Lecture 1: Course Overview

Kenneth M. Anderson
Object-Oriented Analysis and Design
CSCI 6448 - Spring Semester, 2002

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
    • Feel free to interrupt me!
• CATECS students
  – Live-site students (same as above)
  – Tape students (via e-mail)
The Instructor

• Ken Anderson
  – Office Hours: ECOT 822
    • Tuesdays and Thursdays, 2 PM - 3 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
  – Eighth semester, taught 6448 in Fall 1998 and
    Fall 2001
  – Ph.D. from University of California, Irvine
  – Research Topics
    • Open Hypermedia, Software Engineering
    • Information Integration, Digital Library Workflow
  – Software Experience
    • Four 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/users/kena/classes/6448/s02/]

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
  - This is a strength of our textbook: lots of examples!
  - Let me know if you have OO designs that you can share with the class
Course Evaluation

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

Note: I will be posting a point breakdown on the website… which will occur when homeworks are finalized.

Courses Textbooks

• Requirements Analysis and System Design
  – by Leszek A. Maciaszek
  – © 2001
  – Start reading chapters one and two
• The Unified Modeling Language (UML) User Guide
  – by “the three amigos”
  – © 1999

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 (if applicable), assignment name or number
  – Unmarked assignments will be returned ungraded
• Late Penalty
  – late assignments will be assessed a 10% late penalty; assignment can be submitted up to one week late

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 or length
Textbook Roles

• I will be following the material in the first textbook quite closely
  – It has lots of examples!
  – plus supplementing its material with my own to cover some topics in greater depth
• The second textbook is a reference manual to the UML for your own personal use in completing the assignments
  – Note: if you use a notation from this book that has not been covered in class, please indicate the page on which this notation appears somewhere in your homework

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 you would like to learn
• See the website for complete details