

## **Learning Journal 4**

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**Course:** Software Project Management (SOEN-6841)

**Journal URL:**

**Dates Range of activities:** 27/02/2025 to 10/03/2025

**Date of the journal:** 16/03/2025

### **A. Key Concepts Learned:**

I discussed the necessary actions to finish a project in Chapter 8 on Project Closure. This entails completing deliverables, keeping an eye on project documentation, and carrying out in-depth evaluations to record lessons learned and create the foundation for upcoming enhancements. To find out what works and where adjustments are required, it is especially helpful to update code repositories and examine important performance data. This method emphasizes the importance of ongoing assessment in improving project results over time..

Chapter 9 discussed the fundamental stages of software engineering, as well as various lifecycle models (such as waterfall) and iterative approaches (such as SCRUM and Extreme Programming). The waterfall approach works best when the project needs to stay consistent because it follows a linear pattern, whereas iterative models provide the flexibility required for projects that need frequent adjustments, enabling a more responsive and adaptable process. In iterative models, quality gates—which provide structure without requiring a lot of rework—were also emphasized as checkpoints to make sure that each phase satisfies predetermined requirements.

In Chapter 10, requirement management was covered, with an emphasis on methodically obtaining, confirming, and recording client demands. Maintaining traceability while adapting to evolving needs is possible with well-maintained standards. To ensure clarity and conformity with project objectives, requirements are separated into functional and non-functional categories. Configuration management is necessary to bridge the gap between client expectations and the final product and to provide consistency when needs change.

### **B. Application in Real Projects:**

By using project closure concepts in practical projects, teams can find useful knowledge that guides future efforts, help them identify strategies that work, and stop inefficiencies from happening again. These gatherings ensure that effective practices are documented, creating a knowledge base to enhance subsequent projects. Future maintenance is also made possible by the use of source code version control and the retention of metric data, which allow teams to access historical data for optimization and troubleshooting.

The optimal Software Lifecycle Management lifecycle model depends on the specific needs of the project. SCRUM, for instance, would enable iterative development and quick adaptation in dynamic situations with shifting client needs. On the other hand, because the waterfall model adheres to a predetermined procedure that ensures each phase is completed before going on to the next, it is effective for projects that demand a high degree of stability. This paradigm lowers risks and rework, especially in projects with consistent, clearly stated needs..

### **C. Peer Interactions:**

We discussed as a team how we would approach the upcoming phase 2 project work. We will assess each other's work after the three members have divided the issue. The experience of one peer showed how important it is to record lessons learned, even those that didn't work out, as this helps avoid similar problems in subsequent endeavors. According to a different colleague, a strong configuration management system is crucial in situations with changing requirements.

### **D. Challenges Faced:**

Finding the differences between multiple lifetime models and the optimal circumstances for each was one of the most difficult tasks. It was challenging to decide between an iterative and waterfall technique, especially in mixed-project scenarios. It was also difficult to manage requirement changes without interfering with ongoing work because frequent changes could affect team focus and resource allocation.

### **E. Personal development activities:**

I read articles about how lifecycle models are used in different industries, and they gave me useful advice on how to choose the best models for a given project. This study improved my capacity to adjust and support project success in dynamic circumstances by providing me with helpful guidance on how to handle requirement changes, especially in fast-paced development environments.

### **F. Goals for the Next Week:**

Finish the Phase 2 project and gain knowledge of the subjects that will be discussed next week. Learn about version control systems, including git and github.