95-706

Lecture 7

Project Management Classes

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Agenda

- Class Topics
- Homeworks
- Final Exam
- Project Assignment and Milestones

Class Topics

- March 13th (Today)
  - Overview of remainder of semester
  - Initial description of Project 4
- March 15th
  - Gene Milik, SEI
    - Need for software process
    - Capability Maturity Model (CMM)
- March 20th
  - Project 4 Client Visit and Interview
- March 22nd
  - Cockburn, Chapter 2
- March 27th and 29th
  - Spring Vacation

Class Topics -- II

- April 3rd
  - Trish Oberndorf, SEI
  - Gotchas when using COTS
- April 5th
  - Cockburn, Chapter 3
- April 10th
  - Cockburn, Chapter 4
- April 12th
  - Cockburn, Chapter 5
  - Preparation for Kay Video
- April 17th
  - Alan Kay Presentation Video
- April 19th
  - Discussion of Kay Video

Class Topics -- III

- April 24th
  - Linda Northrop, SEI
  - Architecture of Object Oriented Systems
- April 26th
  - Cockburn, Chapter 6
- May 1st
  - Cockburn, Chapter 7 (lightly)
- May 3rd
  - Cockburn, Chapter 8 (lightly)

Homeworks

- Each assignment consists of:
  - Reading a Chapter of Cockburn
  - Turning in written answers to questions about the chapter
  - Preparing two questions for discussion in class
    - Ask for further explanation of parts of the text
    - Ask about applying the text to real situations
- March 22nd -- Chapter 2
- April 5th -- Chapter 3
- April 10th -- Chapter 4
- April 12th -- Chapter 5
- April 26th -- Chapter 6
- May 1st -- Chapter 7 (lightly)
- May 3rd -- Chapter 8 (lightly)

Final Exam

- Term paper of up to 15 pages.
  - 8.5" by 11" paper
  - 1" margins on all sides
  - 10 point type set on 12 point lines
  - Use some form of emphasis for headings
- Paper will address
  - Speaker presentations
  - Readings in Cockburn
  - Experiences in your Project Teams
- A broad general topic will be assigned
  - Bring in material from the above sources
  - Organize the material we discussed.
- Due Friday, May 5th at 5:00 pm
  - No extensions -- registrar's rule

Project 4

- Team Project
  - Teams will be assigned
  - 5 Milestones
- Warning
  - Completing the last milestone can take a lot of time
  - Start working on it before the previous milestone is due
- Single grade for each team's project
- Peer evaluations determine individual grades
- If there is friction in the team
  - Your project is at serious risk
  - Work out the problems as a team or
  - Seek help from the instructor or TAs
  - Pretending the problem doesn't exist is like having cancer and refusing to accept treatment

Project 4 -- II

- Each team is a newly formed company
- Intellectual Property Assets are:
  - skills and knowledge of the team members
  - Sparse Matrix Programs created but the team members
- Project is a software re engineering problem
- Selectively merge the programs on hand
  - create a stronger program
  - clean up mistakes team members made
  - pick the best parts of all the programs
- Interview Client to determine requirements
- Write use cases
  - Some from Problem 1 statement
  - Some from Client Interview

Project 4 -- III

- Create class diagrams
  - from existing software
  - from use cases
  - from client interview
- And links and associations as needed.
- Create Sequence and/or Collaboration Diagrams
  - Based on
    - existing software
    - client requirements
- Create Running skeleton code
  - Each method of each object
    - prints a message that it was called
    - calls each method that is to be called by the object
    - May use Rational Rose Code Generation
  - Compile and Execute Code

Project 4 Milestones

- Due Dates and Descriptions
- Milestone 1 -- March 22nd
  - Assessment of designs and code on hand
- Milestone 2 -- April 5th
  - Use Cases with road map
- Milestone 3 -- Class Diagrams, links and associations
  - April 12th
- Milestone 4 -- April 24th
  - Collaboration and/or Sequence Diagrams
- Milestone 5 -- May 3rd
  - Running Skeleton Code