**Project**: Tic Tac Toe

Website: <a href="https://amyyejunlu.github.io/puiHW/assign\_8/">https://amyyejunlu.github.io/puiHW/assign\_8/</a>

Code: <a href="https://github.com/amyyejunlu/puiHW/tree/master/assign\_8">https://github.com/amyyejunlu/puiHW/tree/master/assign\_8</a>

## Why I changed my project from Assignment 7 to 8:

I decided to change my project from portfolio website to tic tac toe because I wanted to have a greater understanding of javascript. I coded my portfolio website before and am pretty familiar with html and css. I do want to redesign and rebuild my portfolio website, but in this project, I wanted to further my learning of Javascript and not spend too much time on what I already knew (HTML/CSS). So in this final project, I created a simple tic tac toe using basic styling and focused much of my attention on the logic of the game.

**Part 1**: In 300 words (only!) describe your website (We will stop reading at 300 words, so please be concise). Include the following:

- **i. What is the purpose of your website?** The purpose of this site is to provide an entertaining game experience for users playing Tic Tac Toe game.
- **ii. What information do you convey with your website?** This website is not meant to convey information, rather it aims to provide a gaming experience by simulating a tic tac toe game on a website. I created by simple instructions using a popup window that loads as soon as user launches the website. Any text information on the website is conveyed using a simple typography. When they are used to bring to user attention, they are combined with a pop color. When they are meant to be unobtrusive but still needs to be there such as a reset button, they are set against the background with only a border wrapping it.
- **iii. How is it interesting and engaging?** It is interesting because you can play a game. I chose a dark mode color palette, with pop colors such as turquoise and purple to engage the user. The color palette also is easy on the eyes.
- **iv. Who is the target audience?** The target audience is a person who is affluent with using a webpage to play games. While I was designing this website, I imagined my audience to be a young college or high school student who is looking for a break from his/her school work.

**Part 2**: Use a bulleted list to describe how a user would interact with your website. For each item in your list, say

- i. the interaction type you implemented (e.g. speech, gesture, form-based wizard, standard web page, etc)
  - Clickable interaction on a webpage
  - Online game
- ii. how we should reproduce an interesting use case (i.e. click on X on page Y, or scroll on page X, etc.)
  - User can click on a square to see their moves placed onto the tic tac toe board.
  - In the popup a user can choose to be x or o to start the game.

 User can also click reset at upper left to restart the game after they've won or lost.

**Part 3**: Describe what external tool you used (JavaScript library, Web API, animations, or other). Following the bulleted list format below, reply to each of the prompts. (I will stop reading at the 4th sentence, so please be concise)

#### i. Name of tool

animate.css

## ii. Why you chose to use it? (2-4 sentences max)

• I wanted to incorporate a smooth animation of the popup appearing as the user loads the webpage. I tried a couple of animation examples from the animate.css such as slide from left or right, enlarging, etc. I chose this fade in effect because it was the smoothest and felt the most natural.

## iii. How you used it? (2-4 sentences max)

• I added it to the popup modal by inserting the animation classes into the div: animated fadeInDown faster.

#### iv. What it adds to your website? (2-4 sentences max)

• The smooth animation lets the popup appear in an unobtrusive manner, slowly easing the user's eye to view the popup.



Part 4: Describe how you iterated on your HW7 mockups, if at all, including any changes you made to your original design while you were implementing your website. (2-4 sentences max)

I changed the design from portfolio website to a tic tac toe game. When I designed this game in Figma, I initially created a very small popup box using a blue header at top. But when I started coding it and seeing it in the browser, it was hard to see and click on the options. It was also hard to click on x or o because the target size was so small. Then I iterated on the design and made the popup box bigger.

I also changed the blue header on the popup box to be light gray instead of blue, because it was too obtrusive. I realized I should only give user

the option to click on x or o, but introducing a 3rd color may suggest to the user that the blue is also clickable. So I ended up going with a light gray header for tic tac toe.

# Part 5: What challenges did you experience in implementing your website? (2-4 sentences max)

There were so many challenges implementing this seemingly simple game. To create the popup where the background was grayed out while the user sees the popup was a challenge to figure out using css. I realized that I needed to create a div that holds the background color and then fixing the popup div on top of the background. This took a lot of trouble shooting and googling online.

#### References:

I followed a youtube tutorial learning the basics of the logic that goes behind building the tic tac toe game. Then I customized and tailored the code so that it makes sense as to what I am building. I set a global variable called turn = x, and used event listeners to call on the functions. I also styled the innerHTML so that what is reflected on the board aren't just strings but images, which would match with my design.

Tic Tac Toe Youtube Tutorial:

https://www.youtube.com/watch?v=dU\_wjhBywg0&t=292s