the first turn at the beginning of the round and highlight his name. After every turn, the highlighted name should change accordingly.



Frontend Lab

- Player should be allowed to mark only an empty cell.
- Once a player succeeded to mark the whole row, the game should display an appropriate message (e.g. 'Player 1 won!') and increment winner's score. The winning row should be highlighted or crossed out.
- When all 9 squares are full and no player has 3 marks in a row, the game is over with a draw. 'Draw!' message should be displayed and both player's scores are increased by 1.
- When user press 'New game' button, the grid should be cleared, but players' scores should remain.
- When users press 'Clear button', both players' scores and grid should be cleared.

## REQUIREMENTS

- Use **Webpack** to handle build process.
- Please use **ES6** where it is possible. Code should be split by its purpose and located in different **modules**. Should be compiled to one **minimized bundle.js** file.
- Styles should be Less/Sass/Scss in different files, but should be compiled into one file.
- *package.json* file should have 2 scripts:  
Build - for compiling all the project,  
Start - runs development server and watches all file changes.

## RESTRICTIONS

- Adding **task/** folder is forbidden. Do not push it to repository. (Only **homework/** folder should be pushed)
- Do not use any external libraries

## BEFORE SUBMIT

- Code should be clean, without comments, readable, and tested
- Make sure your GitLab folder structure meets folder structure from this document (without **task** folder)

## SUBMIT

- The **FL18\_HW10** folder without **task** folder should be uploaded to GitLab repository "**FL-18**" into main branch.