20.08 Reflection

1. My intentions for taking this course were to open my mind to a new area and to learn things about something that I had little experience with. I’ve seen many articles about the increasing popularity of computer science, and I wanted to understand what all the excitement was about. Before taking this course, I thought computer science was just used for building robots and hacking into computer systems. I had no idea there were so many implications for computer science and that it was being used everywhere around me. I thought I was going to learn how a computer operates and how I could hack into a system myself, but it turned out to be much better than I expected. In fact, I think this is one of my favorite courses that I have taken so far.
2. If someone asked me what computer science is about today, I would say that it is that art of algorithms and problem solving, which work together to develop something greater. It involves problem solving skills in order to make a program work and analyzation skills to make a program better. During this course, I was mostly surprised by my progress throughout the course. I didn’t think I would succeed in this course as I was unfamiliar with the content in the beginning, but I proved myself wrong. I began to become more familiar with the concepts and I became more comfortable with using the concepts I’ve learned. Writing programs became easier and easier and soon I develop a genuine curiosity for computer science. As a whole, I believe I am much more well-equipped to deal with technology issues. Personally, I can write my own programs that can do what I want. In general, I feel that I have a better understanding of how things work around me and the code that may be behind the things I use every day, like calculators and some photo-editing tools.
3. A lesson I found fun and challenging were the lessons about classes and methods. I found these lessons particularly intriguing because it opened up a new door full of new tools that I can use outside of this course. Although I found these lessons to be somewhat challenging and confusing, I felt these were the most significant lessons from this course. I enjoyed learning how I could create new classes with methods to make my program to look nicer and a lot more readable. These lessons also taught me new algorithms and I felt they were good practice in implementing previous ideas like the use of for loops and while loops.
4. A lesson I would like to see changed is the lesson about polymorphism. While learning this, I got lost several times trying to figure out what happened. While the lesson seemed fairly simple and straightforward, the practice was what got me. When I began the assignment, I realized that I had no idea what to do. To improve this lesson, I think it would be very helpful to provide more examples and perhaps provide some more challenging examples to better prepare students for the AP Exam.
5. In the future, I can see myself becoming an engineer. As an engineer, technology would be used very frequently. Engineers can use technology from making models to simulating scenarios to even writing their own code to do something. Programming can be used to solve problems, be used to simulate a situation, and many more possibilities. However, I can see technology being applied to almost any field. Those in the medical industry can use technology for more precise measurements and surgery can be done much more accurately with the help of technology. Better technology may lead to more advanced machines that can help us detect and learn about more diseases and they may even help us find a cure to those diseases. They can help teachers by providing more resources to help students learn. They can be used in agriculture to better predict weather and help farmers make better use of their farmland.
6. During this course, my ideas about computer science have changed completely. From not understanding computer science at all to developing a better idea of what it is and developing a curiosity for it shows how much learning about computer science has impacted me. This course has inspired me to take my newly learned skills outside of the classroom and to further explore them by making my own programs and even learning more about the beauty of this science. Because of this course, my curiosity for computer science has lead me to learn about things I would have never imagined I would learn without the help of this course.