

## Learning Journal 3

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

**Journal URL:** <https://github.com/parikhalay/Software-Project-Management>

**Dates Range of activities:** 7<sup>th</sup> October 2024 to 1<sup>st</sup> November 2024

**Date of the journal:** 2<sup>nd</sup> November 2024

### Key Concepts Learned:

**Project Planning:** Key elements include project scheduling, budgeting, resource allocation, and communication planning. Techniques like top-down and bottom-up planning were introduced, which break down tasks using a Work Breakdown Structure (WBS) for better project control.

**Milestones and Deliverables:** Milestones indicate progress points, and deliverables are results that are delivered to customers. This allows tracking progress at various stages.

**Project Monitoring and Control:** The purpose is to track project progress and address deviations through corrective actions. Monitoring includes metrics like Earned Value Management (EVM) to compare planned vs. actual costs and schedules.

**Scope, Quality, and Risk Control:** Managing these elements ensures that the project aligns with customer expectations and quality standards, while risk management addresses unexpected challenges.

**Performance Indicators:** Used to measure project execution against baselines, including metrics on product quality, schedule variance, and budget variance.

**Effective Structuring of Analysis:** I learned how to break down complex topics into manageable segments for clarity. By organizing the material into core themes, I was able to create a logical flow that made the information more engaging and easier for the audience to follow.

**Audience Engagement Techniques:** I also learned the importance of actively engaging the audience through visuals, examples, and an interactive Q&A section. These techniques enhanced their interest and allowed for a more dynamic discussion, helping me gain confidence in communicating complex material.

### Applications in Real time projects:

Planning and control methods can be applied in software projects by establishing baselines for cost, schedule, and quality early on. Using WBS for task breakdown aids in effective resource allocation and realistic timeline setting, while EVM helps maintain project health by tracking budget and schedule variance.

Critical Path Method (CPM) and Goldratt's critical chain method offer ways to minimize task dependencies and prevent delays.

The integration of tools like Gantt charts and precedence networks assists in visualizing schedules and dependencies, making them highly valuable for managing complex, iterative software projects.

### **Peer Interactions:**

Discussions with my peers helped me clarify different approaches, especially when comparing top-down and bottom-up planning techniques.

Engaging with classmates on challenges we encountered during project provided valuable insights into various project management strategies.

Through group activities, like task scheduling or risk assessment simulations, I was able to gain a deeper understanding of these techniques and how to effectively apply them in real project scenarios.

These interactions enriched my learning experience by allowing me to see different perspectives and solutions to common project management obstacles.

### **Challenges Faced:**

**Time Management:** Staying within the allotted time frame was challenging, as I wanted to ensure that all key points were adequately covered. Practicing time management for each slide helped but keeping pace without rushing was still a bit difficult.

**Deviations in Project Schedules:** Identifying and correcting variances requires constant monitoring and a well-established corrective action plan, which was difficult when unexpected delays or issues came.

**Effective Visuals and Flow:** Selecting the right visuals and structuring the presentation to maintain a logical flow was challenging. I spent considerable time deciding how to organize information so that each section smoothly led into the next, keeping the audience's attention and enhancing comprehension.

**Addressing Audience Questions:** During the Q&A, answering spontaneous questions was challenging, especially for aspects that required deeper analysis. I needed to ensure my responses were accurate and thorough, which required on-the-spot critical thinking and recall.

**Managing Team Dynamics:** Ensuring consistent communication and motivation within the team can be demanding, especially during extended project timelines.

### **Personal Development Activities:**

I devoted time to exploring both top-down and bottom-up project planning techniques covered in Chapter 6. I practiced breaking down hypothetical projects using the Work Breakdown Structure (WBS) method, which enhanced my ability to create realistic task hierarchies and manage resource allocation effectively.

To gain practical insights into the monitoring concepts from Chapter 7, I conducted a hands-on simulation of Earned Value Management (EVM) using sample data. I set baselines and tracked hypothetical budget and schedule variances, practicing variance analysis to assess project health.

I practiced presenting my topic analysis to classmates. This activity not only strengthened my presentation skills but also helped me communicate complex project management data clearly and concisely. Receiving feedback from peers on clarity and delivery was invaluable for building confidence in sharing project metrics and progress effectively.

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

To ensure I'm fully prepared for the midterm, I plan to dedicate time each day to reviewing lecture notes, class discussions, and key concepts in Software Project Management. My focus will be on reinforcing areas such as project planning, scheduling, monitoring, and control techniques. In addition to reviewing the core material, I'll work through practice exam questions to apply these concepts and identify any areas where I need further clarification or review.

I hope to deepen my grasp of crucial principles like resource allocation, risk management, and Earned Value Management (EVM). This approach will also enable me to better connect the theoretical aspects of project management with practical application, making the concepts easier to recall and utilize in exam settings and future projects.

Lastly, I plan to organise and attend team meetings for preparing Feasibility Study, Solution Proposal, Budgeting, etc for the next deliverable.