## **Learning Journal Template**

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**Course:** Software Project Management

Journal URL: https://github.com/Nikitakhera01/SPM.git

**Week 1:** 18 Feb – 09 Mar

Date: 09 Mar

## **Key Concepts Learned:**

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1. Project Monitoring

- Project monitoring involves tracking project progress, identifying deviations, and taking corrective actions to ensure successful project delivery within the set parameters.
- Track Progress Against Plan: Regularly monitor project progress against the initial plan, identifying any deviations and taking corrective actions to ensure alignment with project objectives.
- Measure Performance: Utilize performance indicators and status reports to measure task progress, resource utilization, and overall project performance, facilitating informed decision-making and adjustments as necessary.
- Identify and Address Risks: Continuously monitor for potential risks and issues, implementing mitigation strategies to minimize their impact on project outcomes and ensure timely delivery.
- Ensure Schedule Adherence: Monitor project schedule closely, comparing actual progress with the planned timeline, and adjusting strategies to mitigate schedule risks and maintain alignment with project milestones.
- Communication: Maintain transparent communication with stakeholders, provide regular updates on project status, deviations, and adjustments, fostering collaboration and accountability among team members for successful project execution.

# 2. Project Control & its Techniques

These are techniques used in project control:

- Resource Leveling: Balancing resource demand and capacity to prevent overallocation and ensure efficient resource utilization.
- Schedule Optimization: Adjusting project schedules to minimize delays and maximize efficiency, often through techniques like critical path analysis.

- Corrective Actions against Deviations: Implementing measures to address deviations from the project plan or expected progress, ensuring the project remains on track.
- Corrective Actions against Issues: Taking corrective measures to resolve project issues promptly, minimizing their impact on project delivery and outcomes.
- Resource Optimization: Optimizing resource utilization to enhance project efficiency and effectiveness, ensuring that resources are allocated appropriately to meet project demands.

## 3. Project Monitoring & Control Artifacts

Project monitoring and control utilize various artifacts to ensure project success despite potential setbacks.

- Schedule Artifacts: PERT/CPM charts, network diagrams, resource charts, and Earned Value Management (EVM) data.
- Cost Artifacts: Budget analysis, resource optimization reports, and EVM data.
- Quality Artifacts: Requirement document reviews, design document reviews, source code reviews, test cycle logs, etc.

## 4. Project Monitoring & Control in Iterative Model

- Project monitoring and control in iterative development projects primarily center around managing small iterations, adapting to changes in requirements, and adjusting project plans accordingly.
- Measuring performance based on feature points delivered and defects found per iteration helps to ensure project success and manage risks effectively.
- Risks are addressed through time boxing iterations, addressing issues early on, and maintaining a stable environment.

#### **Reflections on Case Study:**

- Case studies give real life examples of implementing a software project management to fulfil the needs of the organization.
- These concepts help to better understand what problems are going to occur during implementing it in real life.
- It gives some useful insights how to use budget and resources to its fullest.
- Project planning case studies also gives a deep understanding of iteration cycle from identifying tasks to resource allocation, and after receiving feedback, repeat this cycle until you get quality product.
- Project monitoring and control techniques should be used to ensure that the software development is progressing in the right direction and is not deviating from its goal.

#### **Collaborative Learning:**

- During the last 3 weeks, I had meetings with my team members. We worked on our second submission of the project.
- We shared different ideas to make our system more effective and user friendly.
- We identified what other systems lack, and then add all those features to give a better solution.
- We learnt about how to do feasibility study, risk assessment, budget planning and make a project plan for the successful development of the software. It also enhances team bonding and communication.
- We divided tasks among team members based on our individual strengths and interests.
- Class interactions are also very engaging, both with the professor and other students.

## **Further Research/Readings:**

As I started working on the project, I went through many different resources online. It helps me understand how project management works, how to start a project. Right from the market analysis to development to maintenance & control. I'm working on a volunteer service platform, so I went through at least 20 websites. I did all the market analysis, discover other existing platforms, their pros & cons, and then finalise our system's scope and objectives. After that, I started learnt about the feasibility study, budgeting and risk assessment. Also, I collaboratively worked with my team to make a project plan for our software and got to know about how project development works from initiation to closure.

#### **Challenges Faced:**

- Managing the time among teammates is the biggest of all.
- Brainstorming sessions for the project and getting to a conclusion was a little tiring.
- Balancing multiple assignments, classes, and other responsibilities was a task.
- It was challenging to allocate sufficient time to read and write for the journal.
- Research on the course topics and project was time consuming.

#### **Adjustments to Goals:**

- Managed everything well this week, will continue to work on that.
- Reading and writing journal is becoming easy with weekly practice.
- I'll work more on personal development activities.
- From next week, I'll try to give more time for challenging subjects, and will start reviewing class notes before coming to class.
- Work on the projects and assignments.
- Prepare for the finals.