<https://jbldwn.github.io/n220fall2020jbaldwin/Index/index.html>

Memory:

* A 4x4 grid of facedown cards  
  place the divs in a larger div to control the size to float the 4x4
* Reveal the value of a facedown card on click  
  create an function to reveal the underside of the card with an event listener  
  add class to know that card is flipped
* If two revealed cards match, remove them  
  if statement, remove flipped class
* If two revealed cards do not match, return them to face down  
  if statement, remove flipped class
* A ‘replay game’ option when the game is over  
  replay button will refresh screen.
* Use set Timeout to keep both face up cards visible for two seconds before hiding / removing them

Links:

1. <https://stackoverflow.com/>  
   used when trying to randomize the friendsArray found the Knuth Shuffle.   
   used when researching using an array for flipped cards, needed to bush up on how to insert and where items insert. Toyed with Splice, and unshift, but decided on push instead.  
   used when researching how to add/remove background image.   
   used when trying to figure out how to use attribute as variable to get images from file.   
   used for replay button; I knew the best way to reset the game was just to refresh the page, I knew to add an event listener to the div, but was unsure how to reset the window.
2. <https://www.w3schools.com/>   
   used when researching add/remove background image with js.  
   used when researching pulling items by class and double checking how items could be manipulated.   
   used when researching setTimeout.   
   used when researching for loops; I thought I was going to have to use it subtracting from the variable, but ended up going in a different direction with it.
3. <https://developer.mozilla.org/>   
   used when researching how to remove event listeners.  
   used when researching datatypes when a bug appeared when items *should* have been equal, but it was not being caught in the if statements

There was not anything that really forced me to think about my project differently. All the resources helped me to achieve my understanding on what I was looking for, there was not anything I did not understand; It was more like weather or not it was applicable.

Design Notes:

Session 1: in the HTML code, I figured out how many sections I would need, roughly. Then went into java and started creating the table. I struggled figuring how to distinguish 2, I added data-attributes. My next struggle was trying to restore them to their original state. I figured out that adding a class to mark the cards as “flipped” and removing it after figuring out if they were a match or not.

Session 2: I really struggled with restoring flipped cards to their original state (face down). I figured out that when I was calling these items, it was making an array and I had to call them individually as I could not make a for loop work. While this is not ideal, it’s okay as you can only compare 2 cards at a time.

Session 3: I knew I was close to the finish this time. My struggle was implementing some fun easter eggs, I really wanted to use photos instead of words for the divs. I wanted to use the character name stored in the data attribute as a variable to pull an image, but I was struggling to get it work. After some looking, I figured out I was missing a “+” on each side of the variable it was in the middle of the file path.