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**Course:** SOEN 6841

**Journal URL:** https://github.com/LeeELIOT/SOEN-6841

**Dates Rage of activities:** February 8th - February 23th

**Date of the journal:** February 23th

**Key Concepts Learned:**

1. As for Chapter 5, it’s about **configuration management,** which is a process that runs with project development. It also introduces **the information that configuration management system includes**, such as project name, time stamp, document number, document type…, which is utilized by the whole development team. To my mind, what matters is that good configuration system should **ensure that the project is manageable and work properly**, which also includes information security and cyber security. The strategies of successfully utilizing configuration management are also mentioned, which are centralized control, secure access, continuous integration, branching for different versions, and so on.
2. Chapter 6 introduces **software project planning** which could be a detailed roadmap with consideration of trade-offs among quality, schedule, cost, and organizational benefits. Many aspects of **different planning are included** such as risk, resource, schedule, effort, scope, quality, supplier, cost estimation, communication, configuration management, and tools planning. There are also **various plan types aiming for different project structures**, with input requirements adjusted accordingly. Techniques like the Critical Path Method and Goldratt's Critical Chain aid in scheduling and control. Therefore, project planning is important for managing tasks, especially in large-scale software projects.

**Application in Real Projects:**

1. For Chapter 5, what captured my attention was **the idea of organizing teamwork**. In my first project, our team all edited the same code files and talked about updates in the dorm room. The project went problematic because some features vanished and bugs we fixed came back, and ultimately no one knew what is our final version. **Using version control system like GitHub** could prevent all those problems, which could indicate how important configuration management is. Therefore, the processes of version control, basic documentation, and clear communication are part of configuration management, **which could make project progress with elegance and efficiency.**
2. For Chapter 6, **project planning** is crucial throughout the entire project lifecycle serving as **a baseline for projects**. It involves defining goals, organizing tasks, allocating resources, setting timelines, and managing risks. Real-world applications of project planning include **maintaining a structured schedule, tracking progress against milestones, adapting to changes, and ensuring efficient communication** among team members and stakeholders. This could actually keep projects on track with the help of planning activities. What is fresh to me is that **there are also planning techniques available** such as the critical path method can be used to make schedules and the critical chain method can be used to effectively track and control project tasks. Additionally, tools are also required to make plans.

**Peer Interactions:**

Last week we went through the project requirements and rubrics to ensure that we include everything in our draft of project pitch, we also made further discussion about memorable ending. After that, in our discord group chat we also discussed the time of setting another appointment to discuss further about project pitches and next delivery of our project. There won’t be much to do with project pitch except for perfecting it since in the last meeting every part of the project pitch was fully discussed. So, the focus of our upcoming meeting would be more about next delivery.

**Challenges Faced:**

This part of knowledge has increased terminology, which takes me a while to memorize their actual meanings. For example, the term deadline and end point, which I thought were the same turns out to be different. Another one is the process to learn new techniques. Although I’m familiar with the idea of CI/CD, milestone and so on, the planning techniques like critical path method are totally fresh to me.

**Personal development activities:**

Last week, I learnt LLMs for software testing and some papers about it, which gave me a better idea about the different attempts of testing generation and the bottleneck of this domain. Moreover, since my skill to presentation is relatively weak, I also looked into a presentation idea called “Pecha Kucha”, which is the idea of how to catch other attention in presentations.

**Goals for the Next Week:**

Read chapter 7 and 8 in advance to have a general idea of these parts and make summaries for these two chapters. According to the challenges I mentioned above, I also plan to search more case study or practical experience online to have a better idea about the techniques and how they work in practice. Also, me and my teammates plan to work on next deliverable in next week.