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Course: Software Project Management & Software Engineering

Journal URL: https://github.com/hardeep809/SoftwareProjectManagement

Dates Range of Activities: October 6 - November 2

Date of the Journal: 2 November

Key Concepts Learned

1. **Configuration Management**

- By systematically handling change requests and product versions, CM maintains project discipline and order. Configuration identification, control, status accounting, and auditing are essential elements.
- Learned about the risks of uncontrolled change, such as rewriting or deploying incorrect code versions, and the importance of traceability.

2. **Project Planning**

- Some techniques explored like *Work Breakdown Structure (WBS)* and *Critical Path Method (CPM)* for task scheduling and resource allocation.
- Got to know about the necessity of contingency plans and how planning is iterative, with inputs constantly refined.

3. **Project Monitoring & Control**

- Monitoring involves maintaining checks on performance using benchmarks and methods such as Earned Value Management (EVM) for schedule and budget violation.
- When placed special emphasis on corrective measures for deviations, like resource reallocation or re-planning.

Application in Real Projects

- **Configuration Management:** By formally expressing change requests and making sure that only authorized changes are implemented, CM can be used to control scope creep in software development projects**.**
- **Project Planning:** Using WBS in agile settings promotes effective sprint organization. For instance, resource usage is enhanced when user stories are divided into manageable tasks.
- **Monitoring & Control:** To prevent budget overruns, EVM can be used to follow a software release schedule, compare planned and actual performance, and make necessary adjustments.

The suggested creative application of AI to automate CM work and anticipate any schedule disruptions was the challenging component. Peer Interactions

- Participated in a peer group where we analyzed project planning case studies. A significant insight was learning how peers handled resource allocation in agile projects.
- Discussed EVM applications with a peer who shared a practical scenario from their internship, enhancing my understanding of project tracking.

- *Challenging Component*: Peer feedback helped refine my grasp on CPM and understanding task dependencies better.

Challenges Faced

- Initial confusion about the intricacies of EVM, particularly in calculating variances.
- Understanding how to structure a change control policy was challenging; additional examples from peers helped clarify.
- *Challenging Component*: Required extra practice with resource leveling techniques to solidify my understanding.

Personal Development Activities

- Attended a workshop on resource management, learning strategies for efficient team allocation.
- Practiced using project management software to apply concepts from Chapters 5-7, which deepened my practical skills.
- *Challenging Component*: This helped in visualizing project metrics better and provided a hands-on approach to planning.

Goals for the Next Week

1. Focus on mastering risk management strategies in software projects.
2. Work through real-world case studies involving EVM.
3. Collaborate more actively in study groups for better understanding of task dependencies.

Challenging Component: Goals are aligned with practical applications and focus on continuous improvement, enhancing my readiness for real-world scenarios.

Final Reflections

Overall Course Impact

The course has refined my project management skills, emphasizing proactive planning and robust change control. My approach to managing project uncertainty has transformed significantly, with a deeper understanding of structured frameworks like CM.

Application in Professional Life

Skills like EVM and WBS will be invaluable in my career, particularly in managing software development lifecycles efficiently. I envision using these techniques to optimize resource use and handle project changes systematically.

Peer Collaboration Insights

Collaborating with peers has been instrumental. Specific discussions on planning and EVM provided fresh perspectives, significantly improving my problem-solving approach.

Personal Growth

This course has boosted my confidence in handling complex projects and improved my strategic thinking. I have become more disciplined in planning and tracking progress, with noticeable improvements in my organizational skills.