Intro. To Software Engineering

## Fall 2012 Term Project Requirements

Software engineering is concerned with the methods, tools, and techniques used to develop and maintain computer software. An appreciation for, and understanding of, software engineering concepts is best gained by applying then to a real software project.

Participation as member of a software team is an essential component of the term project. Project teams of 3-4 members should be organized. Each team must have an organizational structure. Possible structures are democratic team, the chief programmer

team, etc (see Chapter 22 – section 3.2). Regardless of the organizational structure chosen, it is essential that each team have a well-defined team structure, and each team have a designated leader at all times.

Each team and all team members should maintain a log of time spent on project activity. The log should be broken into categories as reading, preparing specifications, attending meetings, documentation, etc. Each entry in the log should be annotated with comments. At the end of the semester, the log will provide you (and your instructor) with a valuable perspective.

A term project will be provided shortly. Before starting the project make sure that goals of project are clearly understood.

The following are the list of project deliverables and their values:

1. (87) A system Definition consisting of product definition and a preliminary project plan. 5% .
2. A software requirements specification – Object-Oriented methods . 20%.
3. A project plan. 10% .
4. A design document consisting of external design, architectural design, and detailed design specifications. Object-Oriented methods 17% .
5. A user's manual. 3% ..
6. A testing and validation document 8%
7. A proper debugged, and tested software. 25 % .
8. A project legacy continuing: activity log(s), technical and managerial lessons learned 2%.
9. A professionally documented revised/enhanced compilation of all documents. 2%

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To do this team-project we take a step-by-step approach and results of each step are due once we have covered the related chapters (due dates are in class schedule). Using this approach and breaking down the solution to smaller pieces simplifies the development process.

We are following IEEE Standards on Software engineering. Each team will receive a copy of IEEE standard guideline for each phase. Also, each team will receive an example of previous projects. These examples are supplementary to the lectures and book guidelines.