CSE 70: Software Engineering

• Instructor: Pietro Cicotti (pcicotti@cse.ucsd.edu)
  – OH: Wednesday, 12:00 - 14:00 in EBU3B room 2114
• TA: Kristen Jaskie (kpjaskie@gmail.com)
  – Team meetings: Thursday, 11:00 - 13:15 in EBU3B room B275*
  – Lab hours: Wednesday, 16:00 - 18:00 in EBU3B room B260
• Tutor ??
• Textbook: reader (A.S Soft Reserves)
• Meetings
  – Lectures
  – Labs (mandatory)
• Exams
• Grading
• Web Page: http://cse.ucsd.edu/classes/su08/cse70
  – Read and check regularly for updates.
• **What is Software Engineering?**
  
  – The IEEE Computer Society defines software engineering as:
    1. The application of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software; that is, the application of engineering to software.
    2. The study of approaches as in (1).


• **Objectives**
  
  – Developing non-trivial software systems requires a systematic approach and the use of adequate tools. The goal of this class is to help you understand the critical issues that arise in planning, design, integration, testing, and team coordination in software development.
Project

- IRC client (more on this later)
- Who is the *customer*?
  - Kristen
  - Weekly meetings
    - to evaluate progress
    - define milestones
- Weekly assessment
  - 60% customer perception
  - 40% individual/internal performance
    - practices
    - team member participation and mutual feedback
- Demo
Internet Relay Chat (IRC)

- Text based conferencing
- Protocol defined in RFCs
  - 1459, 2810, 2811, 2813
  - 2812 Client-Protocol
- Client-server architecture
  - Communication one-to-one
  - One-to-many
    - channel
Tools

• Subversion
• Ant
• JUnit
• JMock
• EclEmma
• Concordion
• Eclipse
• Trac
Tools

• Version Control System
  – Centralized shared repository
    • Client/server architecture
  – Controlled access
  – Collaborative editing
  – Versioning models
    • Lock-modify-unlock
    • Copy-modify-merge
  – Subversion
Tools

• Integrated Development Environment
  – Integrates tools for software development
    • E.g. ?
  – Eclipse

• Project Management System
  – Support software project management
    • E.g.?  
  – Trac
Let’s form the teams

• Useful information
  – Availability on customer meeting time
  – Preferred days and times for group work
    • Weekends?
    • Tu-Th
    • M-W-F
    • ...

Base Code

- Minimal graphical IRC Client