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APCS - Sheikh

5/27/2019

My Computer Science Journey

An entire school year ago, I enrolled in this computer science course because I wanted to try something new in my academic workload. I looked at all my classes and realized that nothing I was learning in the classroom directly applied to my major! As an aspiring computer scientist, I felt that this course would help prepare me for my future. At the time, I already had a pretty clear understanding that computer science is the study of computer systems, programming, and how we can use logic to create software and programs, among other uses. I thought this course would be more oriented in analyzing a variety of different technological aspects, such as software, hardware, artificial intelligence, and etcetera. Rather, APCS simply taught me how to write extremely basic code in Java, like any generic programming course would do or more.

My description of computer science has not changed since before this course began. It is the study of various features of computers and being able to practically apply them in society. The only thing that might have surprised me was how easy it is to actually learn how to code. In the past, I would ask people how they master a language, to which they would tell me to simply take an online course. After doing this computer science course, I can say that they were right in that it is actually easy to learn basic coding techniques. In the future, I hope to be able to more practically use my knowledge of computers and programming to create technology that can revolutionize the world in whatever way I can.

One of my favorite assignments is 08.12, in which you chose one of two assignments to remake using OOP-style code. I chose to remake the project about estimating the value of pi. I liked this because I am a mathematician at heart. Not only is the program I made cool, neat, and very user-friendly, but the result it outputs is also interesting to someone like me just on its own! If I had to name another program, it would most likely be the 14.03 Caesar Shift Cipher project. I found it really cool and intuitive to build my very own cipher. Of course, I enjoyed the process of coding it to encrypt and decrypt anything I inputted. As a joke, I’d send my friends a .jar file of the program and the encrypted message, and I would make them try all 26 options to decipher it!

In regards to assignments I would like to be changed, I would choose almost everything in modules 16, 17, and 18. Those modules test different algorithms for arrays. The problem is that each assignment is extremely repetitive and annoying. Not only are you reusing the same java files, but you remake the program with a different algorithm and test it in a variety of ways. I wish there was a more creative (and less cumbersome) way to teach the material and diminish the workload while encouraging learning.

In the future, I see myself as a software engineer, programmer, or data scientist. I hope to be able to directly utilize technology and coding to create tools for individuals and businesses. Of course, there are many more possibilities in the technology industry, but I’d be happy with any job in that related field. In the far future depending on the circumstances of my life, I could also see myself creating a startup technology company, too!

In summary, I really enjoyed this class. I had a fun time learning how to code and do several different techniques in the world of computer science. Having you, Mrs. Sheikh, as my teacher has been such a blessing for me, and I am grateful for everything you have done on my behalf to help me in this course!