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Key Concepts Learned

- Project Monitoring and Control
 - Importance of tracking progress against baseline plans.
 - Techniques such as Earned Value Management (EVM) for measuring schedule and budget variances.
 - o Performance indicators: schedule variance, budget variance, and resource utilization.
 - Strategies for handling deviations: re-planning, scope adjustments, and schedule optimization.
- Project Closure
 - Finalizing deliverables and conducting lessons learned sessions.
 - Importance of source code version management.
 - Archiving project metrics for continuous improvement.

Reflection on Learning

- Interconnection between Planning, Monitoring, and Control
 - Monitoring and control mechanisms are essential for maintaining project alignment with initial plans.
 - o Resource utilization plays a critical role in ensuring efficiency and minimizing delays.
- Significance of Project Closure
 - Proper documentation and data archiving facilitate future knowledge transfer.
 - Systematic version control enhances project sustainability.
 - Reflecting on past project metrics allows teams to identify inefficiencies and improve future project execution.

Application in Real Projects

- EVM in Software Development: Tracks budget & schedule performance in Agile projects, identifying scope creep early.
- EVM in IT Consulting: Ensures billing aligns with progress, preventing cost overruns.
- EVM in University Projects: Helps identify delays & allocate resources effectively.
- Version Control with Git: Maintains code history & retrieval for software teams.
- Archived Project Metrics: Analyses defect rates & resolution times to enhance quality.
- Git Feature Branching: Enables efficient collaboration & conflict prevention in team coding projects.

Peer Interactions and Collaboration

During peer discussions, we explored real-world monitoring techniques. One peer shared their internship experience using EVM in JIRA for real-time budget and schedule tracking. Another highlighted challenges in baseline estimations for academic projects due to unexpected delays. We also debated Git version control, where a peer explained how structured branching improved code integration and reduced conflicts. These insights enhanced my understanding of project monitoring and closure strategies across different project scales.

Challenges Faced and Solutions Implemented

- Applying EVM in Realistic Project Scenarios
 - While the theoretical foundation of EVM was clear, applying it in a real-world project seemed complex. The challenge was in estimating accurate baseline values and interpreting variance data effectively.
 - To address this, I created a small-scale sample project in Microsoft Project and practiced tracking costs and schedules to get hands-on experience.
- Managing Source Code Versions in Team-Based Projects
 - In software development, working on team-based projects presents challenges in maintaining code consistency and avoiding merge conflicts.
 - To improve collaboration, I experimented with GitFlow methodology, which helped structure contributions and reduce conflicts during integration.

Time Management Strategies and Improvements

- This week, I dedicated significant time to studying and revising the topics covered in lectures in preparation for the upcoming exam. I allocated approximately 12 hours to practice examples of cost estimating models, focusing on developing a deeper understanding of their application in real-world scenarios.
- Additionally, I dedicated approximately 8 hours to studying these chapters, including readings, lectures, and discussions.
- Moving forward, I plan to allocate more focused time for hands-on exercises with EVM tools and version control systems, breaking study sessions into smaller, more structured time blocks for better retention.

Personal Development and Professional Growth

- Practiced EVM calculations with sample project data to improve practical understanding.
- Explored version control tutorials, specifically Git workflows for managing collaborative software projects.
- Reviewed case studies on successful and unsuccessful project closures to analyse best practices.
- Attended an online webinar on Agile project management, which deepened my understanding
 of iterative project closure techniques.

Goals for the Next Week

- Apply EVM concepts to a real academic project to improve comprehension.
- Participate in a discussion on challenges in project closure within Agile frameworks.
- Implement Git branching strategies in an academic group project for better version control management.
- Develop a structured study plan for time management, incorporating Pomodoro technique and task prioritization.

References

- Lecture slides (Chapters 7-8) on software project management fundamentals.
- Course Textbook on Software Project Management.
- Case studies on project closure and lessons learned.