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**CSCI 2270 Final Project Report**

After testing various data structures for their average search and insertion times, it was found that hashing with chaining was the most appropriate and time effective. Data structures like the linked list and binary search tree were heavily outperformed by all hashing methods tested (quadratic and linear probing, hashing), due to their inefficient search and insertion methods. Linked lists require the machine to iterate through every single object in the structure, and binary search trees require the same of linked lists, but only a logarithmic fraction. Hashing provides the machine with a much more robust and efficient way of searching and inserting objects by implementing a function that immediately narrows down the object to only a couple of places which is much more efficient than linked list and binary search tree counterparts.