

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!

January 15, 2002

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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!

January 15, 2002

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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)

January 15, 2002

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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

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

Course 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

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