**Learning Journal 3**

**Student Name:** Susmitha Mamula

**Course:** SOEN 6841- SOFTWARE PROJECT MANAGEMENT

**Journal URL:** <https://github.com/susmitha810/SOEN6841>

**Dates Rage of activities:** 5th October 2024 to 26th October 2024

**Date of the journal:** 12th October 2024 and 26th October 2024

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| **Key Concepts Learned:** | **Application in Real Projects:** | **Peer Interactions:** | **Challenges Faced:** | **Personal development activities:** | **Goals for the Next Week:** |
| • **Project Scheduling**: Top-down vs. Bottom-up planning.  • **Work Breakdown Structure (WBS)**: Breaking tasks into manageable units for better execution.  • **Resource Allocation:** Aligning skills with project needs.  •**CPM and Buffer Management.**  • **Activity Organization:** Each task’s dependencies and duration directly impact **resource allocation** and scheduling.  •**Milestones** and **Deliverables**. | •Implementing **WBS** in real-world projects provides visibility into task dependencies and allows for precise **resource allocation**.  • The use of the **Critical Path Method** helps to prioritize key tasks and avoid **bottlenecks**.  • Choose **bottom-up** or **top-down** based on task details or **project goals** | •Collaborated with peers to compare the benefits of top-down versus bottom-up planning.  • Exchanged ideas on managing delays using critical path analysis, especially in complex projects.  • Gained insights with peers highlighting WBS's role in managing complex dependencies. | • Experienced difficulty in estimating task durations for **WBS** due to uncertainty in project requirements at the outset.  • Faced challenges in optimizing **resource allocation** without adequate historical data or insights on task complexity.  • Choosing between **top-down and bottom-up** planning methods was challenging for projects with both high-level goals and detailed tasks. | • Completed **Udemy courses** on WBS and CPM.  • Studied **case studies** on project scheduling and resource allocation.  • Created **Gantt charts** using project management tools.  • Read articles on **top-down** and **bottom-up planning** techniques. | • Practice creating a detailed Work Breakdown Structure for a case project and analyse its effectiveness.  • Explore advanced resource allocation techniques in project management software to enhance precision in WBS planning.  • Explore case studies on buffer management to see how it mitigates delays and improves scheduling flexibility. |
| • **Earned Value Management (EVM):** Tracks schedule and budget variances for progress assessment.  • **Baseline Plans**: Compares baseline costs, time, and performance to maintain project alignment.  • **Corrective Actions**: Addresses deviations through re-planning.  • **Monitoring** and **Control**. | • EVM: Ensures **transparency** and proactive decision-making by tracking budget and schedule.  • Baseline Plans: Keeps **stakeholders** aligned during project changes.  • Corrective Actions: **Mitigates risks** and keeps projects on track. | •Participated in discussions about how EVM can be adapted to agile projects, ensuring regular assessment and adjustments.  • Discussed strategies for maintaining the baseline in environments with constant changes to project requirements. | • Struggled to establish a reliable **baseline** in projects with frequent changes, which made monitoring harder.  • Understanding the application of **EVM** in agile projects where iterative changes occur was particularly challenging. | • Watched **Udemy tutorials** on EVM for budget and schedule tracking.  • Analysed **case studies** on risk management in dynamic projects.  • Practiced **corrective actions** and **variance analysis** for project control.  • Read articles on **monitoring and control** strategies. | • Dive deeper into case studies on Earned Value Management in agile methodologies.  • Explore project management tools (like MS Project) that support real-time EVM data collection and variance analysis for agile settings.  • Focus on refining strategies for maintaining baseline plans in projects where scope changes are frequent. |

**Final Reflections:**

**Overall Course Impact:**

* The course provided a comprehensive understanding of core project management techniques like WBS, CPM and EVM.
* These skills are essential for navigating real-world project challenges, ensuring projects stay within budget, meet timelines, and achieve quality standards.

**Application in Professional Life:**

* Gained confidence in project scheduling and baseline management, and learned to use EVM for transparent progress tracking and corrective actions to handle project deviations.

**Peer Collaboration Insights:**

* Peer discussions helped refine my understanding of top-down vs. bottom-up planning and critical path analysis, enhancing my ability to manage project delays and frequent changes.

**Personal Growth:**

* Improved problem-solving and resource optimization skills through case studies and practical applications.
* More ambitious in tackling challenges like baseline management and risk control by studying real-world EVM and variance analysis.
* Proficiency in project control tools and techniques strengthened for long-term project management success.
* In long term will plan to obtain project management certifications (e.g., PMP, Agile) to enhance credibility and expand career opportunities.

**Hours Spent Weekly To study:** 3 Hours per week

**References for Personal Development Activities:**

* Kerzner, H. (2017). Project Management: A Systems Approach to Planning, Scheduling, and Controlling (12th ed.).
* Fleming, Q. W., & Koppelman, J. M. (2016). Earned Value Project Management.
* Williams, T. (2017). The Nature of Risk in Complex Projects. International Journal of Project Management, 35(4), 703-713.