Learning Journal

Student Name: Manpreet Singh Rana (40227463)

Course: Software Project Management (SOEN 6841)

Journal URL: https://github.com/msrana25/SOEN-6841-Journals

Week 5,6,7: Feb 18- Mar 9

Date: Mar 6, 2024

Summary of Activities: -

1. Preparation of Midterm – Read chapters 1 through 6 from the book, went through the journals from week 1 till week 4.

2. Started working on the second project deliverable which includes the feasibility study, solution proposal, budgeting, and risk assessment of our project, "Virtual Wedding Planner". Specifically, I am working on feasibility study and solution proposal part.

3. For the last journal that I submitted for Week 4 , I submitted summary of chapter 6(Project planning) till mid of the chapter. This journal from hereon covers rest of chapter 6.

Key Concepts Learned:

New Terminologies

Activity organization: - It is defined as sequencing of project activities in such a way that produces tangible output for management to judge process.

Milestones: - End point of a process activity.

Deliverables: Project results delivered to the customer.

Task: Basic planning element of a project activity.

Duration: - The number of calendar **days** (or **months**) required to complete a task.

Effort Estimate: - The number of person-days or person-months required to complete the work.

Deadline: - The date and time by which the project activity should be complete.

A defined endpoint: - A tangible output of a task completion which might be a document, holding of a review meeting etc.

Critical Path: - There is one path through the network joining critical activities in a project. The Critical Path is determined by adding times for activities in each sequence and determining the longest path in the project.

Main concepts

Various project activities like feasibility study, requirement analysis, prototype development, design study and requirement specification have their corresponding milestones as feasibility report, requirements definition, evaluation report, architectural design and requirement definition respectively.

Usually among various phases of software development, requirement phase requires least number of resources while construction phase requires the most resources.

Project scheduling includes splitting project into tasks and estimating time and resources required to complete each task. It encompasses organization of tasks concurrently to make optimal workforce use. This is achieved by minimizing task dependencies to avoid delays caused by one task waiting for other.

Graphical notations are used to illustrate project schedule. Project schedules are represented using **Calendar based graphs (Bar charts)** or **activity networks.** Activity chart show task dependencies and critical path whereas bar charts show schedule against calendar time.

Other project planning tasks include but are not limited to: -

Supplier Management: For projects involving hardware or software suppliers, it's crucial to develop a comprehensive supplier plan. This plan should clearly outline the tasks assigned to the supplier, their dependencies on other project tasks, and ensure alignment on quality standards between in-house and outsourced products.

Configuration Management: Configuration management involves establishing protocols for creating and maintaining a central repository for project documents and managing software versioning effectively.

Communication: Effective communication is vital for project success, encompassing both formal and informal channels. It's essential to plan communication channels, tools, and techniques, ensuring clear communication with customers and suppliers to prevent misunderstandings.

Quality Assurance: Quality assurance is paramount in ensuring the desired level of quality in software products. A quality assurance plan is developed to maintain and monitor quality standards throughout the project lifecycle.

Project Schedule Planning: Project schedule planning is crucial for ensuring timely delivery of project milestones. It involves creating a detailed schedule outlining tasks, dependencies, and milestones to keep the project on track.

Project Budgeting: Proper budget planning is essential to prevent project cost overruns, which can derail project progress. Thorough budget planning helps ensure that project costs remain within budgetary constraints.

Application in Real Projects:

Need of Project Planning in Software Project Management

Project planning is essential for successful software project management, providing a structured approach to guide teams towards project goals. By meticulously detailing tasks, timelines, and resource requirements, it ensures clarity and alignment among team members. Through comprehensive risk assessment and mitigation strategies, project planning enables proactive management of potential challenges, reducing the likelihood of project delays or budget overruns.

Project planning facilitates effective resource allocation, optimizing the utilization of human and financial resources throughout the project lifecycle. Clear communication channels and defined protocols established during planning promote collaboration among stakeholders, fostering a cohesive working environment. Ultimately, project planning serves as a roadmap, steering software projects towards successful outcomes by ensuring efficient execution, risk management, resource utilization, and stakeholder engagement.

Peer Interactions:

I did the preparation for midterm by myself. Was in touch with my team for project deliverable. Details will be furnished in the project deliverable.

Challenges Faced:

In depth understanding of project planning phases was bit challenging because there is a lot of data available to read and understand about each item which was little overwhelming. Completely grasping critical path and Goldratt's critical chain method around my head was also little tough as well.

Goals for the Next Week:

Study of next project management steps which include project monitoring and control and project closure.