Implementing the K-means algorithm has not been an easy task. I struggled with the distance estimations between the points, especially since there were multiple points instead of only two. This was also something I really struggled with on the midterm. I read the textbook and watched some tutorials online on how to calculate the distance between the points. After implementing the methods that did that, implementing the other features were not as difficult. I started testing out the algorithm on a smaller data set with only two sets of coordinates and after that algorithm worked flawlessly I expanded it to the rest of the data set. This was the first time the algorithm worked directly without any changes when expanding the dataset. For the other algorithms I always had to look for bugs after expanding the data set and fixing those bugs before the algorithm worked flawlessly on the entire dataset. Overall, I enjoyed developing the K-means algorithm.