Learning Journal 1

Student Name: Muqaddaspreet Singh Bhatia

Course: SOEN 6841 Software Project Management

Journal URL: https://github.com/Muqaddaspreet/SPM_Journals.git

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

Date of the journal: 20th September 2024

Week 1

Key Concepts Learned:
- Projects are distinct from regular jobs due to their non-routine nature, complexity, and time/resource constraints. Explored how people, processes, tools, and technology are integrated in project management and gained insight into the subprocesses involved, such as project initiation, planning, execution, monitoring, and closure.
- The project charter outlines the purpose, scope, objectives, and initial project budget. SMART objectives, which help ensure that project goals are Specific, Measurable, Achievable, Relevant, and Time-constrained.

Application in Real Projects:
- Understanding how to write a project charter and define SMART objectives will help our team align on clear, achievable goals for our project.
- Having insight into project initiation and cost estimation will aid in planning our project's timeline and resource allocation.
- I completed the exercises for Chapters 1 and 2, which involved exploring real-world examples such as the Phoenix Pay System and ArriveCAN.

Peer Interactions:
- I finalized my group members for the project. We discussed the roles each person would take and began brainstorming how to approach our project charter.
- We will apply the concepts from Chapters 1 and 2 as we initiate our project by defining the scope and objectives.

Challenges Faced:
- Fully grasping the complexity of project cost estimation. Since effort estimates depend on many factors such as project size, scope, and resources, understanding how to create accurate and realistic estimates will require further practice.

Personal Development Activities:
- I undertook reading on Task Monitoring and understood the difference between Waterfall and Agile models.

Goals for the Next Week:
- Work with my group to draft our project charter and define clear objectives for the project.
- Practice estimating effort and costs for the project, applying techniques learned in Chapter 2.
- Explore more case studies or examples of successful project charters to further understand best practices.

Week 2

Key Concepts Learned:
- Software projects are effort-driven, requiring accurate estimation of the effort required for different project tasks. Estimation techniques, including experience-based methods and algorithmic cost modelling. I focused on Estimation by Analogy and COCOMO (Constructive Cost Model), which involves comparing the size and scope of a new project with similar past projects to estimate effort.
- Project costs are derived from effort estimates. Factors such as the number of staff required, project duration, and the complexity of tasks influence cost estimates. This process can be refined using different models like function point analysis.
- Researched a project charter for the Sustainable Energy Usage Tracker. I learned how the scope and objectives of a project are clearly defined in the charter to ensure that all stakeholders have a common understanding of the project goals. The charter also outlines what is within and out of scope, which helps manage expectations throughout the project.

Application in Real Projects:
- This week, my team finalized the project topic, *Digital Healthcare Appointment Optimization*. The concepts from Chapter 3, particularly effort and cost estimation techniques, will be crucial as we begin planning and defining the scope of this project. Applying models like COCOMO will help us estimate the resources needed to build and implement the appointment scheduling solution.
- Structuring the project charter for our healthcare optimization project. We plan to ensure that our charter includes clear objectives and a well-defined scope.

Peer Interactions:
- My team and I began discussions on defining the scope and objectives for the *Digital Healthcare Appointment Optimization* project.
- I contributed my understanding of effort estimation, highlighting the importance of using past project analogies to estimate the size and effort required for different features.

Challenges Faced:
- Understanding the complexity of estimation techniques like COCOMO and Function Point Analysis. These methods require detailed data and experience with past projects to make accurate estimates. As this is new to me, I plan to practice more with these techniques as we begin to apply them to our group project.

Personal Development Activities:
- To prepare for the upcoming quiz, I reviewed Chapters 1 and 2, focusing on project initiation, scope definition, and the importance of a project charter. This revision helped reinforce my understanding of how to initiate a project and define clear objectives, which will be useful as my team develops our project charter.

Goals for the Next Week:
- Finalize the project charter for the Digital Healthcare Appointment Optimization project, incorporating lessons from the Sustainable Energy Usage Tracker.
- Apply effort estimation techniques like Estimation by Analogy to estimate the resources needed for the project.