## Learning Journal 2

Student Name: Sushanth Ravishankar

Course: SOEN 6841 (Software Project Management)

Journal URL: https://github.com/sushanth16012002/SOEN6841\_40267400

**Dates Rage of activities:** 24/01/2025 – 09/02/2025

**Date of the journal:** 8<sup>th</sup> February 2025

Key Concepts Learned:	Application in Real Projects:	Peer Interactions:	Challenges Faced:	Personal development activities:	Goals for the Next Week:
Software risks refer to something can lead to a bad outcome. Not all risks are bad for the project however. Types: Software, Hardware. People: people emergency leave, sick leave Requirements: unclear requirements. Tools: compatibility issue. Issue and Organization: resource constraints.	Brainstorming sessions with project peers to identify different types of risks and its probability of occurrence. Risk mitigation plan should also be drafted for each risk. Examples: people risk is when only one person has the skill to use a particular software and that person resigns or is on sick leave. Tools risk is when a software is incompatible with each other.	One of the students had prior work experience in the IT industry. We talked on how the risks are spilled and mitigated in a project. He mentioned that meetings are held to allow for risk analysis.	Found it difficult to understand how risk is not always bad in projects.	Read a case study for furthering how to perform risk analysis.	Look up a case study for further understan ding of the topics.
Risk is measured as a probability of it becoming a reality and its impact on the project. More the impact, more priority is the risk. Both are measured in qualitative and quantitative scale.  Risk = impact probability of it happening.	Impact can be measured in terms of its cost, time and additional resources to mitigate the risks when it becomes a reality. Hence, small part of the budget is allocated for such unforeseen expenses. These delays may affect the project timeline by many weeks or even months if risk mitigation strategies are not in place.	Talked generally about Risk Management.	No challenge faced in this topic.	Read case studies of risk transference and what steps are involved to shift the burden to another party through contractual agreement and insurances.	Re-read the topics already visited for better understan ding.
Configuration management is the process of maintaining, version controlling and tracking changes to the software to maintain consistency. Change is tracked by calculating the impact of the change.	A software project involves a large team who are working concurrently to build a software. Different versions of the software are readily available. Further the access control for important critical operations is performed	No particular interactions had taken place.	How impact of change is calculated in real time projects.	Read case studies on configuration management, various aspects of the project such as cost, time, resource,	Read more case studies.

	only be the senior developers.			quality and risk are taken into account.	
Project Planning methods: The Critical Path Method identifies the longest sequence of dependent tasks (critical path) that determines a project's duration. It helps manage task dependencies, start/end dates, and slack time. Goldratt's Critical Chain Method focuses on resource constraints, removing buffers from individual tasks, and placing them at project end to manage uncertainties, ensuring timely project delivery.	Critical Pan Method is used during planning for construction projects, event management and software development projects. Whereas the Goldratt's Critical Chain is often used in aerospace industry and in manufacturing industries.	We spoke about some of the real-world applications of the project planning method and how it will positively/negatively impact the projects.	No challenge faced in this topic.	Looked into real world projects employing the mentioned project planning methods to better understandin g the real-world application of the project.	Read chapter 6 in the textbook completel y (half completed right now)

## **Final Reflections**

**Overall Course Impact:** The course introduced me to more nuanced topics in software project management. The topic of risk management, configuration management and project planning were introduced. The course taught me how to apply the theoretical aspects of the covered topics to analyse and understand real life topics.

Application in Professional Life: Risk management helps identify and mitigate potential issues such as scope creep, security vulnerabilities, technical debt, and resource constraints, reducing the likelihood of project delays or failures. Configuration management ensures consistency across code versions, documentation, and system configurations, preventing conflicts and data loss during software updates and facilitating smooth collaboration among distributed development teams. Project planning provides a structured framework for defining project goals, allocating resources, setting timelines and managing dependencies, which is essential for meeting deadlines, controlling costs and delivering high-quality software products. These practices enhance development efficiency, improve product reliability and reduce the impact of unforeseen challenges thereby ultimately contributing to the successful delivery of software projects.

**Peer Collaboration Insights:** As my peer had worked in a software company, his insights proved extremely useful in understanding various software concepts. The learnt theory was further enhanced and supplemented by a practical example given by my peer. I did not find a way to cover all topics with my peer as he did not have sufficient knowledge on every topic covered.

**Personal Growth:** I learnt on various software project management topic, and understood that creation and management of software is extremely complex. I look forward to learn more topics on the same so that I am better equipped to handle real like software applications.