Learning Journal – Week 4

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Course: Software Project Management

Journal URL: https://github.com/Amanpreet1304/SOEN6841-Software_Project_Management

Dates Rage of activities: 6th March 2025 – 15th March 2025

Date of the journal: 14th March 2025

Key Concepts Learned:

This week, I explored **Project Monitoring & Control** and **Project Closure**, which are essential for tracking progress, ensuring corrective actions, and finalizing projects effectively. Key takeaways include:

- **Project Monitoring & Control:**
  - Ensures continuous tracking of project performance and corrective actions when deviations occur.
  - Key areas monitored include cost, schedule, scope, risk, and team performance.
  - Tools like **Earned Value Analysis (EVA)** and **S-Curve Analysis** help measure project health.
- **Project Control Measures:**
  - Reallocating resources, adjusting schedules, or revising scope if deviations arise.
  - Avoiding scope creep by implementing change control processes.
  - Using **Gantt charts & Critical Path Method (CPM)** to track task dependencies and scheduling bottlenecks.
- **Project Closure:**
  - Ensures final deliverables are completed, approved, and archived.
  - **Post-implementation reviews** assess project success and document lessons learned. Proper knowledge transfer ensures smooth transition to maintenance teams.
- **Challenges in Closure:**
  - Common issues include incomplete documentation, unresolved defects, and lack of formal acceptance.
  - **Solution:** Maintain a centralized repository for documentation and conduct structured handover meetings.

Application in Real Projects:

The learned concepts can be applied to our project - Intelligent Tutoring System or any real time project as follows:

- **Applying Project Monitoring Strategies:**

- We plan to use **Gantt charts** to track the development of key modules: Adaptive Learning, Student Analytics, and AI-Based Tutoring. **Earned Value Analysis (EVA)** will help measure progress against planned budgets and effort estimates.
- **Change Control & Risk Monitoring:**
  - Any change requests (adding new reporting features) will require formal review and approval before implementation.
  - Scope creep will be managed using a change control board to evaluate impact.
- **Project Closure Planning:**
  - The final version of the ITS software will be archived in GitHub, ensuring version control for future updates.

Peer Interactions:

- **Discussion on Project Monitoring Techniques:**
  - Compared **Earned Value Analysis (EVA)** with **S-Curve Analysis** to decide the best monitoring approach for ITS.
  - Some team members preferred EVA for tracking cost and effort, while others found S-Curve more useful for visualizing progress trends.
- **Debating Challenges in Project Closure:**
  - Discussed why many IT projects struggle with incomplete documentation at closure. Shared strategies to ensure proper knowledge transfer.

Challenges Faced:

- Initially, I struggled with defining Closure Criteria as it was unclear what final deliverables should be archived. Resolved by creating a **project closure checklist**.
- Handling scope changes without affecting the deadline was challenging. Decided to implement a **"Must-Have vs. Nice-to-Have" approach** to prioritize only critical changes.

Personal development activities:

- **Explored Real-World Case Studies on Project Monitoring:**
  - Analyzed how NASA used Critical Path Method (CPM) in the Mars Rover mission to manage high-risk tasks.
  - Learned how Amazon tracks project performance using EVM for cost control.
- **Practiced Using Jira for Change Management:**
  - Created sample **change request workflows** in Jira to understand how real companies track approvals.
- **Reviewed Closure Reports from Past IT Projects:**
  - Studied real project closure documents to understand common pitfalls and best practices.

Goals for the Next Week:

- Implement project monitoring strategies (Gantt Charts, EVA) for ITS
- Create a closure checklist for the ITS project to ensure smooth transition.
- Review case studies on IT project failures due to poor closure management.