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**Module 1 Assignment**

In my previous experiences with software development, I've worked with a variety of methodologies. Unfortunately, I am a brand-new employee who is at the first job therefore I do not have a lot of experience with the methodology elements that are listed in the lectures. In this case, I will mostly talk about the software development experience I had when I was in college as well as the experience I have from working my first job so far.

When I was a student at college, the only software development work I did was homework for classes, therefore I never incorporated any of the methodology elements like supply chain and market analysis that are usually done only in paying jobs. The only methodologies that were used in my college software projects were designing, coding, implementation, and documentation. Most of the time, when the professor assigns a project or assignment for us that involves software, he lists out specific instructions and requirements for the assignment for it to be complete. Therefore, the main methods that were used involved having to design the program to meet the requirements, coding, and implementing the necessary functions and classes in order to ensure that the program meets the assignment's requirements. I also had to deal with defect management because inevitably there will always be issues with the code not working the way it's supposed to and, in that case, I need to troubleshoot it or figure out a way to manage the issues.

A lot of times, the methodology I use for software development will depend on the kind of project it is, as well as whether I'm working by myself or for a group. If I am working with a group, then it is not completely up to me to decide what method to use and I kind of have to go with whatever methodology the group wants to use.

I usually prefer the agile fixed mindset when it comes to working on school projects. This is because school projects are usually limited by a deadline, therefore, I have to finish this project in the quickest and most efficient manner possible. A growth mindset is only good for me if I am working on my own personal project where I set my own deadlines because this is a project where I can take as much time as I want and therefore grow as much as I want.

For the current project that I am working on, the methodology elements that matter the most are the project and development planning as well as figuring out the testing strategy and documentation. Right now, the project requires that my team work on proving in a new piece of test equipment and getting it to run production testing on units. Therefore, figuring out the testing strategy is the most important part of the project because we need to have a good test strategy in order to make sure that the test equipment is fixed and will run correctly. The most important part of the testing strategy is to make sure that the test equipment does not have any excess output voltage that could burn and destroy any expensive UUTs. Project planning is also very important for the company project I'm in because the project is under a government contract that has limited funding. If the project is not complete before the contract ends, my company may not get the funding and profit that was promised under the contract. Right now, the deadline for the contract is coming up very fast. In just two weeks, the contract will end and my company is going to have to either find a new project for me or put me on awaiting assignment. Therefore, my whole team is rushing to get the project done as soon as possible. Looking back at it, I think we should have planned ahead better and taken more precautions to ensure that we would not be frantically working on this at the last minute. Unfortunately, I am not the team leader of the project so it was not in my control anyway.

Officially, the team project I work on for my job uses the agile methodology. I work in test equipment for the ESSM Missile contract in Raytheon Technologies, and this program supports using the agile methodology for its workers. In the building where the project is based, the cubicles are designed to be very low and basically open office space in order to foster more collaboration in line with agile methodology. However, in practice, I doubt that the employees strictly follow and make sure that they use the agile methodology all the time. It all depends on the project and the situation; things can always change that can require a quick change in strategy for the project. Other missile programs at Raytheon Technologies may use different methodologies like the waterfall method, but I've never been at those before, so I don't know how exactly they work.

I hope that in the future, I will get more opportunities to learn about different methodologies for software development, especially for agile. Right now, it is still a little early for me because I just started my professional career as a software engineer at Raytheon Technologies last October so to most people I am still new. But I'm sure my long-term potential will be that I will be a veteran in software development with multiple years of agile experience. Of course, I also want to make sure that I do not forget about the other methodologies like the waterfall method. Old methods can still be useful in certain circumstances.