**Learning Journal 1**

**Student Name:** Arik Kantesaria

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

**Journal URL:** <https://github.com/Arik39/SOEN6841_SPM>

**Dates Rage of activities:** 9th September 2024 to 20th September 2024

**Date of the journal:** 21st September 2024

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Key Concepts Learned:** | **Application in Real Projects:** | **Peer Interactions:** | **Challenges Faced:** | **Personal development activities:** | **Goals for the Next Week:** |
| **Chapter 1: Introduction to Project Management** I came to know that projects are different from routine work because they have specific goals, are more complex, and are non-routine. Software projects are especially demanding due to invisibility, complexity, conformity, and flexibility. It is tough to manage them compared to other types of projects. The main project phases that were discussed in the chapter include initiation, planning, execution, monitoring, and closure. | **Project Phases:** Breaking down projects into distinct phases-initiation, planning, execution, and closure-allows software development to remain organized and controlled.  **Metrics Tracking:** Budget, time, and quality metrics allow progress to be tracked and problems to be solved early.  **Project Charter & Scope:** It also prevents misunderstandings and scope creep because the charter and scope are defined up front; hence, deliverables would be aligned.  **SMART Objectives:** Setting specific, measurable, and time-bound goals will make the project's success more easy to gauge.  **Effort and Cost Estimation:** Processes like COCOMO II and function point analysis allow for better project time estimates, resources utilized, and costs incurred. This prevents budget overruns.  **Resource & Schedule Planning:** Only proper estimates guarantee that resource allocation is proper, hence allowing for Delays within that project. | One classmate pointed out the calculation error of unadjusted function points in my work during this week. Based on his feedback, I developed my steps and further resolved my doubts in data function types such as ILF and EIF. This exchange has enhanced my comprehension of the estimation model​ more profoundly. Their insight also made me realize that FPA is inefficient for real-time systems. | One of the challenges that I could not imagine mastering was the FPA technique in effort estimation. I couldn't understand how ranking according to their complexity was done on the five function types, which include External Input and External Output. I will consider more examples from past projects and study resources about FPA complexities​. | **Activity:** I completed a case study doing effort estimation using the COCOMO II model. This was done by calculating the person-months based on Kilo Delivered Source Instructions and efforts' multipliers from various project drivers.  **Reflection:** Hands-on experience with COCOMO II provided more pragmatic insights into how varied factors, such as team cohesion and process maturity, may influence project effort and cost. This has refined my ability to adjust estimates as the project progresses, leading to more accurate budget and time management. | **Refine Estimation Skills:** I will hone my skills in algorithmic cost modeling by revisiting COCOMO and applying the same to a mock project. Wide-band Delphi method will also be practiced with my study group.  **Improve Peer Collaboration:** I plan to participate more actively in class discussions, especially on resource estimation for iterative projects. This will help me learn from peers and refine my own techniques​.  **Long-term goal:** Elaborate my skills in the project estimation area and align them with my career development by solving complex estimation problems in real case studies. |
| **Chapter 2: Project Initiation** I explored project charters, which define the project's purpose, and scope, and set boundaries and key features. We also covered SMART objectives (Specific, Measurable, Achievable, Relevant, and Time-bound) to help align project goals. |
| **Chapter 3: Effort and Cost Estimation I** learned about estimation techniques like experience-based and algorithmic cost modeling, which help predict the resources and time a project needs. Estimates change as projects progress due to unexpected requirement changes. |