

Hw 5 write up

What I did:

For this assignment I managed to implement a lot of the functions of a regular scrabble board game. I created a row of the board with 3 special tiles. I was able to make a drag and drop mechanic and record an accurate score based on the values of the letters. I was able to make a reset button that clears the board and a button that gives you a new hand of tiles. Finally, I created a table to keep track of remaining tiles with error checks when there are no more tiles.

What I didn't do:

What I did not accomplish is a function to get rid of an individual tile and replace it. This component is pretty critical to playing scrabble, but I wasn't able to figure out a method to get rid of a single tile. In the end my assignment basically simulates a round of scrabble where you can replace your entire hand, instead of an individual one.

Index.html

For this assignment I started off with trying to recreate the example that was shown in class. I used my Jumbotron header from the previous assignments. Then I created a space for the score and buttons. The 2 buttons reset the game and give you a new hand of tiles. Next, In order to create the one row scrabble board, I created a table and inserted an image of the tiles themselves. Each of these elements in the table had their own ID so we can use them in JS. The last part of my index.html file is the "bag of remaining tiles". Instead of a bag, I made another table that holds every letter and its remaining tiles. Each one had an id so we can update the number as you play.

Main.css

This file contains all the styling for the game. The majority of this file is adjusting commands so that I can line up the images. Another part of this file would be the stylings of the tables. Overall, without this file, everything would be ugly and not centered.

Scrabble.js

This is where the majority of my time went into. I made a few global array variables to hold the information and then started on the first function. The buildrack function starts off by getting a random number. Then it enters a loop that starts on the first position of the rack. At every iteration, it checks to see if it has remaining tiles. If it does, the function then inserts the random tile into that position and creates a draggable image of the tile.

The next 2 major functions are used to record the score if the tile is put on a special spot. The first function is called tiledropped. This function checks the value of the draggable object, it then checks the tile tags that it is being put on. If it's on one of the special tiles, do that special math to calculate a new score. The second function is called tileRemoved. This function is almost the same, it checks if the fragile object is being taken off the tile and which tile it's being taken off on. When the tile is taken off, the math is done to reverse the score to what it was before.

The final 3 functions are used to assist the major functions and provide quality of life functionality of the scrabble game. They help reset the game, keep track of if there are any tiles left and update the game score.