

# **SOEN 6841 - Software Project Management**

## **Final Learning Journal**

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**Course** - SOEN 6841[Software Project Management]

**Journal URL** - <https://github.com/KarthikDurai98/Karthik-SOEN-6841-SPM-Weekly-Journal>

### **Overall Course Impact:**

This course broadened my understanding of managing software projects. I gained in depth knowledge on various key concepts and methodologies in software project management such as project planning, requirements engineering, software development methodologies, quality assurance, software maintenance, risk management, budget allocation etc... I can confidently say that I can manage the project right from scratch to deployment. I learned about various software development methodologies, including Agile and Waterfall, which equipped me with the knowledge to adapt to different project requirements effectively. I understood the importance of problem identification, market analysis, budget allocation, risk management through this course because these are some of the important factors for the success of any software project. Also I worked on real time software project with my group where I use all my theoretical knowledge into practical application. We have developed a comprehensive budget plan, identified the existing problem statement, proposed a feasible solution. This project really helped a lot on how to understand the management side of project apart from development. Also I got to know about the roles and responsibilities of a project manager, how to plan and organise a software project right from requirement phase to release and maintenance with accurate planning of budget, resource and risk mitigation. So, this course has provided me with a solid foundation in project management, which will help me to step into various roles such as product manager, scrum master, project manager, team lead, and more.

### **Application in Professional Life:**

The knowledge I have gained in this course will help me a lot to my professional life as a Software Developer / Product Manager. I can see myself using these skills in various projects, whether it's a new application or upgrading an existing application. I can now approach projects with clear understanding of the user needs, problem identification, market analysis techniques which I have learned. I will explain some of the key concepts I learned in this course that will help in my professional life.

### **- Problem Identification and Solution Proposal:**

In today's digital era, it is important to identify software related problems and propose a effective and feasible solution for maintaining product quality and user satisfaction. By using problem solving

frameworks, I can systematically analyze issues and find solutions that align with organizational goals.

#### **- Market Analysis and Feasibility Study:**

Thorough market analyses and feasibility studies are essential for ensuring that software projects align with market demands and objectives. By conducting comprehensive market research, I can understand user needs, competitor offerings, and industry trends.

#### **- Budget Allocation and Resource Management:**

Effective budget allocation and resource management are critical for optimizing project outcomes and maximizing return on investment. By estimating project budgets, allocating funds to different project phases, and monitoring expenses, I can ensure that projects are delivered within budget constraints while meeting quality and performance standards.

#### **- Risk Management and Mitigation:**

Risk management is essential for identifying, assessing, and mitigating potential challenges and uncertainties associated with software projects. By conducting thorough risk assessments and developing risk mitigation strategies, I can find and address potential issues before they escalate, thus maximizing project success and satisfy customer's requirements.

#### **Peer Collaboration Insights:**

In this course, I had lot of interaction with my classmates, team members. Also during lecture time, class was very interactive and professor asked us some scenario based questions related to Software Project Management and it was very interesting and helpful to me. The group project which I done helped a lot to understand the practical side of project management. In this project, we developed an innovative solution for integrating Augmented Reality (AR) technology into museum settings. In this project, we explored various aspects of AR technology and its applications in traditional museum. Each team member brought distinct skills and perspectives, enabling us to approach the project from multiple angles and consider diverse stakeholder interests. We brainstormed innovative solutions, discussed strategies on how to develop AR Museum to the visitors. This project also helped to gain skills in Augmented Reality and how to convert a existing project into AR setup. We used project management tools like Jira for task allocation and communication so that each team member could contribute meaningfully to the project. Also we used GitHub for setting up the project repository, allowing us to work together easily.

Apart from the project, I also participated in Posterathon on the topic "How to effectively manage large teams?". This helped me to analyse how different organisation manage their teams, what are some successful techniques followed by the organisations. My team reviewed various case studies, research papers and gathered insights into the unique challenges and opportunities associated with managing large teams effectively. Our poster showcased innovative approaches to address common issues such as coordination, resource allocation, accountability within large teams. Also, I had the

opportunity to attend other teams' posterathon, which enabled me to interact with them, provide suggestions, receive feedback, and gained valuable learning experiences. Overall this course really helped me to work as a team, helped me to use various project management tools, interact with other classmates and discuss regarding various topics of software project management. Overall, this course helped in shaping my ability to work within a team environment, broadened my understanding of software project management.

### **Personal Growth:**

By taking this course, I can identify several areas where I have experienced significant improvement and development. Prior to this course, my participation in software projects lacked structured techniques or tools for managing our work effectively. However, with the knowledge gained from this course, I successfully integrated various project management tools into our projects, such as Jira and Trello, enhancing our workflow efficiency. Also we followed Agile methodology in our project and can see the significant improvement in our delivery timeline, team collaboration.

I also participated in various workshops organised by the university related to ML/AI, data analysis which helped me deepen my skills and knowledge on those domains. Also I volunteered some events where I was able to meet new people, improved my communication skills. I participated in networking events through which I connected with professionals, alumni and employers. This helped me for my professional growth. I also attended a webinar on “Mastering the public speaking skill”. It helped a lot to break my barrier to speak in front of public with confidence. Also I am planning to attend more webinars in the upcoming weeks.

Overall SOEN 6841 - Software Project Management helped me to understand the management side of the product development in depth and also learned some of the important concepts like requirement gathering from clients, budget allocation, market analysis, resource management, risk management, product release and maintenance. These learnings have not only deepened my theoretical knowledge but have also equipped me with practical skills that I can apply in both personal and professional projects.