Learning Journal Week 2

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Course: Software Project Management

Journal URL: https://github.com/raemonx/SOEN6841/tree/main

Week 1: 28 January – 3 February

Date: 2 February, 3 February

Key Concepts Learned:

❖ In continuation to previous week's lecture , I learned about accurate project estimation and its importance.

❖ Also, predicting financial and time investments accurately is an important criterion for a successful software project initiation.

❖ Effort Estimation Techniques were also discussed such as

➢ COCOMO Model: mostly used when current project data is available but no data on past projects.

➢ Function Point Analysis (FPA): Mainly suitable for projects with both current and historical data.

➢ Wide Band Delphi: When all of the data is available for the current project.

❖ Cost Estimation is done by converting the effort estimate into costs for the project. It may include direct or indirect costs.

❖ Schedule estimation is needed as it cannot be correlated to effort –

➢ Critical Path Method (CPM)

➢ Program Evaluation and Review Technique (PERT)

❖ Resource estimation is an important task to utilize the personnel appropriately.

❖ Key concepts - Accurate Effort and Cost Estimation , Cost Estimation Methods, Activity-Based Costing, PERT, CPM, Resource Estimation, Risk Management in Estimations, Continuous Development Cycle, Software Productivity Metrics.

❖ New methodologies discussed - COCOMO Model, Function Point Analysis (FPA), Wide Band Delphi Technique

Application in Real Projects:

❖ A number of estimation techniques are also used such as in –

➢ Agile – Story points, Planning Poker, T-shirt Sizing, Velocity etc.

➢ Waterfall - Top-Down, Bottom-up, Expert Judgement ,Analogous Estimation etc.

❖ Also, AI is playing a huge role in helping generate project estimation.

Peer Interactions:

❖ We discussed about how Agile uses flexible techniques like Story Points, while Waterfall prefers structured methods like Top-Down estimation.

❖ We Discussed about why accurate estimations are crucial for setting realistic project expectations to avoid budget issues

Challenges Faced:

❖ I faced challenge in doing the FPA analysis.

❖ Also faced understanding how PERT technique is performed.

Personal development activities:

❖ I studied the SaaS case to understand the role of estimation in project outcomes. It also showed the process of revising estimates as more information becomes available.

❖ I researched about the different estimation models used nowadays in projects.

Goals for the Next Week:

❖ Since this week I focused mostly on project estimation and scheduling, I will be focussing on risk management in software project development which was discussed in the lecture this week.

❖ Read the case study for the risk management chapter to better understand how risk is managed in a project.