

## Criteria A: Planning:

Word count: 174

### **Defining the problem:**

The client of the program is myself. I want to create a to-do list program to help me keep track of my assignments and decide which ones should be done first. To do that, I need a way to decide what assignment needs to be prioritized based on the current assignment that needs to be done. My current planner lists my assignments by the due date. I want to create something that doesn't just consider when the assignment is due but, how much it affects your current grade and the amount of time required to complete it. Therefore I want to write a program to do this. It should have a user interface that allows you to input variables about the assignment like when it is due, how many points it is, what the grade in your class is, etc to calculate how urgently you need to complete the assignment compared to others. I am doing this with the assistance of my advisor Krishnan Ranjani, who was my computer science teacher for two years.

Word count: 137

### **Rationale:**

I decided to use Javafx to write this code to create a user-friendly interface with a language I am familiar with. My advisor and I decided to do this in JavaFX as I have the most experience in this and learning HTML or JavaScript would be completely unfamiliar territory to me. I will use a point system to create an algorithm to determine which assignment took priority. Based on the data given, I give each assignment a different number of points for each variable. For example the closer the assignment is to the due date the more points it's given therefore increasing the priority level.

### **Success criteria:**

- Can use user-inputted values to calculate the priority.
- Can calculate the number of points given to each assignment
- Accurately sort the list of assignments based on the number of points