**Learning Journal 1**

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

**Journal URL:** https://github.com/pranav687/SOEN6841_SPM

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

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

**Key Concepts Learned:**

In Chapter 1, I learned the basics of software project management, focusing on key processes like initiation, planning, monitoring, control, and closure. It highlighted the importance of managing people, processes, and technology, as well as configuration and version control, and introduced metrics for tracking project progress.

In Chapter 2, I learned about project initiation, including defining the project charter, scope, and objectives, estimating effort and costs and developing an initial plan. The chapter emphasized stakeholder involvement, quality planning, feasibility studies, and breaking projects into manageable parts.

In Chapter 3, I learned that each project requires tailored effort estimation methods, like Function Point Analysis and Wide Band Delphi. I also explored the COCOMO model for estimating costs in different types of projects, along with strategies for Waterfall and Iterative models. Understanding cost, resource planning, and the importance of good documentation were key takeaways.

**Application in real projects:**

1. Effort Estimation:
    - Function Point Analysis: XYZ Corp estimates effort for a CRM system based on its features.
2. COCOMO Model:
    - COCOMO II: A government agency uses it to estimate costs and time for a healthcare software system.
3. Waterfall vs. Iterative:
    - Waterfall: A construction company builds an office using a linear, phase-by-phase approach.
    - Iterative: A Startup develops a mobile app with Agile, releasing updates based on feedback.
4. Cost and Resource Planning:
    - Budgeting: An event company plans costs for a conference to stay within budget.

- Resource Allocation: A manufacturer estimates needs for production to manage inventory.

5. Documentation:
   - Project Tracking: A software firm documents requirements and changes to keep the project on track.

**Peer Interactions:**

I recently spoke with my friend, about how we would have created a project charter, scope, and goals for the several projects we had created as undergraduates from the standpoint of a project manager. I talked about the different ways that, from the developer's perspective, the project must be completed without any limitations, but she also mentioned that it must adhere to the schedules and directives of the parties engaged in the project's creation.

**Challenges Faced:**

Understanding project cost calculation from a project manager’s perspective was a challenge. In the course, I sometimes struggle to differentiate between project scope, charter, and objectives. Additionally, distinguishing between the objectives of different roles within a company is tricky, as similar terms often involve different activities. I need to focus more on these topics.

**Personal Development Activities:**

I discovered online coding challenges and competitions, which are excellent for enhancing problem-solving skills and coding proficiency. These activities offer practical experience and expose me to new technologies. Additionally, participating in coding challenges can significantly boost my resume and improve my performance in technical interviews, as they help demonstrate my problem-solving abilities and coding expertise to potential employers.

**Goals for the Next Week:**

Next week, I aim to explore the project manager's role more deeply, focusing on how projects with similar goals differ in scope, charter, and objectives. I will also read chapters 3 and 4 to prepare for the next class. Additionally, I'll consider key market analysis factors for the AI-based academic advisor project, reflecting on how it might be developed for a company. I plan to meet with my teammates to gather their insights and critiques and to devise a potential project plan.