Learning Journal 1

Student Name: Sweta Sarat
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Key Concepts Learned

Chapter 1: I gained an understanding of how projects differ from repetitive jobs, particularly the unique challenges faced in software projects, such as invisibility and complexity. Learning about the phases of project management initiation, planning, monitoring, and closure helped me see how each step contributes to project success. Additionally, the course highlighted the responsibilities of a project manager, including defining scope, allocating resources, and ensuring timely delivery.
Chapter 2: The concept of project initiation stood out, especially the role of project charters in aligning stakeholder expectations and defining clear project objectives and scope. Understanding how scope and budget planning ensure a solid foundation for projects was particularly impactful.
Chapter 3: I explored estimation techniques like Function Point Analysis and COCOMO and their importance in calculating costs and resources. This gave me a new appreciation for balancing accuracy and flexibility in Agile environments, where iterative adjustments are crucial.
Chapter 4: Learning about risk management, including risk identification, prioritization, and mitigation strategies, was eye-opening. It emphasized the importance of addressing uncertainties such as resource shortages and timeline constraints to maintain project progress.

Application in Real Projects

The course content has enriched my approach to projects by providing practical frameworks and methodologies. For example:

- While working on a data pipeline project at EY, I encountered challenges in defining the scope early in the project. After learning about project charters in this course, I realized how this tool could align team expectations and clarify deliverables. Applying this insight retrospectively, I now see how a well-crafted charter could have avoided ambiguity and streamlined the workflow.
- During the CIBC Innovation Challenge, my team tackled the problem of targeting GIC clients by leveraging iterative modeling. We adapted our approach based on frequent feedback, minimizing risks and enhancing efficiency. This experience reinforced the importance of flexibility and incremental improvements, concepts emphasized in Chapter 3.
- I've begun using analogy-based estimation for tasks in academic projects, drawing on past experiences to make accurate predictions. For example, when comparing the data flow requirements of a recent case study to a previous project, I was able to allocate resources more effectively.

Peer Interactions

Collaborative activities during the course were particularly rewarding. For example:

- Group discussions on effort estimation and risk prioritization enhanced my understanding of these concepts. A peer's suggestion to use Delphi estimation for breaking down complex tasks was new for me.
- Discussion on project scopes based on class exercises helped me refine my planning approach, teaching me the importance of precise and clear documentation.
- Sharing my CIBC challenge experience with my peers highlighted how diverse perspectives can lead to innovative problem-solving.

Challenges Faced

- Initially, I struggled to differentiate project scope from objectives, often conflating the two. Creating concrete examples during exercises helped clarify the distinction. For instance, in the EY data pipeline project, scope involved integrating three data sources, whereas the objective was improving reporting efficiency by 20%. This clarity is now central to how I approach planning.

- Effort estimation techniques, such as COCOMO and Function Point Analysis, felt overwhelming at first due to their technical nature. However, breaking them into smaller components during exercises and applying them in hypothetical scenarios made them more manageable.
- Quantifying risks in realistic scenarios felt abstract initially. Peer discussions during the course and reflecting on challenges like resource unavailability in the CIBC Innovation Challenge helped me better appreciate the importance of detailed risk assessments.

Personal Development Activities

- I practiced drafting project charters and schedules to strengthen my planning skills.
- Through tutorials, I explored Agile workflows and estimation techniques like Function Point Analysis to build a deeper understanding.
- Engaging in peer chats after lecture enabled me to test risk management strategies in hypothetical projects.
- I plan to watch videos on Jira which could help me understand visualization of project tasks.

Goals for the Next Week

- Deepen my understanding of effort estimation techniques like COCOMO and Delphi by understanding the use of them to mock scenarios.
- Collaborate with peers for the project on refining scoping and risk prioritization techniques, seeking feedback on my approach.
- Go through next 2 chapters prior to the lecture to understand better during the lecture hour and explore how cost estimation and risk management can align my learning with real-world applications.

The chapters so far has reshaped my understanding of software project management by emphasizing the importance of breaking projects into manageable phases. The interplay of scoping, estimation, and risk management has clarified how these elements drive project success. For instance, learning about iterative models challenged my assumption that waterfall models were always sufficient, showing me the value of flexibility in dynamic environments.

Through these chapters, I’ve developed greater confidence in tackling complex challenges like effort estimation and risk prioritization. My communication skills are improving, particularly in presenting ideas and engaging in collaborative problem-solving.