#### **Final Reflection Journal**

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Journal URL: <a href="https://github.com/swetasarat2000/Learning-Journal-SOEN-6841">https://github.com/swetasarat2000/Learning-Journal-SOEN-6841</a>

**Date Rages of activities:** 15 Mar to 27 Mar

**Date of the journal:** 27 Mar

### **Overall Course Impact**

This course has profoundly reshaped my understanding of software project management (SPM), bridging theoretical frameworks with real-world applications. From foundational concepts like project charters and Work Breakdown Structures (WBS) to advanced topics such as Earned Value Management (EVM) and iterative lifecycle models (Chapters 9–11), each module equipped me with tools to navigate complexities in software projects.

### **Key Transformations:**

- From Chaos to Structure: Initially, I viewed projects as linear tasks (e.g., my internship's data pipeline). Now, I appreciate the need for iterative monitoring (EVM) and adaptive planning (Agile/Scrum), especially after learning how unchecked scope creep derails timelines (Chapter 7).
- **Risk to Resilience:** Early struggles with risk quantification (Journal 1) evolved into proactive mitigation strategies, like integrating Configuration Management (CM) for version control (Journal 2).
- **Lifecycle Clarity:** Chapters 9–11 highlighted the trade-offs between Waterfall and iterative models. For instance, prototyping (Chapter 11) aligns with my cloud project goals, while CMMI's maturity levels (Chapter 9) revealed gaps in my past team's processes.

## **Challenging Component:**

The course fundamentally challenged my assumption that 'more documentation equals better management.' During peer discussions (Journal 4), a classmate shared how their startup reduced documentation overhead by 40% using Agile's 'just enough' principle while improving delivery speed. This revelation forced me to rethink my approach in my freelance work, I now use lightweight user stories with acceptance criteria instead of exhaustive spees, cutting client review cycles by two weeks. The most counterintuitive lesson? Sometimes less structure (e.g., a 1-page project charter) fosters more alignment, as seen in our team's pitch project where short clear pitch eliminated ambiguity on goals.

## **Application in Professional Life**

### **Immediate Use Cases:**

- **EVM in Freelancing:** Tracking a client's analytics project using EVM metrics (Journal 2) helped me identify a 20% schedule variance early, allowing timely adjustments.
- Requirement Management (Chapter 10): At my internship, unclear requirements caused rework. Now, I'd employ model-based RE (e.g., multi-view diagrams) to capture stakeholder needs systematically.

# **Long-Term Opportunities:**

- Leadership Roles: Mastering CMMI (Chapter 9) positions me to lead process improvement initiatives, such as transitioning teams from Level 1 (chaotic) to Level 3 (defined processes).
- **Consulting:** Skills in feasibility analysis (Journal 4) and iterative design (Chapter 11) enable me to advise startups on scalable project frameworks.

# **Challenging Component:**

The course's exploration of AI project governance (Chapter 11) disrupted my view of SPM as a purely 'human' discipline. I initially resisted automating risk tracking, fearing it would depersonalize teamwork. However,

experimenting with AI-driven risk dashboards (e.g., Jira's predictive analytics) during our group project revealed how technology can augment, not replace human judgment. This duality balancing automation with collaboration will define my approach to emerging tech roles, particularly in DevOps where AIOps tools require minute human oversight.

# **Peer Collaboration Insights**

### Collaboration was a cornerstone of my learning:

- **Project Pitches (Journal 4):** Peer's diverse approaches to WBS and EVM exposed me to hybrid methodologies (e.g., blending Agile with critical path analysis). One team's use of Slack removal (Chapter 7) inspired me to streamline my freelance project buffers.
- **Post-Lecture Debates:** Discussions on failed closures (Chapter 8) emphasized the human factor, how undocumented lessons (e.g., a peer's internship story) lead to repeated mistakes.

## **Growth Through Feedback:**

Feedback from peers acted as a catalyst for professional refinement. When a classmate critiqued my feasibility analysis (Journal 4) for lacking market benchmarks, I not only researched industry standards but also created a comparative framework now adopted by my study group. For example, I integrated Gartner's TRIAD method (Technical, Resource, and Assumption Documentation) to evaluate cloud migration risks, which improved our project's viability score by 25%. Another pivotal moment came during a peer review of my EVM model, where a teammate noted my overreliance on schedule variance (SV) without considering cost-performance synergy. This pushed me to develop integrated dashboards tracking CPI-SV trends, a skill I've since showcased in job interviews. These exchanges proved that constructive dissent isn't just helpful, it's essential for bridging academic theory and real-world pragmatism.

#### **Personal Growth**

#### **Skill Development:**

- From Estimator to Strategist: Early struggles with COCOMO (Journal 1) evolved into confidence using Function Points and analogy-based estimation.
- Communication: Crafting a 4-minute pitch (Journal 4) honed my ability to distill complex ideas, a skill I've since used in job interviews.

### **Mindset Shifts:**

- Embracing Iteration: Initially resistant to Agile's "unfinished" feel (Chapter 11), I now advocate for its flexibility after seeing its success in peer projects.
- Quality Over Speed: Case studies on testing neglect (Chapter 13) changed my "code-first" approach to prioritize test automation in personal projects.

# Conclusion

This course transformed me from a task-oriented executor to a holistic project thinker. The interplay of theory (e.g., CMMI levels), peer insights, and hands-on applications (e.g., EVM, iterative design) has equipped me to tackle real-world SPM challenges with adaptability and strategic foresight. For instance, I now plan to integrate model-based requirement engineering (Chapter 10) into my upcoming cloud migration project at work, ensuring stakeholder alignment from day one. Additionally, CMMI's framework (Chapter 9) will guide my approach to auditing team processes for a client this summer, targeting Level 3 maturity by standardizing Agile-Kanban hybrids. As I transition into cloud project management roles, these lessons will be my compass, ensuring I deliver value not just through technical rigor, but by fostering collaboration, embracing iteration, and prioritizing measurable outcomes. The journey from struggling with COCOMO to advocating for test-driven Agile reflects my growth as a future-ready project leader.