**Unit 6 Reflection**

Date: May 29, {2018}

To: Mr. Peck!

From: Ian Chiu

Subject: Lynder Project Reflection

**Accomplishments.**

I coded the three GUIs and the main class of the project. The three GUIs essentially keep the project running and get the information from the user, allowing the algorithm to do the behind the back work of creating the groups. The three GUIs also call on each other, so that there is no true main class – because each class calls on another, the main class only has two lines of code, calling on the first GUI to appear. I also wrote the preliminary specification, and working with Maxwell, we planned the class structure and how the algorithm would work mathematically.

**Learning Experience**. I think that the most valuable thing that I learned from doing the GUIs was how GUIs could be created and implemented. It required me to graph on a piece of paper how exactly each piece of the GUI could be placed, so that it looked nice. In this APCS class, I never truly learned how to code a GUI, as it was usually done for me. I think that learning how to code a GUI is especially valuable because it opens the possibilities of coding a project; it provides an opportunity for the programmer to create code that adapts to how the user inputs answers and responses.

**Objectives**. {Evaluate your performance. Describe how your performance aligns with each of the performance objectives. Give supporting details and examples to justify your grade.}

· Challenge:

I think I challenged myself a good amount, because I attempted to code multiple GUIs that iterated among themselves, which I think is a challenge because I had never learned how to even use a GUI in the first place. I was also able to learn about the multiple parts of a GUI, such as a JLabel, JTextbox, Scrollpane, etc. However, I think that I could have challenged myself further if I had the time to attempt networking, so that all the students would not need to use the same computer.

· Effort: I think that I worked relatively hard on this project; I started coding the GUIs on day one, and tried to meet the deadlines that we had set when he completed the preliminary specification. Although I missed one of the deadlines, we were ultimately able to connect everything together in time to do the JUnit testing. I think that I paced the group, because not many things can happen without a GUI, and not many things can happen with GUI development without an algorithm that works in the back.

· Quality: I think that I did my work well, because everything that I had planned to work in the beginning was able to work.

· Problem Solving: I think I was pretty resourceful because I had to figure out how to iterate through entire GUIs multiple times. At first, I tried to use an iteration in the main class, which would call a GUI with each loop, but that did not work out. Next, I attempted to use the GUI to call itself, in a strange type of recursion that ended up going into infinite loops and wasting computer memory. After tampering around with code for a while, and attempting to change or restrict the recursive statements, I was able to iterate through everything.

· Results: I think that my resulting code was good, because the GUI works, and properly communicates with the algorithm to deliver and receive ratings and student information.

· Teamwork: I think that I am a relatively good team worker, because I taught everyone how to use Github at the beginning of the project, and adhered to Maxwell’s requests for how to interact with his algorithm. I relatively stayed on top of deadlines, so I think it worked out relatively well.

**Overall Assessment**: I think that I deserve an A, because our group worked hard to create a product that adhered to what we had planned. We fulfilled everything that we had planned to work, which I think is a major accomplishment. We followed the guidelines that was given to us.