My Final Project for CIT 261

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My final project is a memory game. The container is set up to look like a table top with a felt covering. I have only used Chrome to test it. When you first load it, the instructions will come in from the left side of the screen. When it arrives in the center, the main title will flash three times. If you hover over the secondary title, it will grow and skew. A call out container shows a thank you with the text that changes color every 4 seconds. It also has an X button so you can have it go away (changes the display to none). If you hover over the instructions they will get bigger and change color. A reset button has been put in that basically just refreshes the page.

You start the game by clicking the deck of cards. The deck gets bigger when you hover over it. When you click it the cards fly to their respective areas on the table in a random order. When you click on one card it will turn over and stay turned over until you click the second one. After the second turns over they both get turned back. As they are turned over they get bigger and rotate a bit. Some cards will randomly spin when you choose them. When you get a match, the two cards fly back to the deck. When you have completed all of the matches, an alert will pop up to tell you that you won and tell your number of moves.

I had many issues to get this to work. I found that there are so many things I still have to look up even when I thought I was getting pretty good at it. I wanted a tabletop look to my container and I spent way too much time to get it just like I wanted. For the individual card pictures I was able to find a free Church of Jesus Christ of Latter-Day Saints bingo game and download it. I then had to crop each image and save it at the right size. I had planned on a small weather widget to put in the corner of the page but just ran out of time.

Probably the hardest part of the whole project was figuring out what project I wanted to do. I actually created a DX ball page that is pretty cool but it was still kind of clunky so I did this memory game instead. I have had that problem throughout this course. I am the type that if you tell me to build a widget I will get it done but when I have to decide what to do I have troubles. Oh well, I guess the goal is to learn, which I have done.

Here are the different elements:

**Transforms:** The footer is centered with a transform. There are two transforms for when you flip a card: Either to rotate it to the left or to the right one degree and the card gets bigger. Another transform when you hover over the deck to get bigger. Another when you hover over the buttons they get bigger. There are more to make the cards rotate at random times when you flip them over and when you get a match.

**Transitions:** Used with transforms to rotate the cards one degree when you flip over a card. A transition is used to change the text color and size when you hover over the instructions. The secondary title font changes size and skews using transition and transform.

**Animations:** The text at the bottom slides in when the page is loaded. A thank you call out container has the text change from black to red every 4 seconds. After a 4 second delay from when the page loads, the main title will flash 3 times.

**DOM Manipulation:** At the end of the game, the player is shown their number of moves. This is done through getElementById (line 88). The stage container is created by getElementById also (line 116) and the felt container is created by createElement (line117). The card is retrieved and created through getElement and innerHTML (line 123 and 125). There is an addEventListener (line133) for when you click on a card. There are also some append and removeChild lines and cloneNodes.

When I first started this class, I was worried about the lack of direction but I have found it has really helped me. This is really what the real world is about. I started working as a programmer just over two years ago and there have been many times I have been told, “We don’t have someone who does that. Why don’t you learn it?” Then I have to go to Google, Udemy, and YouTube to figure out how to do it. The latest thing was Tableau reports which turned out to be quite easy. Thanks for your help during this class.

My final project: <https://frost-mitch.github.io/cards.html>

Assignments page: <https://frost-mitch.github.io/>

GitHub repo: <https://github.com/Frost-Mitch/Frost-Mitch.github.io>