Learning Journal 1: Chapter 1, 2 and 3

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Course: Software Project Management [SOEN 6841]

Journal URL: https://github.com/nishith-soni/Software_Project_Management/blob/main/Journal_1.pdf

Dates Rage of activities: 16th January 2025 to 28th January 2025

Date of the journal: 28th January 2025

Key Concepts Learned:

Acquired an understanding of Software Project Management and its importance.

- Learned about the key phases of project management: initiation, planning, monitoring, and closure.
- Delved deeply into project initiation, focusing on cost estimation and schedule development.
- Gained insights into cost estimation techniques and risk management strategies.
- Studied methodologies such as COCOMO and Delphi for project estimation.
- In summary, effort and project estimation play a crucial role in the design phase, influencing the development process. Key techniques include Estimation by Analogy, Function Point Analysis (FPA), Delphi Technique, and COCOMO.

Application in Real Projects:

- Case Study: Developing a Mobile Banking Application.
- **Project Management:** The development team leverages project management principles to navigate phases like requirement analysis, user interface design, integration, testing, and deployment, ensuring effective resource allocation, time management, and adherence to budgetary constraints.
- Quality Metrics: Metrics such as application performance, security testing outcomes, and user feedback ensure that the mobile banking app meets the highest quality standards throughout the development lifecycle.
- Cost Estimation Techniques: The team applies various estimation approaches to build a secure and user-friendly transaction management system, including statistical models and parametric estimation, to evaluate factors like feature complexity and development team size, ensuring accurate planning of timelines and resources.
- **Effort Estimation:** Using analogy and expert judgment based on previous app projects, the team estimates the development effort required.
- **Function Point Analysis:** During the design phase, the team identifies and calculates function points, including transaction types, reports, and interfaces, to determine the Unadjusted Function Points.
- **Cost Modeling:** The team employs the COCOMO model to estimate costs across different phases of the project, ensuring efficient financial planning and resource allocation.

Peer Interactions:

- Engaged in a meaningful discussion with a peer who has practical project management experience in mobile banking development, comparing methodologies and approaches used in different work environments.
- Drawing from my own experience as a software developer, we shared insights and exchanged notes, which enhanced our understanding and improved our collaboration skills.
- Conducted a team meeting for the mobile banking app project, where we had an in-depth discussion about project goals, requirements, and relevant topics from our coursework.
- Following a thorough analysis, the team agreed to initiate work on the project. Two members were assigned to focus on defining project objectives and requirements, while the other two began conducting a detailed market analysis to identify user needs and competitive features.

Challenges Faced:

- This week's topics offered a clear introduction to project management principles and the steps involved in the project initiation process.
- While theoretical understanding was straightforward, practical application would deepen my grasp of these concepts, and I anticipate opportunities to apply them in the upcoming course project.
- Although I found the concepts easy to follow, a live demonstration of cost estimation techniques would provide valuable real-world context.
- Additionally, a class activity centered on a project scenario requiring the use of estimation techniques could enhance our practical understanding.
- Such an exercise would allow us to compare estimation approaches, evaluate margins of error, and explore strategies for improving accuracy.

Personal development activities:

- I aim to obtain AWS certification to advance my career prospects.
- This will enhance my expertise in cloud computing and equip me with project management skills aligned with this course.
- Worked collaboratively with my teammate on user experience design, gaining valuable insights into the project while exploring various mobile banking app interfaces and their usability features.

Goals for the Next Week:

- Next week, I plan to review the upcoming chapters and complete the exercises independently to improve my understanding and remain focused during class discussions.
- I also intend to connect with my project teammates, build rapport, and exchange insights on lecture topics and our project progress.
- Additionally, I will dedicate time to refining the market analysis for our project as the deadline draws near.