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NEWM-N 220

Final Reflection Paper

Link to my code: <https://alrwest.github.io/N220_Summer2020/>

Github: <https://github.com/alrwest/N220_Summer2020/commit/53f8522c1632eb0a80e835bcf042eff5729e6fc9>

Final Reflection

For my final project, I’m creating a concentration game that’s space themed. First, I decided to ask myself if I should write my HTML/CSS or my JavaScript initially. I decided to go with my HTML/CSS first, so I have something tangible to refer to when writing my JavaScript.

Since I’ve been taking a course that heavily involves HTML and CSS, it was easy for me to come up with a grid on my own for the playing cards. I decided the best way to do this was to create a div wrapper (which I’ve come to find to be a very useful tool) to lay out the background. I decided to use a width and height that can easily be sectioned into four even parts, for the required 4 X 4 grid. I created a row div and filled it with 4 column divs and copied and pasted three other times to lay out the grid. I added padding and margins to add space between the background and each individual card div. Once everything was nice and even and met the requirements, I decided to style the board with a space theme. I went and gathered all of the images I would need for the cards themselves. 8 planets, 8 pairs, 16 cards total to fill the 4 X 4 grid.

While styling the board with images for the cards, I began writing out my pseudocode function by function. I started watching through a few videos to see where others started in their project; I noticed a lot of others started with HTML, then CSS, and lastly implemented their JavaScript. I know immediately I’m going to loop through an array to pull and store the cards. I ended up creating some empty arrays to store the matches and the score to the user.

I created a few different functions: startGame(), checkMatch(), flipCard(), and a resetGame() function, each to iniate the game, take the needed information, see if an item’s been clicked, check that against a few conditions to see if the array value matches, and then either add a value to the match array or reset. Once the game was completed, it would shuffle the cards and restart with the resetGame() function.

My main issue that I came across was getting the div class card to change with the JavaScript. The console didn’t have any obvious errors, so everything was most likely written “correctly”, but not necessarily correct in what I wanted to do, which was the frustrating part. I used a getAttributeByClass to pull that div to my JavaScript, but ultimately it didn’t seem to work. I used console.log to test each function, but it didn’t even recognize the first function, so it wasn’t implementing.

**Used Resources:**

1. Make Memory Game in JavaScript, HTML, & CSS (Ania Kubow)

This source covered more with setting and getting data attributes; which with more practice I’m learning that it is a fun and very useful tool. This also gave me the idea to check array values with my if conditions! Most of the questions I had were definitions for some of the functions, this video was my most helpful source. However, I was not able to figure out how to grab my class div and make it work in my JavaScript.

1. Memory-game cashed (Veronica Parente)

This source helped me learn how to setup a reset and more in-depth shuffle function.

1. Codecamp’s memory card game tutorial

This is the intial video that I watched to get an idea of where to start for this project.

**Algorithm Design for Concentration Game**

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Figure idea for a function to swap images

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Description automatically generated with medium confidenceText, letter

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