

Module 4-2 Milestone Three:
Enhancement Two: Algorithms and Data Structure

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For the Data Structure and Algorithms portion of Capstone CS499 I decided to work with applications from CS260 – Data Structures and Algorithms, there are two stages to this portion of the project the first was deciding what the structure I should use in the search field. There are two search fields that also have two strings, I decided to keep the hash table and leave it as it was, since searching by the ID is the only field guaranteed to be unique. I also knew that there were changes that needed to be made besides changing the search method. For the vector and binary search tree, so the display shows each match just as it was found. The intention was to utilize different methods, that aren't necessarily used the most. The objective of using each data was to search by different fields, that way I would have preferred to find a fix so that I could remove bids from each.

I believe that the most important part of my approach to this, was to handle it one file at a time so that I wouldn't overload myself with information. This led me to start with the vector, so when I had a file that needed modification, I was able to search for it by title and tested the process, once they were committed the changes in GitHub I was able to move on to the next. I did however run into an issue while I was working on the link modifications. The file containing the data has two entirely different funds entered they were, Enterprise and a General fund. The logic I implemented had no problem identifying all the bids in the Enterprise fund but when I searched for General Fund it output the main menu in an infinite loop. I tried debugging but I couldn't seem to get where I needed to go. I know that I need to spend some time on eclipse debugging and get better at using it. Since I was unable to use a debugger, I figured that I should also dive into each line of the code that is surrounding the issue in order to figure it out. I had a suspicion that it could have been because of the whitespace between both words in the name of the fund. So, I made up new names for these funds, with

just a single word, but there are also some with two and others that have an underscore between words. So, it's been a while since I used C++ within the last couple of terms so there were some instances that I had to go back and look how they should be run correctly. So going through this process to find the correct solution was more than it weight in gold and will be added to my solutions next time.