

## Learning Journal 1

**Student Name:** Alay Parikh

**Course:** Software Project Management (SOEN 6841 )

**Journal URL:** <https://github.com/parikhalay/Software-Project-Management>

**Dates Range of activities:** 9<sup>th</sup> September 2024 to 20<sup>th</sup> September 2024

**Date of the journal:** 21<sup>st</sup> September 2024

Key Concepts Learned:	Application in Real Projects:	Peer Interactions:	Challenges Faced:	Personal development activities:	Goals for the Next Week:
<b>Week 1:</b> <ul style="list-style-type: none"><li>• <b>Project Definition:</b> Differentiates from other disciplines by its temporary and unique nature.</li><li>• <b>Project Management:</b> Involves subprocesses and phases from requirements management to software maintenance.</li><li>• <b>Project Lifecycle:</b> Covers phases like initiation, design, development, and maintenance.</li><li>• <b>Initiation Tasks:</b> Includes schedule estimates, project charter, and cost estimation.</li><li>• <b>Software Product Initiation:</b> Involves market analysis, development estimates, feature planning, and delivery.</li></ul>	<ul style="list-style-type: none"><li>• Project management applies to any project, guiding development and release phases.</li><li>• <b>Example:</b> CRM software launch follows design, development, testing, and maintenance.</li><li>• It covers scheduling, risk, and quality management.</li><li>• Initiation includes schedule estimates, project charter, and costs.</li><li>• <b>Software tasks:</b> Market analysis, estimates, feature definition, and success metrics.</li></ul>	<ul style="list-style-type: none"><li>• Interaction about case study and software project management concepts, its importance and role of project management.</li></ul>	<ul style="list-style-type: none"><li>• Project management concepts were easy to understand this week.</li><li>• Introduced to the steps involved in the project initiation process.</li><li>• A practical approach would enhance understanding of these concepts.</li><li>• Expect to implement these concepts in an upcoming course project.</li></ul>	<ul style="list-style-type: none"><li>• I am pursuing a MERN stack project development course to enhance my skills in full-stack development and software project management. This course provides hands-on experience with the project lifecycle, modern development methodologies, and problem-solving, enabling me to effectively manage technical tasks, improve coordination, and oversee future software projects successfully.</li></ul>	<ul style="list-style-type: none"><li>• Goals for next week would be to go through the course book and learn the concepts.</li></ul>

<p><b>Week 2:</b></p> <ul style="list-style-type: none"> <li>• <b>Effort Estimation:</b> Key in the design phase to guide project development.</li> <li>• <b>Estimation by Analogy:</b> Uses past project data with a multiplication factor for effort estimation.</li> <li>• <b>Expert Judgment:</b> Relies on team experience for effort estimates.</li> <li>• <b>Function Point Analysis (FPA):</b> Measures software based on user features, calculating Unadjusted Function Points (UFP) from five types: ILF, EIF, EI.</li> <li>• <b>Delphi Method:</b> Estimates effort through collective expert input.</li> <li>• <b>COCOMO2 Cost Modelling:</b> Algorithmic model with sub-models like application composition, early design, reuse, and post-architecture.</li> <li>• <b>Key Terms:</b> COCOMO2, Algorithmic Cost Modelling, FPA, Delphi, UFP.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Effort Estimation:</b> The team uses Analogy and Expert Judgment to estimate effort based on past projects and expert input.</li> <li>• <b>Function Point Analysis (FPA):</b> Five function types (ILF, EIF, EI, EO, EQ) are counted to calculate Unadjusted Function Points (UFP) for user-focused software features.</li> <li>• <b>COCOMO2 Cost Modeling:</b> COCOMO2's sub-models (Application Composition, Early Design, Reuse, Post Architecture) improve cost estimation throughout the project.</li> </ul>	<ul style="list-style-type: none"> <li>• Interaction about various cost estimation methods and how project managers determine the most suitable approach.</li> <li>• Insights into effective project cost estimation.</li> </ul>	<ul style="list-style-type: none"> <li>• I concentrated on grasping effort estimation techniques like Function Point Analysis, COCOMO, and Wide Band Delphi, along with resource allocation concepts and loading factors for optimizing workforce capacity.</li> <li>• I realized these topics required further clarification and effort to fully understand and apply in project planning and management.</li> </ul>	<ul style="list-style-type: none"> <li>• Engaged in learning sessions with classmate, focused on effort estimation techniques like FPA, COCOMO, and Wide Band Delphi to enhance my project planning skills.</li> </ul>	<ul style="list-style-type: none"> <li>• To read the next chapter and to start working on project initiation and market analysis.</li> </ul>
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