Learning Journal 3

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Course: SOEN 6841
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Summary of Learning Activities

During this period, I prepared for my mid-term exam by revisiting concepts from the lecture PPT's. I reviewed Configuration Management, Project Planning, and key techniques such as Work Breakdown Structure (WBS), Critical Path Method, and Agile Planning. I also explored case studies to understand their real-world applications.

Following the exam, I studied **Chapter 7: Project Monitoring and Control**. This chapter introduced key principles and techniques for tracking project progress and taking corrective actions when deviations occur. The topics covered included performance indicators, earned value management (EVM), resource utilization measurement, risk monitoring, and status reporting. Understanding these techniques is crucial for ensuring project success and timely delivery.

Additionally, I explored the differences between project monitoring and control, where monitoring involves collecting data to track progress, and control ensures corrective actions are implemented to keep projects aligned with scope, schedule, and budget. A detailed breakdown of performance measurement techniques such as Earned Value Analysis (EVA), schedule variance, and cost variance helped reinforce the significance of systematic project tracking.

Key Concepts Learned

- **Mid-Term Exam Preparation:** Revisited key concepts such as project planning, scheduling, and configuration management.
- **Project Monitoring:** Learned the importance of tracking project progress against the plan using periodic measurements and status reports.
- **Earned Value Management (EVM):** Explored how EVM integrates cost, schedule, and scope to assess project performance.
- **Performance Metrics:** Examined how project execution is evaluated based on schedule, cost, and quality metrics.
- **Corrective Actions:** Studied methods for identifying deviations and implementing changes to realign the project schedule and budget.
- **Resource Optimization:** Understood techniques such as resource leveling and allocation to ensure efficient project execution.
- **Scope and Risk Control:** Recognized the importance of controlling scope changes and executing risk management plans proactively.

Reflections on Learning

Application in Real Projects:

- The concept of monitoring task progress using EVM was insightful, as it provides a quantifiable measure of project performance.
- Resource utilization tracking highlighted the importance of balancing workload distribution to avoid bottlenecks.

- A real-world example involved a software development firm using EVM to detect schedule slippage and adjust task priorities accordingly.

Peer Interactions:
Engaged in discussions on project monitoring techniques. As an interactive activity, our group analyzed a case study where a project faced schedule delays. We proposed corrective actions using EVM and resource leveling, reinforcing the importance of proactive project control. We also practiced designing a Project Monitoring and Control System, where we established baselines, tracked project metrics, and proposed corrective actions using real-time data.

Personal Development Activities

- Created a comparison chart of monitoring techniques, including EVM and traditional milestone tracking.
- Explored project tracking tools such as Microsoft Project and JIRA to understand practical implementation.
- Attempted a sample project performance assessment using earned value calculations.
- Designed a mock project monitoring system, integrating baseline tracking, progress variance analysis, and corrective action planning.

Challenges Faced

- **Understanding EVM calculations:** Initially struggled with interpreting EVM metrics like schedule variance and cost performance index.
- **Applying corrective actions:** Determining the best approach for adjusting project schedules based on monitoring data was challenging.
- **Mid-term revision balance:** Managing time between exam preparation and new learning activities required careful planning.

To overcome these challenges, I practiced EVM problems and sought additional explanations from online resources.

Time Management
Total study hours: 10 hours

- **Mid-term Exam Preparation:** 5 hours (Revision, practice problems, group discussions)
- **Project Monitoring and Control:** 5 hours (Reading, case study analysis, tool exploration, system design exercise)

Goals for Next Week

- Explore advanced **risk mitigation strategies** in project monitoring.
- Review **case studies on project recovery plans** to understand how failing projects are realigned.
- Deep dive into **automated tracking tools** for monitoring large-scale projects.
- Read Chapter 8