Reflective Piece

Software Engineering Project Management – Assignment 3

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Reflecting on the last 12 weeks in the SEPM course, I have learned a decent amount regarding project management principles and practices in general. This course, like other group-based courses, are particularly challenging given the distance, both physical and personal to other group members. It is much easier in a work environment to efficiently work towards a goal than it is for a disparate number of individuals to come together for a goal that, honestly, most people would rather not be doing. Overcoming this challenge is a skill in itself, and I believe that me and my group members have done a great job of overcoming these challenges. This course has been a good learning experience, and I feel that it will have lasting impacts on my future career. Key takeaways from this course include project planning, estimation, and risk management. These are all great skills to have, and I feel that I have a much better understanding of these concepts now than I did before. The course underscored the significance of effective project management in delivering successful software projects. It compelled me to transcend my comfort zone(s) and embrace a more comprehensive understanding of the software development lifecycle from a management perspective, incorporating elements of planning, execution, monitoring, adaptation, and reporting. I have learned that project management is a complex and challenging discipline, and that it is a skill that requires constant practice and refinement.

Collaboration emerged as a central theme throughout the course. The group projects were not just opportunities to apply project management methodologies, but also platforms for honing interpersonal skills. Working with diverse team members with distinctive strengths and perspectives illuminated the importance of communication, compromise, and synergy in achieving a cohesive and effective team dynamic. I have learned that collaboration is a skill that requires constant practice and refinement, unfortunately I have not had a great deal of opportunity to do so in a professional setting, as my career has mostly been focused on the systems side of information technology, but I hope that I will be able to flex and train these skills in the future. One of the skills that does come up, particularly in my job as a systems administrator, is interpersonal skills. I have historically not been the best at this, but over time have been able to expand on it and has allowed me to excel at working with coworkers, other departments, and particularly stakeholders and executives. Learning how to talk to people at a base level and at different technical levels is invaluable and should be on the forefront of everyone’s skillset in IT.

The course delved into software development, methodologies, quality models, tools, and testing techniques. These topics have transformative impact on the software development process ([and its history!](https://essex.trevorwoodman.ca/pages/module6/unit-assignments/unit10/m6u10-eportfolio-activity.html)), and I feel that I have a much better understanding of these key concepts now than I did previously. Embracing the software development lifecycle from a management perspective has provided me with a more comprehensive understanding of the software development process. Risk management and estimation are two other key cornerstones of the course. Identifying potential risks, assessing their impact, and devising mitigation strategies is a critical skill for software engineering project managers, and estimating the time and resources also requires a great deal of skill and experience I think. I would equate this to the "experience" that is required to be a good software engineer, and I think that this is a skill that requires constant practice and refinement. I guess one could apply this to really any skill, but since we are talking about software project management, and I do programming as a hobby, it is a bit more relevant in my case. The unpredictability inherent in software projects makes management a challenging task, and I have never really thought of it from this perspective before. Understanding the whole picture is certainly important, and I think even a little bit of knowledge in that department as a software engineer or someone that isn't directly involved in the management of the project would go a long way into making the project more successful.

In hindsight, the course structure, with the blend of lectures, seminars, hands-on activities, and group projects, was an effective way to learn the material, but it also mirrored the multifaceted nature of software engineering itself. The theoretical foundations were complemented by practical application, which supported my development of a well-rounded, albeit condensed and surface-level I would say, skill set that extends beyond technical proficiency and journeys into the realm of interpersonal skills, communication, estimation, risk management, and all the other words that I've said before and that encompass what a software engineering project manager would do. It is clear that this is a invaluable and necessary skill to step up the ladder rungs in a software engineering career, to have the skills to talk about and convey to executives and stakeholders the functionality and purpose of a project in a way that they can understand and appreciate.

In conclusion, the software engineering project management course has been a good experience for me, and something that I think will genuinely help me in the future. It has influenced the lens with which I view software engineering, even from a hobbyist perspective, and I truly believe that it will make me a better software engineer. The skills acquired and challenges overcome have collectively contributed to what I believe is a solid foundation that I can build on.