Learning Journal

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Course: SOEN 6841

Journal URL: https://github.com/sanjay123-321/Learning-Journal/blob/main/40306152_Sanjay%20Upadhyaya_LJ2.pdf

Dates Rage of activities: 01-28-2025 to 02-08-2025

Date of the journal: 02-08-2025

Key Concepts Learned	Application in Real Projects	Peer Interactions	Challenges Faced	Personal Development Activities	Goals for the Next Week
Effort Estimation: Understanding how effort estimates for projects are made and different techniques such as Expert Judgment, Analogous Estimation, Parametric Estimation, and Bottom-up Estimation.	In real-world projects, effort estimation is crucial for resource allocation and scheduling. Using Bottom-up Estimation for detailed project phases ensures accuracy, while Expert Judgment helps refine estimates.	Discussed with peers on challenges in estimating effort using various techniques. Compared experiences of using different estimation methods in projects.	Difficulties in selecting the most suitable estimation technique for different project types. Need more practice in applying parametric models.	Read additional materials from the textbook and researched industry case studies on effort estimation accuracy.	Practice estimating effort for a small-scale project using at least two different techniques. Validate estimates with real data.
Cost Estimation: Learning how to calculate project costs using techniques like Analogous,	Applied Bottom-up Estimation for budgeting in a sample case study. Used Parametric Estimation to compare with	Shared experiences with classmates on cost overruns and how estimations can prevent them.	Understanding the impact of cost drivers and hidden expenses in a project budget. Found it challenging to balance	Attended a webinar on financial risk management in project planning. Reviewed additional cost	Develop a cost estimation model using both Bottom-up and Three-Point Estimation to compare accuracy.

Parametric, Bottom-up, and Three-Point Estimation.	real project data for accuracy.	Discussed how organizations manage estimation biases.	accuracy with estimation efficiency.	estimation case studies.	
Schedule Estimation: Learning about the importance of Work Breakdown Structures (WBS), Critical Path Method (CPM), and Program Evaluation and Review **Technique (PERT).**	Used WBS to outline project phases and estimated schedules using PERT for a hypothetical project.	Engaged in a discussion on how scheduling impacts project success. Shared insights on challenges in maintaining realistic timelines.	Balancing time constraints while keeping estimation realistic. Needed better clarity on dependency management.	Completed additional exercises from the textbook and watched tutorial videos on CPM and PERT.	Implement PERT for a real project and assess its effectiveness compared to traditional scheduling.
Resource Estimation: Understanding how to estimate resources such as personnel, equipment, and materials.	Created a resource allocation plan for a small project, considering skill levels and availability.	Compared strategies with classmates on resource planning and optimization in various project scenarios.	Difficulty in predicting resource availability and aligning with project constraints.	Researched industry best practices for resource optimization and allocation.	Build a resource estimation model using industry benchmarks and validate assumptions.
Risk Management: Understanding project risks, types (technical, financial, operational, external), their impacts, and strategies such as risk avoidance, mitigation, transfer, and acceptance.	Conducted a risk assessment for a sample project, identifying risks and developing mitigation strategies.	Discussed common project risks with peers and how different industries handle them. Analyzed a real case study.	Challenges in accurately quantifying risk impacts and prioritizing risk responses.	Reviewed additional textbook material and real-world case studies on risk management strategies.	Develop a risk response plan for a case study project, applying different risk management techniques.