Lecture 1: Course Overview

Kenneth M. Anderson
Object-Oriented Analysis and Design
CSCI 6448 - Spring Semester, 2001

CATECS Announcements

• In-Class Students
  – CATECS has a busy studio schedule
    • Be sure to exit promptly so next class can begin on time
  – Food and Drink are not technically allowed
    • Drinks are tolerated
      – as long as you keep the studio clean!

Live-Site Students

• Place speakerphone away from the TV
  – Make sure its pointed away from the TV
• If you have connection problems
  – hang up, wait 15 seconds, then call again
• If your speakerphone has a mute button
  – use it when not talking!

Class Participation

• I expect you to participate!
  – Questions
    • “Stupid questions” -- No such thing
    • “Clarification questions” -- Please do!
  – Discussion
    • “Silent Tomb” -- Not allowed
• CATECS students
  – Live-site students (same as above)
  – Tape students (via e-mail)
The Instructor

- Ken Anderson
  - Office Hours: ECOT 822
    - Wednesdays, 10 AM - 12 PM
    - Or, send me e-mail to set an appointment
  - E-mail
    - <kena@cs.colorado.edu>
  - Phone
    - +1.303.492.6003

The Instructor, continued

- Ken Anderson
  - Mailing Address
    - Dr. Kenneth M. Anderson
    - University of Colorado, Boulder
    - Department of Computer Science
    - 430 UCB
    - Boulder, CO 80309-0430
  - Department FAX
    - +1.303.492.2844

The Instructor, Background

- Assistant Professor
  - Sixth semester, taught 6448 in Fall 1998
  - Ph.D. from University of California, Irvine
- Research Topics
  - Open Hypermedia
  - Software Engineering
- Software Experience
  - Three Systems ranging from 30K-60K LOC

Teaching Philosophy

- “sage-on-stage” vs. “guide-at-your-side”
- lecture vs. participation
- Answering questions
  - Sometimes the answer will be “I don’t know!”
- I welcome comments and questions from students!
- Something new
  - class activity sessions
  - CATECS: do the activities at home, then fast forward tape
Useful URLs

- CATECS
  - <http://www.colorado.edu/ContinuingEducation/CATECS/>
- Computer Science Department
  - <http://www.cs.colorado.edu/>
- Instructor’s Homepage
  - <http://www.cs.colorado.edu/users/kena/>
- Class Homepage
  - <http://www.cs.colorado.edu/~kena/classes/6448/s01/>

About the Class Website

- You have one continuous homework assignment this semester:
  - Check the class website EVERY day
    - Preferably more than once each day
- Website will be your source for
  - Class schedule
  - Homework assignments
  - Pointers to class-related information

Prerequisites

- Background in Basic SE Concepts
  - Software Systems
  - Software Lifecycles
    - Requirements, Design, Implementation, etc.
- Experience with at least one object-oriented programming language
  - Note: I will not be teaching object-oriented programming in this class!

Currently-Planned Course Topics

- Analysis (Requirements)
- OO terminology: objects, classes, etc.
- Design Methods
- Design Patterns
- UML
- Examples of OO Design
  - Let me know if you have OO designs that you can share with the class
Course Evaluation

- Homeworks 30%
- Midterm 30%
- Final 40%
- Total 100%

General Notes on Assignments

- Electronic Submission OK
  - Text or Postscript/PDF formats only
  - If you send an attachment, make sure your name is on the attachment
  - All other formats will be returned ungraded
- CATECS requires the following information on the first page of all assignments; so do I
  - student name, course number, company name, assignment name or number
- Unmarked assignments will be returned ungraded

Homework Assignments

- Format
  - Examine OO topics in more depth
  - Practice the techniques covered in class
- Typically one-week in length
  - (CATECS students will be one week behind)
  - Some assignments may be allocated more time based on difficulty

Course Textbooks

- Object-Oriented Analysis and Design
  - by Mathiassen, Munk-Madsen, Nielsen, and Stage
  - © 2000
  - Start reading chapters one and two
- The Unified Modeling Language (UML) User Guide
  - by “the three amigos”
  - © 1999
Class Goals

- Understand the difference between requirements and design
- Practice the distinct modeling of problems and solutions
- Gain an initial familiarity with a particular set of notations for capturing object-oriented requirements and designs

Discussion Point

- Note: the previous slide had very little to say about “object this” or “object that”
- That’s because OO Analysis and Design is just one way to perform requirements and design
  - When we talk about OO Analysis and Design, we are in fact addressing an age old problem:
    - How do we get from a set of requirements to a solution that meets those requirements?
    - Fred Brooks (read the Mythical Man-Month if you haven’t) classifies these problems as “essential” difficulties

Homework 1

- (This one’s easy)
- Send me an e-mail describing
  - your background
    - including your technical skills
  - why you are taking this class
  - what would you like to learn
- Bonus Point
  - What did you think of my slide format?
    - Too dark? Can you read them in-class or on-tape?