

# Journal

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**Course:** SOEN 6841 – Software Project Management

**Journal URL:** <https://github.com/kin-kins/SOEN6841>

**Week 1:** 18/01/2024 – 24/01/2024

**Date:** 24/01/2024d

**Synopsis of This Week's Sessions:** This week's sessions delved into the intricate world of software project management, dissecting its definition and the essential characteristics inherent in project dynamics. We extensively covered the core elements of projects – budget, time, and resources, and scrutinized various phases, including initiation, planning, monitoring, control, and closure. The complexity of these phases, incorporating industry-specific sub-processes, was thoroughly explored. Additionally, we delved into visual representations like flow diagrams, illustrating software life cycle processes and software configuration management. Quality characteristics' paramount importance in software projects was duly underscored.

## **Key Takeaways:**

1. Understanding the essence and characteristics of software project management.
2. Grasping the foundational pillars of projects: budget, time, and resources.
3. Comprehensive insight into project phases: initiation, planning, monitoring & control, and closure.
4. Exploration of sub-processes within each project phase, including industry-specific nuances.
5. Visualization of software life cycle processes and software configuration management through flow diagrams.
6. Recognizing the significance of project charter, project scope, and project objectives.
7. Incorporating SMART criteria for precise objective-setting and goal definition.
8. Practical application of project charter, project scope, project objectives, and goals in real-world projects.

## **Novel Concepts and Approaches Introduced:**

1. Project Charter
2. Project Objectives
3. Project Scope

**Real-world Implementation Insights:** Appreciating the importance of project objectives, goals, project scope, and project charter provides a systematic framework for project initiation, division, and budget allocation. The application of these factors facilitates efficient tracking and management of the entire project lifecycle.

**Encountered Challenges:** The concepts introduced this week proved relatively straightforward, and no significant challenges were encountered. However, a desire for a more direct connection

to real-time project development experiences was expressed to enhance overall comprehension.

**Personal Development Highlights:** Acquiring foundational principles of software project management has significantly influenced my approach to project initiation, elevating my strategic thinking on how to commence and navigate through a project.

**Anticipated Goals for the Following Week:** There is a palpable excitement as we look forward to exploring the subsequent phases of software project management in the upcoming week.

**Week 2:** 18/01/2024 – 27/01/2024

**Date:** 27/01/2024

**Overview of This Week's Sessions:** Effort estimation took center stage this week, primarily leaning on experimentation. Two primary approaches – experiment-based techniques and algorithmic cost modeling were extensively discussed. Techniques such as function point analysis, wide band Delphi, and COCOMO were introduced. Experience-based estimation was categorized into estimation by analogy and estimation by expert judgment. The steps of the Delphi method were explained, and algorithmic cost modeling was presented as  $\text{Effort} = A * \text{Size}^B * M$ . COCOMO, with versions tailored for different requirements, was explored, focusing on effort estimation and subsequent project cost determination.

**Innovative Concepts and Methodologies Introduced:**

1. Project Effort Estimation
2. Experience-based techniques
3. Algorithmic cost modeling
4. Estimation by analogy
5. Estimation by expert judgment
6. Function points analysis
7. Delphi
8. COCOMO

**Practical Application in Real Projects:** Understanding how to estimate project costs based on various efforts offers valuable insights into the decision-making process for project budgets. Strategies and real-time examples of implementing these methodologies were thoroughly discussed.

**Encountered Challenges:** The concepts introduced were relatively straightforward, with no significant challenges reported. However, the need for more real-time project development examples was expressed to foster a deeper understanding. Suggestions included incorporating real project scenarios, providing concrete project development instances, and leveraging virtual labs or collaborative tools.

**Peer Interactions:** Peer discussions predominantly revolved around the challenges of determining precise project costs, emphasizing the need for clarity in this specific aspect. The discussions highlighted the intricacies of navigating uncertainties and collectively acknowledged the pivotal role clarity plays in successful project cost determination.

**Anticipated Goals for the Subsequent Week:** The upcoming week brings anticipation as we shift our focus towards exploring the subsequent phases of software project management. There is a collective eagerness among participants to unravel the complexities of risk management within the project context. The excitement surrounding this next learning phase adds a dynamic element to the educational journey, reflecting a shared enthusiasm to delve into the intricacies of risk assessment and mitigation strategies.