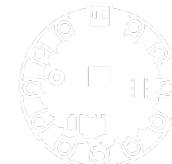
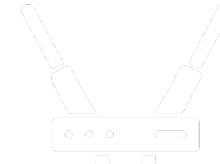
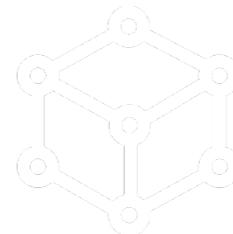
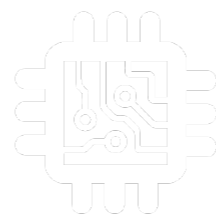
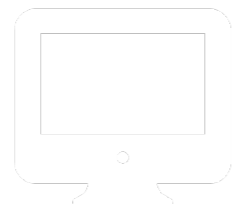
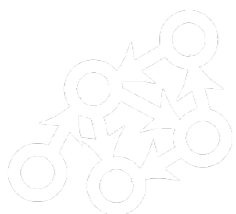
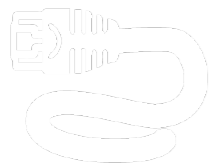


CS 134 Lecture 25: Tic Tac Toe: **Game Logic**



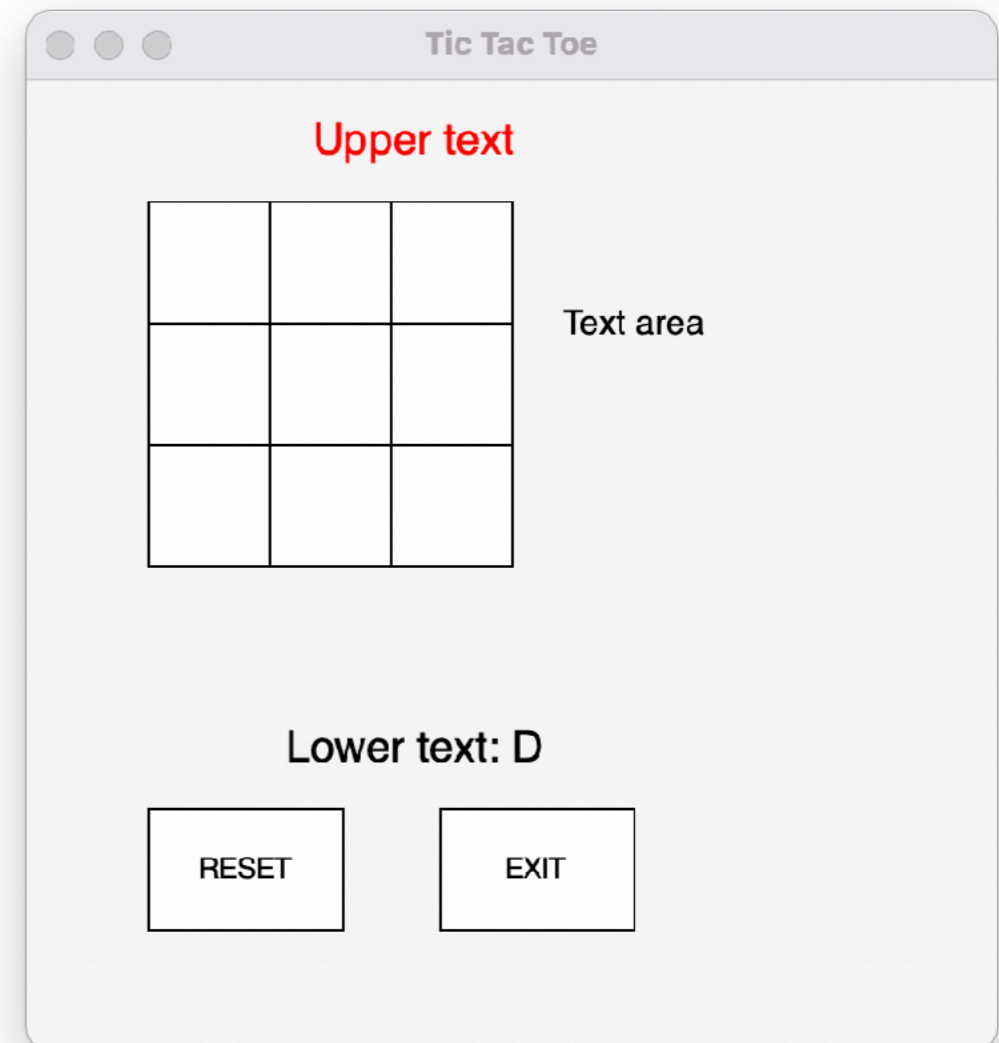
Announcements & Logistics

- **HW 8** due Mon @ 10 pm
- Preregistration Info Session today
 - 2.35 pm in Wege Auditorium
 - Come find out more about CS major requirements and fall courses
 - There will be cookies!
- **Lab 9 Boggle**: two-week lab
 - **Part 1** due next Wed/Thur 10 pm
 - Will run our tests on these and return automated feedback: you are allowed to revise it afterwards without penalty!
 - **Part 2** due May 1/2

Do You Have Any Questions?

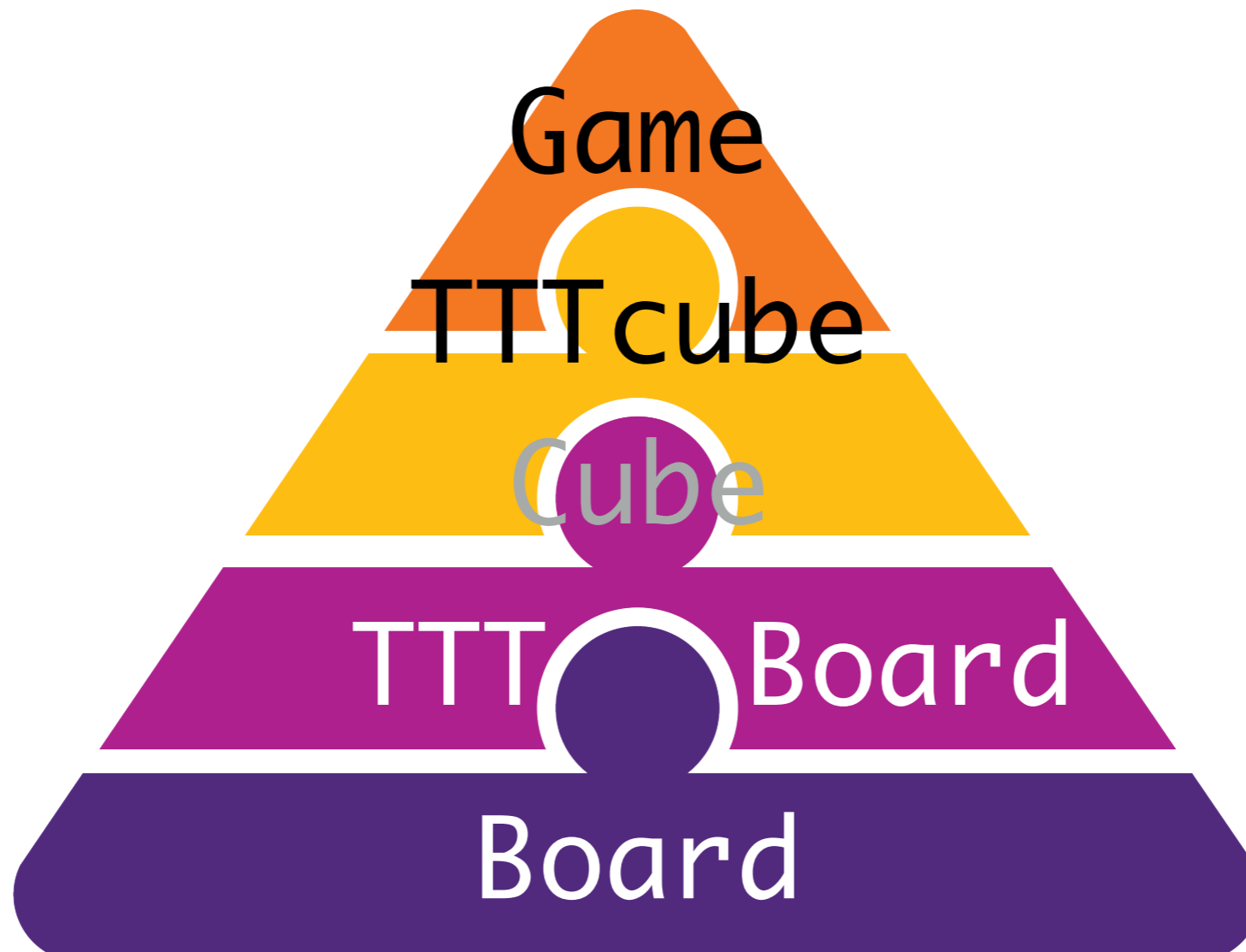
Last Time: Board class

- Basic features of our game board:
 - Text areas: above, below, right of grid
 - Grid of squares of set size: rows x cols
 - Reset and Exit buttons
 - React to mouse clicks (we'll discuss this)
- These are all **graphical** (GUI) components
 - Used graphics package to create rectangles/window/text
 - **object.draw(win)** draws object on graphical window **win**



Today: Text-Based TTT

- Explore inheritance through “grid-based word games”

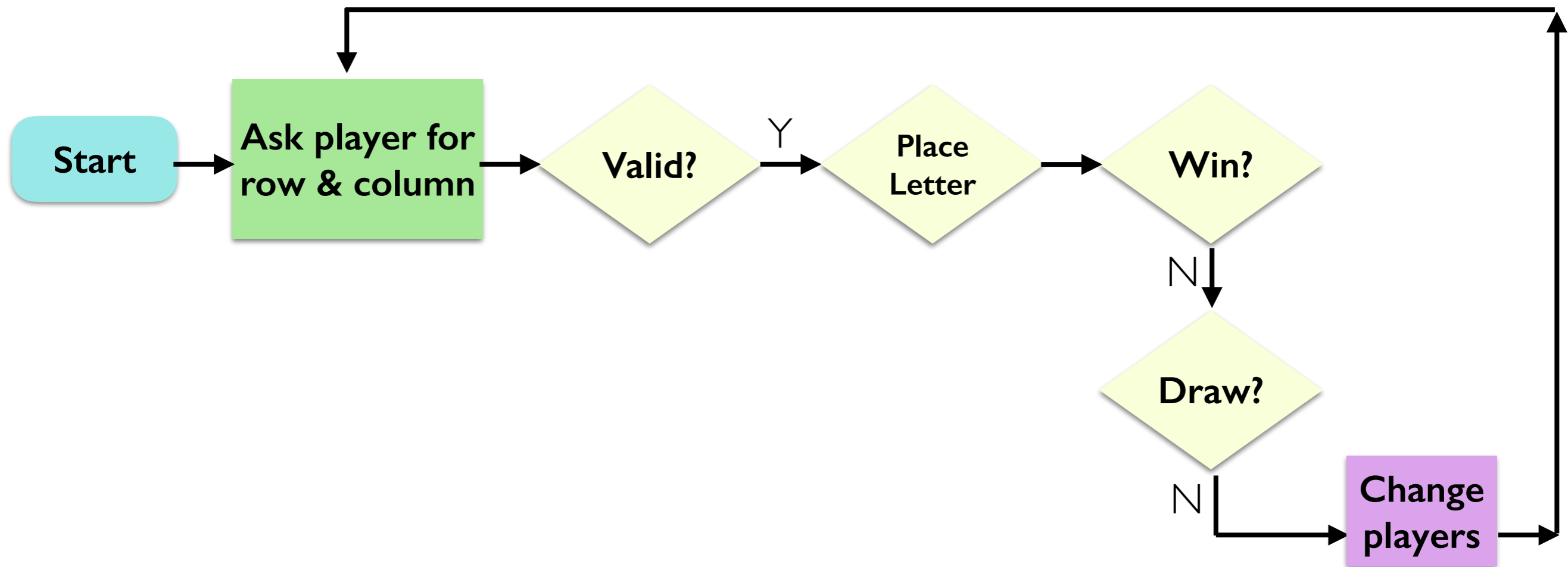


Code in Notebook

`tic-tac-toe-2.ipynb`

TTT Game Logic

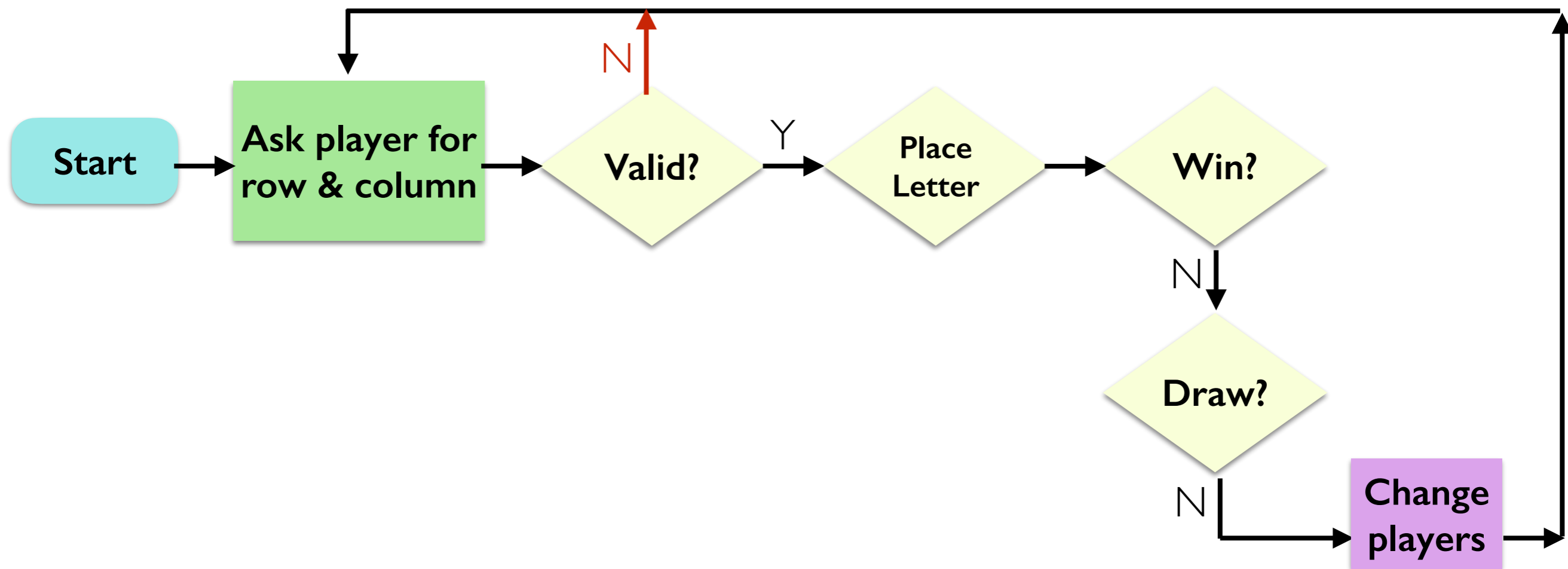
- Let's create a TTT flowchart to help us think through the state of the game at various stages



Let's think about the "common" case: a valid move in the middle of the game

Finally... TTT Game Logic

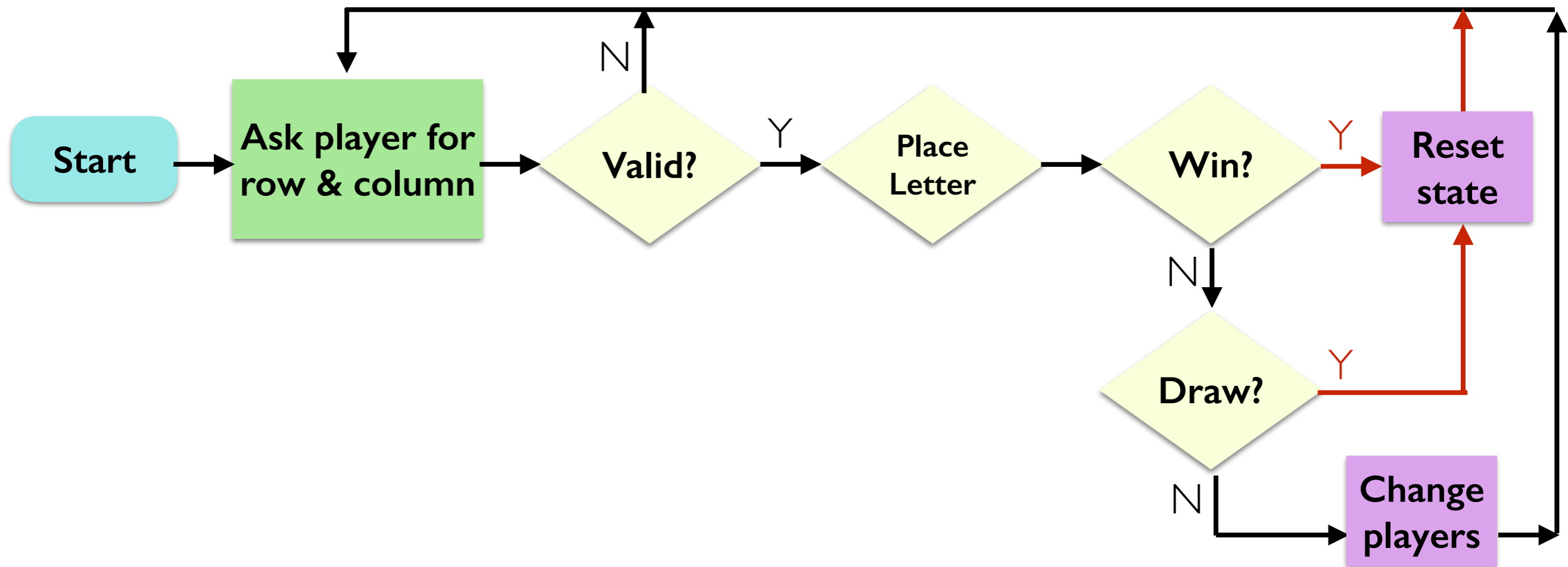
- Let's create a TTT flowchart to help us think through the state of the game at various stages



Now let's consider the case an invalid move

Finally... TTT Game Logic

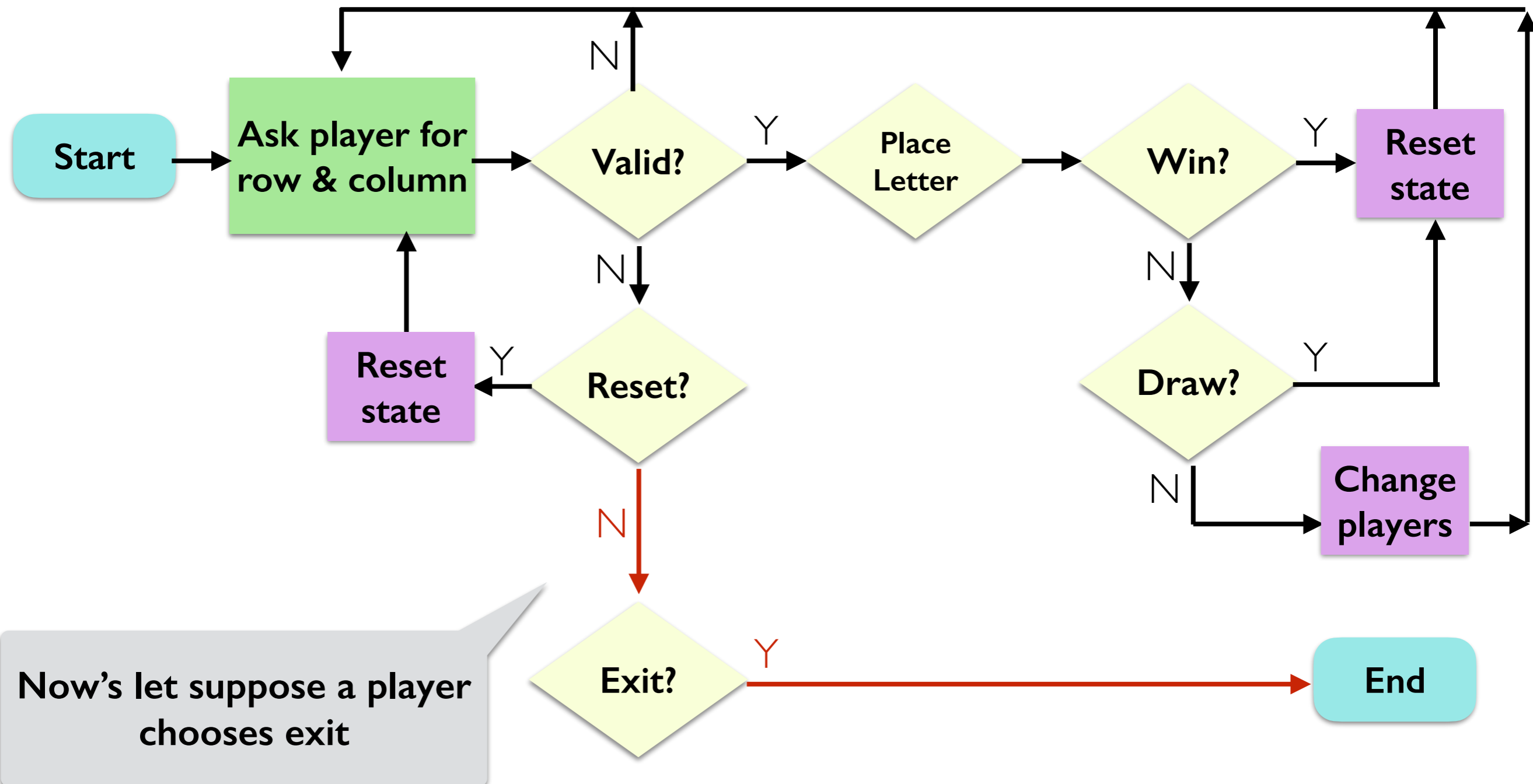
- Let's create a TTT flowchart to help us think through the state of the game at various stages



Now let's consider the case of a win or draw

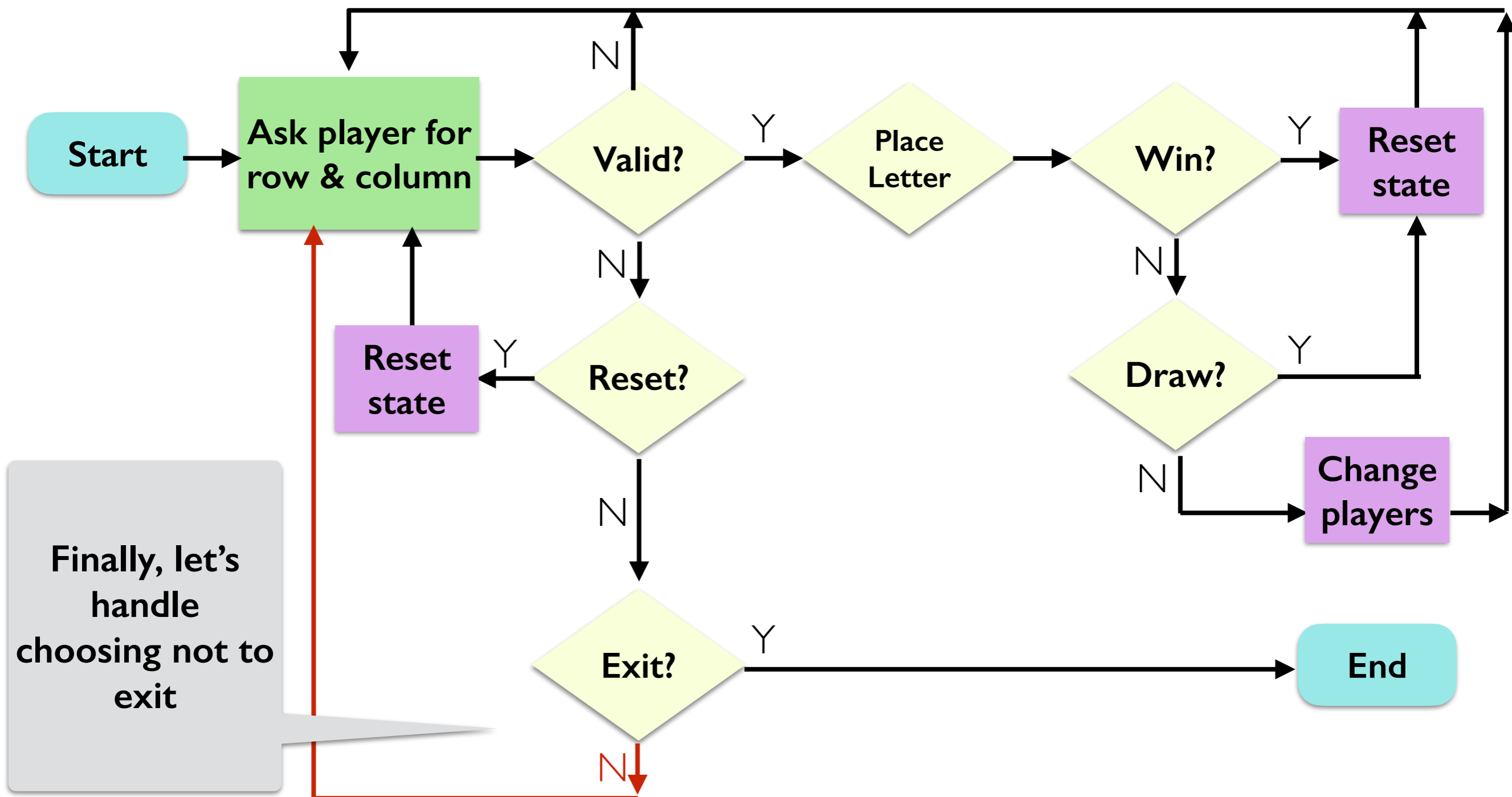
Finally... TTT Game Logic

- Let's create a TTT flowchart to help us think through the state of the game at various stages



Finally... TTT Game Logic

- Let's create a TTT flowchart to help us think through the state of the game at various stages



Finally... TTT Game Logic

- Let's create a TTT flowchart to help us think through the state of the game at various stages

