**End of Semester Class Narrative ISAT 252**

Coming into this class I did not know what to expect. I had never done any sort of programming in my life and was not sure of how it would be. Some of my friends who had taken the class before had told me it was somewhat difficult, but it was not too bad. I did expect the class to be somewhat challenging because of my lack of previous knowledge in the field. But I was quite excited to take this class because I thought programming was a valuable skill to learn. Whichever field I go into in the future, it would no doubt be good that I know some coding language and terminology. I did not really know anyone taking the class with me. As a junior, I procrastinated on taking this class which most of my friends took as sophomores. This was not ideal, but it was alright because it provided me with the opportunity to meet new people in the ISAT program.

Some of the learning goals that I set for myself was to simply just learn basic coding. Like I said, I had never coded or even knew what coding entailed. I hoped to master the basics of it from this class. Of course, I hoped to learn a thing or two from the major programming languages like Phyton and JavaScript because they are very widely used across the World. I also set a goal for myself of learning how to do cool things with code, like make a simple game or create a useful tool. I wanted to get the most that I could out of this class and I really looked forward to learning. My goals for the class were to not only do the examples and homework but to also understand the concepts behind them so I could apply them to other scenarios. Also, I set goals for myself that I set for every class. This includes going to class, keeping up with the homework, and visiting professor’s office hours if I need help. If I do not go to class, then I would miss the lessons for the day making it harder for me to learn. So, I made sure to attend class as often as possible so I would not miss anything. I also set the goal for myself to get an A in the class because I try to set high goals for my grades.

After the class went online, this threw me for a curve. Since I was at home and not having to attend a physical classroom, I found it a lot harder to pay attention. My home to me, was not the ideal workspace. My two younger brothers made it quite hard to focus and were constantly bothering me during my work. I found that I did not like the online learning format at all and much preferred in-person classes. With online classes, I received a lot more work, not necessarily from this class but from all of my other classes. With the increased amount of work from my other classes and the distractions of being home, I would sometimes put ISAT 252 work on the back of my mind. This was the case when online classes first started by, I quickly found ways to balance my work. One of the most crucial was the code katas that were provided to do as examples. I tried a couple but my favorite one by far was Free Code Camp. In class, I could barely follow along with the examples that were being given. I felt like coding was super complicated and I would never have a full grasp of how it works. But, luckily for me this website provided simple and short coding lessons that could be done on my own time. The lessons were quite fun, and they felt like a game. Everything sort of built off of each other so the information could be solidified in my head. My favorite thing about it was that each lesson was quite short, only demonstrating one or two coding principles at a time instead of throwing a whole bunch of information at you all at once. The day I first visited the website I kept doing the challenges until I had realized that I had been working on them for five hours. When I first started doing these, I would spend so much time doing them because they were just so interesting to me. Over time, I stopped doing the challenges as much because my other schoolwork became so demanding. I set a goal for myself to spend at least thirty minutes to an hour a day doing Free Code Camp challenges. This I felt was a good goal as I could be learning code a little bit at a time every day and it sort of became a habit towards the end. Setting a routine for myself made things go a lot more smoothly in my school life. This equated to me spending roughly seven to four hours a week doing coding.

When the semester went online, my goals for the course, for the most part, remained the same. I still wanted to learn the basics of programming and have a solid foundation in it. Since the class was online, it was a bit tough to stick to my previous goals for the class. So, like the class, I had to adapt my goals to fit in with the current situation that we are in. My goals changed to simply learning coding with the resources at my disposal. Since class was online now, I had that and the tutorials online. I found that it was not too bad of an adjustment to switch this class online as it was some of my other classes. Since coding is all done on a computer it was easy to look at demonstrations online. So instead of going to class I could instead watch classes online, which in my opinion is much easier than in person class. So, my goals for the semester remained mostly the same, with the addition of watching classes instead of going to class.

I feel that I was somewhat successful this semester. I first created the Fizz buzz program that we had created in class before Spring break. I wrote it in Python and have tested it to make sure it works correct. I uploaded the program to GitHub. I also used the Free Code Camp tutorials, and I was able to learn the basics of HTML and CSS. Before using this website, I had no idea what HTML and CSS were, and it was quite exciting to discover them for the first time. I learned the basics of website design and now have the ability to build a basic website. It was quite interesting to me to see how all of the different parts of a website are created. I never realized how easy and simple it was. To prove that I completed all of the tutorial, I have screenshots of all of the completed challenges that I have done from Free Code Camp. Once I was done with the HTML and CSS sections, I moved on to the JavaScript lessons. I am still currently working on the JavaScript section, but I am currently working on writing functions to accomplish specific tasks. Before that I learned all of the basic features that JavaScript offers, like using it for calculations. Like I said, I am still working on the section and I am roughly halfway done. To prove this, I also have a screenshot of the completed challenges from Free Code Camp. I felt that I was learning very useful things that could be applied to my professional and personal endeavors later in life. I was solidifying basic coding concepts and was starting to understand what programming actually was.

I believed that I failed my goals in the amount that I actually attended the online class sessions. At first, I would tune into the class or watch the session at a later time. But as the semester went on, I found myself frequently forgetting to watch or attend the class lectures. I felt that seeing the lecture and listening to the questions by my fellow students would probably have helped me more in my learning. But I feel that I failed to log on and see the online lectures as much as I should have. Since class was three times a week, I would just log on to Slack at the end of the week and watch part of whatever videos were put up. I figured that doing that and the online tutorials was good enough for me. Another thing I failed at doing was learning how to use GitHub. The idea of GitHub is simple, and it makes sense, an online place to exhibit code and ask questions, and is very useful for programming needs. The part that I could not figure out was how to push my code that I had written to GitHub. For hours I tried to send code that I had written using Git to the GitHub server with no luck. I followed online tutorials exactly as they had written, and I would receive error messages saying that I could not send it. I got very frustrated with GitHub and decided to move on and just manually download files into my repository.

Based on my failures, I learned that I often forget to do things when I do not have a rigid schedule set for myself. If I do not plan things out for myself on a weekly basis then I will often forget things because they slip my mind. In the future I plan to address this by having a calendar and writing down things I need to do each week. If I maintain it and actually look at it each week, then hopefully it will set me on track with my weekly tasks. In terms of my failure with GitHub, this is a failure in my ability to ask for help. If I had simply asked one of my classmates for help, someone could have probably shown me the correct way to upload code to GitHub. I have often found that in the past, that I find it hard to ask others to for help. I need to learn to reach out to people more when I am struggling instead of trying to unsuccessfully figure out problems myself. It would be a very valuable skill to learn because most work environments are team based and rely on teammates helping each other.

After this class, I can definitely say I am more educated and enlightened. As mentioned before, I knew absolutely nothing about programming and what it entailed. I have become enlightened on the job of a programmer and educated on what programmers do. This class has definitely opened my perspective into a different field of science that I knew nothing about. I have also been enlightened to realize that although I think coding is very useful, I do not make to make a career out of it. Overall, I feel more enlightened and educated.

Some of my activities this semester definitely did help me decide with what I want to do with my life. This semester I started to dive deeper into my environmental concentration classes and I really enjoyed them and was interested in the subject. But I realized the coding can be included in all different fields, like the environment field. I plan to continue my education with coding by taking the environment information systems class in the future, which to my understanding involves coding. Coding has also been very useful in my capstone, which is conducting an energy analysis of computer labs on JMU’s campus. The power settings for the computer can be altered by writing code. My group has been exploring different power saving strategies and software, which requires knowledge of programming in order to properly understand it. This semester has helped me to narrow down my career path in the future. I definitely want to enter the environmental field and my education in ISAT is helping me to achieve that goal.

My grade for this semester I think should depend on whether I can answer the two questions posed at the beginning of the semester, do I like coding and do I think I could be good at it. My answer to the first question is a mixed one. Sometimes I think coding is really interesting and fun, then other days it makes me super frustrated and bored. So overall I would say I somewhat enjoy coding, but I am not super into it. My answer to the second question is that I could likely be good at coding if I stick with it and practice a lot. Like most things, if you continually practice and do exercises then you can become really good at an activity. I feel this applies to coding, the more practice I do the better I will be at coding. As for my grade for the semester, I think it should be an A-. I say this because I feel I have adequately completed the tasks required for the class and have a good understanding of the basics of coding. I am giving myself an A- because I feel like I did not attend the online lecture as much as I should have. Overall, I really enjoyed the class, it was unlike any of my other classes that I have taken before and has provided me with a unique experience into the world of programming.