ISAT 252 Final Narrative

My expectation coming into ISAT 252 was to figure out whether or not I wanted to pursue programming as a career path.  Both of my parents work with software development and I wanted to see if that was what I was meant to do as well.  In terms of the content of the class, I expected it to be structured similar to the introduction to computer science classe I had taken in the past which was focused more on various labs and intense problem solving rather than really understanding the basics of programming such as using the terminal, GitHub, and Test Driven Development. I was hesitant coming into this class considering my previous experience with programming. I had to withdrawal from that class and drop the Computer Science major because of how ridiculously difficult it was to understand. My only hope for this class was that it would not be another class like that one.

My main goal for this class was to obtain a deeper understanding of how to start up my own program and learn what to do when I get stuck on a problem and cannot find an easy solution. This was one thing I was never taught in computer science. I really appreciated your approach of allowing us to watch you code and workout problems during class because it showed how easily problems can arise. Teaching us how to Google our way through problems is something that is extremely useful that many students may not see the value in right away. I made it a goal to practice this and be able to solve problems on my own (with the help of the internet of course).

Most of what I did outside of class included working through tutorials on Free Code Camp learning basic JavaScript and watching tutorials on YouTube about how to work through different coding problems. I tried to watch tutorials that were common job interview problems just to get an idea of what employers look for when hiring for software development positions. My goal overall for this class evolved from wanting to learn what different code did to wanting to learn how to solve problems effectively. Knowing what the different parts of the code do is still important, however, it usually is not the part that people have trouble with when writing a program. Figuring out where an issue is occurring, why it is occurring, and how it can be fixed is much more valuable knowledge to have when entering the workforce. This change in goals gave me a very different perspective from the start of the semester.

While I did have this change in goals, I wanted to make sure I obtained some background on both Python and JavaScript as well. I completed about 75% of the Basic JavaScript tutorials on Free Code Camp and plan to finish the rest. I also wrote a program in Python that allowed the user to play a game of Rock, Paper, Scissors against the computer. I believe that both of these exercises together helped me learn the basics of both languages that I will need for further instruction.

I believe I succeeded in these goals in the sense that I now feel comfortable with the process of starting up my own projects and feel confident in my abilities to work through problems. I have also begun to pick up on the differences between Python and JavaScript and I am working towards becoming more comfortable with both. I am proud of myself for changing my mindset from what it was at the beginning of the semester to what it is now because it has allowed me to work past the previous resentment I used to feel towards programming which I would consider a success on its own.

I failed these goals by not dedicating enough time and effort outside of the class. Unfortunately, this was a product of my overall mindset, poor time management, and lack of prioritization. College and the American education system in general have fixed my mindset on meeting deadlines and when there are no deadlines the priority tends to slip into the background. This is a dangerous mindset to fall into and I need to become better about controlling it. More practice would have helped gain a better understanding of the problem-solving process and would give me more personal experience to expand upon.

In the future, I need to hold everything I do to equal priorities. It becomes easy to let classes that require more work take up all of my time, but I cannot let that get in the way of me doing more work for other classes as well. Using a time planner that allows me to plan every hour of the day has helped me in the past and I plan to use it more effectively in the future. This usually helps me visualize where my time is being spent and if I am distributing my time well.

I want to continue learning about programming languages and their differences, so I have decided to make that a personal project of mine over the summer. I had an internship that was unfortunately cancelled due to the current circumstances and I think this will be the perfect opportunity to be able to expand my knowledge. I will continue to use the resources you have provided for us on code4yourlife.com and hope that I can come back to ISAT 340 in the Fall with a deeper knowledge and understanding of programming.

This class has absolutely helped me become more educated. Teaching students how to problem solve and work through things themselves is very important and that is definitely something I have picked up on in this class. With other classes, it is easy to get lost in purely memorizing information and regurgitating it on a test. With programming it is possible to follow that mindset, although it will not get you very far. I believe this is why the Computer Science major did not work out for me in the first place.

The Introduction to Programming course for the major is typically considered a “weed-out” course and I can understand why. Although I always found this to be not very smart considering how demanding the field is right now. I do not understand why they would want to weed-out so many potential students in one of the fastest growing and most needed industries. If that course was structured more around teaching students how to think about programming and how to solve problems, I believe it would be a much more successful program. Another course I took was called Introduction to Computer Science which I also did not believe took a good approach to learning computer science. It was more of a concept-based course and focused mostly on textbook readings instead of how to think like a programmer. There was one unit that was focused on Python, but it was so rushed that I did not feel like I had truly learned anything.

All of this together has contributed to my unknowingness about my future and what I want to do with it. All throughout high school I told myself I would major in computer science just like my parents did and get a job in software development just like my parents did. When my first semester in the major did not workout I was scared about the future and considered just about every other major offered at JMU. I considered everything from dance to business to biology, but something always brought me back to wanting to work with technology. This is why I decided to join the ISAT major. I saw that Information Knowledge and Management was a possible concentration, but I could still expose myself to other areas of interest in case I decided that was truly not what I wanted to do. This class has reset my mentality about programming, and I have declared it as one of my sectors in hopes that it will click better the second time around.

I am extremely grateful for the ISAT program because it has also introduced me to Production Systems which I would have never known I had such an interest in. Early in high school we had to take a test that would supposedly tell us what job we should have in the future based off of our answers. My result told me I should work with factories which slightly offended me at the time because I thought all factory workers did was assembly line work. After that, I did not think much of it and assumed the test was just inaccurate. It wasn’t until this semester when I figured out what that result meant and why I got it. Learning about the processes behind how products are made and what they are made out of was something that I never knew interested me because I had never taken classes that covered that topic or even really thought about it. The ISAT program has given me a chance to dive deeper into both of these concentrations and no matter which one I choose I will still be thankful to have the knowledge that the other has taught me.

This semester has been a huge learning experience and I feel much more educated not only on the subject matter of the course but on myself as well. I am glad I did not give up on programming and gave it a second chance because I do truly think I could be good at it. This has taught me that I am much more persistent than I give myself credit for at times and that if I have my mind set on something, I will go for it. In terms of the future, I am much closer to figuring out what I want to do with my life than I was before the semester. I have always been one to have some idea of what her future is going to look like, so the year-long period where I truly had no idea was a scary one.

I have come to the conclusion that in the future my job must have purpose and significance in the life of someone else. If I can do something that will make another person’s life easier or better in any way that would be ideal. While many people may not typically think programming or engineering could do this, there are plenty of ways that it can make such a difference. Whether it be creating the design for a product that will make peoples days easier or writing an app that might do the same, I want to make a difference in other people’s lives while still doing what I love and am interested in. Both the IKM and the Production Systems concentrations will result in me doing what I love. As long as I am happy, I would consider myself successful.

I would like to ask for the grade of either an A or a B in this class. I would be understanding with the grade of a B because I believe I could have put more time overall into this course and that would have helped prepare me for the future. However, I do believe I grasped the overall concepts of the two main languages we focused on in this course, Python and JavaScript. I feel comfortable with starting my own project as well and now have a fresh mindset about how to think about programming. For these reasons, I believe an A would also be a fair grade. Thank you for a great semester and I will see you in ISAT 340 in the fall!