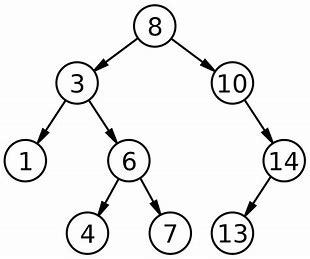
AVL C++ -- \*\*Finalized

I was in my Data Structures class, creating Binary Search Tree for my weekly project. Other students told me the class would challenge anyone. As no exception, I devoted most of my time to this particular project that week. Otherwise, I wouldn’t have finished

A Binary Search Tree is a way of organizing data so that finding it only takes O(log(n)) time to find it. There is a starting node and two ‘children’ Nodes called right and left, left always being lesser and right always being bigger. Each of the children have a right and left node. Like this:



For this assignment we were creating the data structure for adding nodes and removing nodes

For the functions I had issue creating this because of my lack of understanding of pointers. In javascript pointers are something handled in the background. But in C++ it had to be added in.

Often, as I was working on the projects, the nodes wouldn’t link or when I deleted a node, they would arrange in the wrong way.

After series of banging my head against the wall, outputting the tree so I could physically see what the code was doing(it was not a website, so the project was pretty abstract). It came down to something I had seen people use but didn’t quite absolutely trust.

I had to use a pointer of reference as the datatype of my parameters for my functions That way I could just reassign the pointer instead of the value of the pointer. It’s on replit let me show you …

I didn’t really learn my lesson until I completed the next lab the AVL lab. It’s the same thing as a BST but it balances the tree so that nothing ever leans to one side, keeping the runtime for log of n.

My turned in BST.cpp file was 600 lines long because I hadn’t used the pointers of reference had was using more complicated than necessary ways to do it. The AVL tree, since I was more persistent in seeking useful information from the TAs, took less than two hundred, even though it did a lot more than a BST would normally do.

I learned a valuable lesson that while I did need to learn to code independently, that in the meantime I would need to lean on those who knew more than I, until I go there. Say if I have a big problem at work, I could save hours of time if I just ask a more experienced coworker instead of just treading alone. In the end what’s more profitable for you?

Server on Heroku

In my DevMountain bootcamp we had just learned how to deploy our websites for other people to use. As an experiment I wanted to test the limits of Heroku as the links had to be written different locally than they were for being deployed. Meaning the code that links the html to the CSS and JavaScript documents.

I figured out how to get multiple pages on the site. Feeling satisfied, I tried a few axios calls to get things from the server, something we had learned to do locally several weeks before. The idea was that I made JavaScript databases that the server would access and send them to the client.js for the site through axios calls.

Nothing worked. Then I performed the classic coding ritual of checking every nook and cranny of my code to figure out what I did wrong. Everything seemed right. Heroku could retrieve files from my server, that’s how the deployed site recognized the links in my html. So why didn’t the axios call work?

After talking with my instructor, I learned that although the server helped deploy my sites, in order for a server-client website to run, I would have to deploy my server on a different site. However, I did not want to pay Heroku just to be able to deploy two sites at once. So, I moved on with this knowledge in mind.

What I was trying to do just wasn’t possible with the setup.

Pathfinder Project \*Finalized

During my last week of Fundamentals in DevMountain they told us to make our own personal websites. I decided to do a Pathinder 2 (a variation of D&D that I prefer) Character generation site with a server(so I could only do it locally).

I used what I called javascript databases. Which were formatted a lot like a json file to contain the various information about the classes, ancestries and other properties of the game. At that point I hadn’t learned how to link my site with a SQL or other kind of database. So I used what I had.

Outside of class I researched this feature called Sass that my instructor mentioned from time to time. I learned how to link my Sass files to my css. Sass is css that can use variables, loops and functions. I learned how to link my sass to css so that when I edited my Sass file it would translate it into pure css posting it in my index.css file so that the html file could see.

It made styling so much easier. Say spacing out various boxes only required me changing the variable instead of updating the values of each box.

I also would label colors so that I didn’t have to type the color code every time.

Sass made the styling phase a lot more straight forward. I was pretty determined and eager to use it for all of my future projects.