**Week 1 – Learning Journal**

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**Course:** Software Project Management

**Journal URL:** https://github.com/KarthikCU1054/SOEN\_6841

**Week 1:** 18th 2024 – 24th Jan 2024

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**Key Concepts Learned:**

* **Project Management and Software Project Management**: How software project management is a specialized subset of project management, the combination of general project management principles with software engineering principles to efficiently develop and maintain software products. This integration aims to optimize resource utilization, minimize costs, and ensure timely delivery while adhering to high-quality software development practices.
* **The importance of software projects**: The way IT and Software Industry has become a necessity in more than the ways that we can think about. The important role that it plays in global economy and current society.
* **The various problems and hurdles faced while managing a project**: There are many problems which could disrupt a phase of the project or the whole project combined. Such problems include of lack of skills, tools and techniques, ambiguous goals and requirements and so on. The earlier these problems are taken care of; it is more likely to meet the customer satisfaction and reach the end goal.
* **A small introduction on how to become a successful software project manager**: Using technology and human involvement, project management can be made efficient, minimize errors and ensure that there are measurable outputs.
* **The process of managing a project**: Each stage in the process of software engineering is dependent on its successor stage. Preferably in software engineering, Iterative Development Models are more effective than the Waterfall Model. An example of iterative model is Agile Model and Extreme Programming.
* **Change Management and Version Control Management**: This involves on how to handle the change requirements, implementation of new features, handling bugs and many other artifacts as the development continues.
* **Management Metrics**: How the software project manager calculates or evaluates the progress of the project at each stage from project initiation till the project closure.
* **Project Charter and Project Scope:** The way Project Charter and Project Scope are written or defined could either lead to success or failure of a project. The rate of success can be increased with defining goals that are realistic.
* **Estimation of Project Metrics:** Estimation of elements like project size, effort, costs and schedules are necessary to initiate a good Project plan. This could help in identifying a lot of missing elements or requirements before even starting of the project and this will help in success.
* **Initial Project Plan and Project Initiation:** Creating an initial project plan will help stakeholders to understand how the software engineering team’s approach towards the software development. Here the stakeholders feedback is needed and will be helpful in altering the process of development to ensure the success of the project.

**Application in Real Projects:**

* The tracking, evaluating, predicting and many other important aspects of a project can be collected for various objectives which may be related to the project, the company that is developing or the stake holders. Such data can help in predicting the success rate and failure rate of a project, which can be further used to improve or control the damage that has been made or yet whilst the software is being engineered.

**Peer Interactions:**

* N/A.

**Challenges Faced:**

* Understanding and differentiating few concepts like Project charter, Project Scope and Project Objectives. Case studies helped in understanding of these concepts in a much clearer manner.

**Personal development activities:**

* Starting of Learning Journal was a great development activity, which motivated in implementation of a personal journal and maintaining a calendar for courses and other personal matters.

**Goals for the Next Week:**

* Improve on the speed of learning and time managing.
* Making sure to relate topics in real life for better understanding of the concepts taught.