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**Course:** SOEN 6841 Software Project Management

**Journal URL:** <https://github.com/Priyanshu7175/SPM.git>

Week 2: (28 Jan - 3 Feb)

Date: 2 Feb 2024

**Key Concepts Learned:**

-This week we covered chapter 3 which has the topic of **effort and cost estimation**.

Softwares in general are **a product of effort** and as there is human effort and skill involved but estimating effort which is intangible in nature makes the task difficult.The estimation techniques used to measure effort are experience based and algorithmic cost models

**Experience based models** are estimates made using the past experiences in any project. The technique mentioned is Function point analysis(FPA) . It gives a standard method by using user requests and receive.The problem with this model is it is not universally applicable and a new project in which no experience is there can be evaluated.

**Algorithm cost models** is an algorithm based concept which uses product, project and process attributes to estimate the cost for the software project.These are very complex models and are very difficult to use, moreover many attributes are uncertain.So the use case is very limited.

**COCOMO** Cost Modelling(Constructive Cost Model)the timeline of the project from 1981 to 1995 COCOMO 2.It has a range of sub models like application composition model,early design model,reuse model and post architecture model give a detailed software estimate.COCOMO model assumes the estimate based on LOC(Lines of Code) the next feature COCOMO 2 estimates on the basis of different stages of a software.

**Reflections on Case Study/course work:**

-The case study shows how a Saas vendor works with incremental development.The estimation of the project was $3.2 mil and LOC(5,00,000) by strategic team scaling from 22 to 50 the cost in total would go down to 320000 LOC. This reflects balanced strategy and allocation of resources at the early stage so the estimate can be decreased.

-The course work helps in evaluating the cost estimation techniques and understanding how software is linked with human efforts.

**Collaborative Learning:**

-We had a team meeting where the roles and responsibility of every individual was decided and the tasks and objectives were decided.The first objective for everyone was to take a Financial Literacy App and start the market analysis on the same.

-We also discussed all the topics discussed in last class.

**Further Research/Readings:**

-Read Barry W. Boehm ‘s "COCOMO II: Model Definition Manual" is a manual/book that provides descriptions of the COCOMO (Constructive Cost Model) approach for estimating software development effort and cost. It explains various sub-models within COCOMO II, required for each part in SDLC. It explains all the factors influencing estimation, at stages like application composition, early design, reuse, and post-architecture considerations. It gives a lot of information on the COCOMO model.

**Adjustments to Goals:**

-Market Analysis for the apps PocketGuard and Acorns to check for opportunities or problems in the apps

-Read Chapter 4