David Cole

Professor Henry Carter

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Algorithms and Data Structures II

Project 3

I learned a significant amount about myself as a coder during this third project. The thing that I felt was the most important to my success in this project was planning the project out appropriately. On previous projects, I had just jumped into the code and tried to get a start without thinking about the bigger implications of the project. This strategy always led to me getting myself confused about my own code. This time I used a whiteboard and planned out how I wanted to write the entire project, starting with the countHands() program. After mapping out how the program should be written it was obvious to me that this was an integral part of the program. countHands() was also where I ran into my largest stumbling block on this program. I was having this strange issue where it was returning the sum of the first card in the hand twice, so if your hand was a jack and 5 it would return 20. At first I believed that my logic in countHands() must be flawed and spent a significant amount of time crawling through my code. After looking through my code with the debugger I finally realized that my issue was not in my countHands() program at all. The issue was with the hand that I was passing to countHands(). I had a typo that was adding the first card in the hand to the hand twice. So the countHands() was actually performing flawlessly. This taught me a lot about debugging, it showed me that I should not make assumptions about what is giving me the bug. Rather, the better approach would be to start from the beginning and think of the cases that could be leading to this error, it would have saved me a lot of time had I realized this. I very much enjoyed this project because of the real world applications that it has. I am not a big gambler, although I am going to Atlantic City today so the practice was nice. It was extremely satisfying to write all of the code required to run the program, and then to see and be able to play/interact with the program was very fulfilling. I enjoy the projects so much more than the labs due to their real-world nature. They allow me to see how my coding skills have advanced in terms of real world applications.