Introductory Programming
4CS001 Coding
Challenge Naomi
Thing

Coding Challenge Assignment

1) What is the most challenging aspect of the coursework task?

= Java programming has been very new to me. In the beginning I thought things would get out of my hands and be a mess while doing assignments of java assigned to us. Doing this coding challenge is also first for me. In this assignment we were assigned with a Merge Sort task. While doing this work I met few problems such as: it was difficult to grasp the overall logic and flow of the method. It was challenging to implement the merge function as I was not familiar with the process of merging two sorted arrays. When creating Merge Sort, troubleshooting, and testing are crucial factors to consider, so to make sure the code is working properly, I had to spend extra time debugging and fine tuning it. Depending on the specific requirements of the task, I had to ramp up the Merge Sort implementation following the demands of the work.

2) How did you go about completing the task?

= Coding is a huge challenge for someone who has not tried the basics before but after attending the classes, learning about this module, and trying to tackle the programming questions in the earlier assignments, I could say I had gotten clear knowledge and improved as a beginner. When we were assigned this coding challenge, I was worried because Merge Sort was not something I have tried but with the guidance video and slides, posted by our teachers I got an unobstructed vision of Merge Sort. For further details about Merge Sort, I went through YouTube videos, searched up on the few JAVA websites. In addition, for the reference I consulted with my friends and even few seniors I knew who had studied the same course as me. These sources helped me learn about the algorithm of merge sort in a clear manner, and which led me to completing the task.

3) What have you learned over the course of completing this coursework task?

= I learned about basics of coding in the earlier lectures of programming, but this one coursework brought out the different knowledge and was the source of helping me improve my coding skills. While doing I figured out about merge sort and how it works. After the completion of this coursework, I learned that to create a final sorted list, the merge sort sorting algorithm divides an input list into smaller sub lists, sorts each sub list separately, and then merges the sorted sub lists back together. I also gained knowledge about divide-and-conquer strategy and how this method can be applied to a broad variety of issues, from sorting and searching to optimization and decision-making, and it is often used to tackle problems that are too huge or complex to be addressed directly. I bought the significance of good algorithms, and the part temporal complexity plays in algorithm creation and analysis.