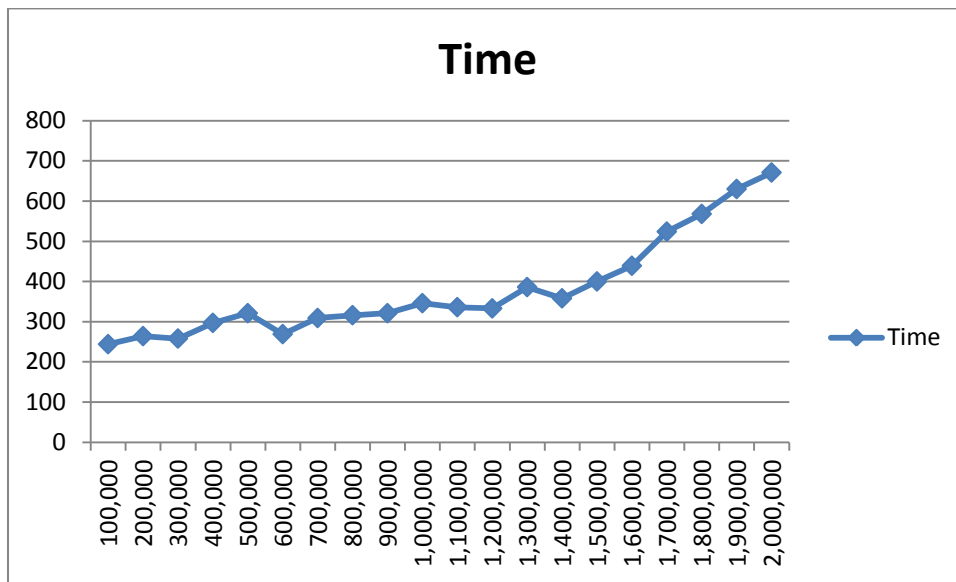


Enrique Ramirez-Holston

CS 2420

1. My programming partner is Anthony Wilkinson. I submitted the source code for the assignment.
2. My programming partner and I switched roles fairly often. I thought that the frequency of us shifting roles was just right. We both had plenty of opportunities to actively program and watch the other, while programming we would explain what it was we were doing and the navigator would make suggestions and correct mistakes along the way.
3. My programming partner is really good at programming. He knows what he is doing and he does it well. We do plan to work together again on the next assignment.
4. If we had backed the sorted set with a Java List instead of a basic array, the main points in which our implementation would have differed would have been that the set would be allowed to contain duplicates and lists search function provides costly linear searches. I would expect that using a Java List would be more efficient in program development time because it contains methods in the interface for an iterator and allows for efficient insertion and deletion at a specified point, and less efficient in running time because its default search method uses linear rather than binary searching.
5. I expect the Big-O behavior of MySortedSet's contains method to be  $\log(n)$  because we are implementing a binary search to see if the item is or isn't in the MySortedSet.



6. This doesn't match the Big-oh behavior I predicted in question 5.

7. For an element not already contained in the set, it takes  $N \log N$  time to locate the correct position at which to insert the element. In the worst-case, it would take  $(\log N + 1)$  to locate the position to add an element.

8. We spent about six and a half hours on this assignment.