**Student Name:** Anubhav Mahajan (40267770)

**Course:** SOEN 6841

**Journal URL:** https://github.com/anubhavm101/SPM-Learning-Journal

**Dates Rage of activities:** 21-Sept-2024 to 04-Oct-2024

**Date of the journal:** 05-Oct-2024

**Key Concepts Learned:**

1. Experience-based Techniques: Using the knowledge of experts to estimate effort based on past similar projects.
2. Algorithmic Cost Modeling: Employing formulas based on product attributes (e.g., size) and process characteristics.
3. Estimation by Analogy: Comparing the new project with previous ones using a multiplier factor for similarity.
4. COCOMO (Constructive Cost Model): An empirical model using project experience to estimate development effort.
5. Function Point Analysis: Measures the functionality provided to the user based on logical design.
6. Risk Identification: Recognizing potential risks (technical, legal, schedule, etc.) at the start and reassessing them in iterations.
7. Risk Analysis: Evaluating the likelihood and impact (qualitatively and quantitatively).
8. Risk Prioritization: Prioritizing risks based on severity and probability to determine focus areas.
9. Risk Response Strategies: Acceptance, avoidance, transference, and mitigation.
10. Risk Control: Developing strategies to minimize the impact and probability of risks through planning, resolution, and continuous monitoring.

**Application in Real Projects:**

1. Effort and Cost Estimation: Apply during project planning to create accurate budgets and timelines, ensuring resource alignment and preventing overruns.
2. Risk Management: Essential for projects with new technologies or uncertainty to proactively mitigate issues and maintain project stability.

**Peer Interactions:**

1. Pitch Preparation and Presentation: During the Class, I presented a pitch outlining the project’s core objectives and potential impact. The feedback received on my delivery style from my group mates and few classmates helped refine my presentation skills, making my message clearer and more impactful.
2. Market Analysis Insights: Collaborating with peers on the market analysis highlighted new angles, such as competitor strategies and niche opportunities, that I hadn’t initially considered. These discussions broadened my understanding and enabled a more comprehensive market evaluation.

**Challenges Faced:**

1. Effort Estimation Accuracy: Accurately estimating effort for unfamiliar technologies was challenging, often leading to discrepancies. More data and expert input are needed for improved accuracy.
2. Complexity of Risk Assessment: Prioritizing risks effectively was difficult, highlighting the need for clarification on quantitative vs. qualitative analysis methods.
3. Collaboration Dynamics: Integrating diverse peer perspectives into cohesive analyses proved challenging. I need clearer communication strategies to better synthesize feedback.

**Personal development activities:**

1. Problem Initiation and Market Analysis: I studied the significance of problem initiation and market analysis, which deepened my understanding of identifying project challenges and aligning solutions with market needs, ultimately informing my project strategy.
2. Engaged in group discussions and collaborative activities with peers, which improved my communication skills and allowed me to gain diverse perspectives on project challenges.
3. Pitch Presentation: Delivered a pitch for my project, which enhanced my presentation skills and boosted my confidence in articulating project objectives and value to stakeholders.

**Goals for the Next Week:**

1. **Enhance Risk Management Skills:** Review and analyze different risk management frameworks in software projects to apply effective strategies in my ongoing projects.
2. **Improve Presentation Abilities:** Focus on enhancing my presentation skills by practicing delivery techniques and receiving feedback from peers. This will strengthen my ability to communicate project objectives clearly and confidently in future discussions.