## ***CS-242 – Fall 2020***

# Final Project – Reflective Writing

*(20 Points)*

Q1. Did Final Data Structures Programming Project advance your understanding of Data Structures? How did it further help you in polishing your logic-building skills?

Absolutely, I think it is difficult to understand just how different they are and how useful or unhelpful they can be in a plethora of situations without using them. There were some I wanted to introduce that were not suited for I wanted and had to eliminate as well as some that worked well for somethings that later I realized could be replaced by simpler ones even more efficient than the first.

Q2. What were the major challenges encountered during developing the Data Structures Final Project and how did you overcome them?

The challenges I had were mostly on writing data in a certain way, retrieving it, and cross referencing. Having a toolbox of data structures with assorted tools was extremely important. If I had only one option it would be difficult to accomplish all the tasks I wished to accomplish without giving up some ideas.

Q3. What further enhancements could you have made in your Project?

I wish I had given myself less requirements and done testing before I began writing the classes. I know I could not have done all I wanted but it would have saved me the bugs and headaches. I will still try to incorporate testing before the end of the day, but I will not lie they were not there in the beginning and their lack was made known by numerous frustrations. A mistake I will not make again.

Q4.) What other types of problems can be solved by a similar Data Structures Programming Project?

OR

Could your Project have been developed in some other way? Please elaborate.

I believe that yes, perhaps it could have been solved in a different way, maybe even more efficiently. Every time I looked at the code I found something to make it more concise, more evident, less expensive; but time was a constraint, I did not have exhaustive testing, and had too many classes. One change could turn into a never ending but fix that brought redundancy and obscurity to the code. After completing this assignment, I will work on this code backwards introducing testing and an automated build to do automated testing. I know now it is extremely important. I do not think I would have a better understanding of the difference between having it and not, if it were not for the suffering (overdramatic I am sorry) and frustration of not having it.