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**Course:** SOEN 6841

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

**Dates Rage of activities:** February 23rd - March 14th

**Date of the journal:** March 14th

**Key Concepts Learned:**

1. As for Chapter 7, it’s about **control and monitor software projects**, which is often difficult to do due to unclear specifications and assumptions made by the project team. This leads to difficulties in managing the project work effectively until clarity of the project progresses. In order to overcome the challenges, there are **various tools and techniques** available to assist project teams in monitoring and controlling software projects. Resource leveling, schedule optimization, and corrective actions against deviations can help overcome setbacks without depleting buffers.

The **Earned Value Management (EVM)** technique is also mentioned in the course which is a valuable tool for taking **corrective action and providing a project dashboard with performance indicators**. This technique could help project managers with identifying deviations from the planned metrics to keep the project on track.

1. Chapter 6 introduces **software closure**, since there could still be many tasks that are left uncompleted before finishing the project. The main things to do before closure are **releasing the resources** this project used, **documenting** things, and **saving our project data**. It's crucial to keep track of changes in our source code, especially after all the fixing that have done during testing. Which version of the software to release to the public should also be determined. When it comes to project data, it should be clean and organized before it is being stored.

**Application in Real Projects:**

1. For Chapter 7, there could be many activities involved like **budget management, schedule adherence, quality assurance, risk management, resource allocation, performance measurement, and stakeholder communication**.After learnt this part of knowledge, I notice that control mechanisms like s**chedule optimization techniques and EVM** vales a lot in practice, which could provide necessary framework for effective monitoring and control and ensure that the successful release could be delivered within scope, time and budget constraints while meeting stakeholder expectations.
2. For Chapter 8, the application of **project closure** is crucial for efficient r**esource reallocation, documentation and risk management**. By formally closing a project, resources can be released and applied elsewhere, while documentations ensure future projects benefit from past experiences. Overall, project closure ensures successful outcomes, satisfied stakeholders, and valuable lessons for future projects.

**Peer Interactions:**

After our discussion about the second delivery, we have our work distributed and all the parts of the project has been taken care of. The budgeting part I’m responsible has completed, and the communication across teammates has been smooth. There might be more discussion about the project related to formatting and further adjustments.

**Challenges Faced:**

The knowledge related to software monitoring and control could be more challenging since there are many uncertainties to deal with like requirements, scope creep, resource constraints, communication issues and so on. There has been discussion about techniques like EVM which is very helpful, but I might need to research more about this to get a better understanding.

Another challenge is our second deliverable, since what it requires are very detailed and realistic things, which might need many research about industry standard.

**Personal development activities:**

Last week, I learnt more about project management and has looked up related tools like CI/CD tools (GitHub actions). Also, I’m looking into how to fine tune LLMs for specific software engineering related tasks, which gave me a better idea about the different techniques of fine-tuning like parameter efficient fine tuning.

**Goals for the Next Week:**

Read chapter 9 and 10 in advance (haven’t released yet) 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, I will research more about fine tuning LLMs to understand how it could help with certain task.