

- 1) Alexander Weech was my partner. I submitted the source code.
- 2) We switched roles each day. I prefer switching daily due to how we can use our respective laptops each time. We can have less interruption from using an unfamiliar device, or passing a device back and forth.
- 3) Alex is focused and willing to spend time to work on the assignment. I will continue to work with him for future assignments.
- 4) The array holding the data would've been cast to type E, so there would be much less typecasting throughout the code. The functions add(), remove, and contains() would have relied on ArrayList's versions of those methods rather than the binary searches that were coded. Array growth would have been done inside of ArrayList. Using an ArrayList would have been more efficient because of how it could remove the need for almost half of the coding work, and it would use its own optimized algorithms of locating and adding/removing elements.
- 5) The contains() method uses a binary search algorithm, which has an order of  $\log N$ . So, I would claim it has a behavior of  $O(\log N)$ .
- 6) Did not have time to complete.
- 7) Did not have time to complete.
- 8) Around 10 hours