



#CodeYork

Session 4: Two Player Games

Recap

- Last time, we looked at:
 - Recursive definitions
 - Factorials
 - Palindromes
 - ...

Questions? Speak up now!

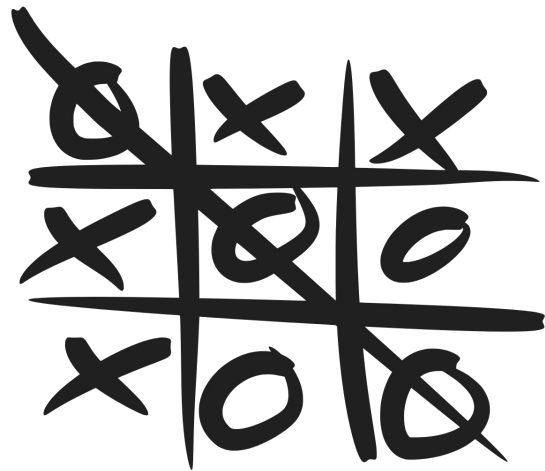


The Schedule

1. Introduction
2. Functions and Control
3. Recursion and Examples
4. **Two Player Games**

Tic-tac-toe

- Tic-tac-toe is a game for two players, X and O.
- Take turns marking the spaces in a 3×3 grid.
- The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row win.



Question: What's wrong with the picture?



Representing the Game Board

- A good board representation would be to use **2D arrays**.

board[0][0]	board[0][1]	board[0][2]
board[1][0]	board[1][1]	board[1][2]
board[2][0]	board[2][1]	board[2][2]

```
[[None, None, None],  
 [None, None, None],  
 [None, None, None]]
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Course Website

<https://york.gjcampbell.co.uk/>

“Thank goodness we don't have only serious problems, but ridiculous ones as well.”



- Edsger Dijkstra

Thanks!

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