EECS 22L: Software Engineering Project in C Language

Lecture 12

Rainer Dömer

doemer@uci.edu

The Henry Samueli School of Engineering Electrical Engineering and Computer Science University of California, Irvine

Lecture 12: Overview

- Course Administration
 - Project 2 software releases
 - Team presentations and demos
 - Final exam
- Towards Object Oriented Programming in C++
 - Introduction to C++ concepts from the C perspective
 - Classes, a deeper look

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Course Administration

- Completing Project 2
 - 1. Software Releases:
 - Alpha version, 33% complete, due Monday, March 5, at noon
 - Beta version, 66% complete, due Monday, March 12, at noon
 - Final release, 100% complete, due Monday, March 19, at noon
 - > Refer to TAs and posted instructions for details on expectations
 - 2. Team Presentations and Demos:
 - · Week 10 during lecture times
 - 16 teams in Tue/Thu lectures, 10 teams in Mo/We/Fr lectures
 - Volunteers first, then random order (determined ad-hoc)
 - · Software presentation and demo (max. 10 minutes)
 - By a few selected team members
 - Main features of your Chat application
 - > Demonstration of a chat session (at podium and in audience)
 - $\triangleright O + A$

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Presentation

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Course Administration

Team Team name

- Week 10: Team Presentations
 - Lecture
 assignment
 by majority
 of enrollment

1	TBD	Tue/Thu
2	AntCheater	Mo/We/Fr
3	Chat Squad	Tue/Thu
4	Message4U	Tue/Thu
5	TBD	Mo/We/Fr
6	Crystal Kingsmen	Tue/Thu
7	Roll Two Die	Tue/Thu
8	Talk or Not	Mo/We/Fr
9	Bongcloud Inc.	Mo/We/Fr
10	TBD	Tue/Thu
11	TBD	Tue/Thu
12	Send Noods	Tue/Thu
13	PreWorkout	Mo/We/Fr
14	WeTalk!	Mo/We/Fr
15	JabberZot	Tue/Thu
16	ZOT CHAT	Tue/Thu
17	ZOTCOMM	Tue/Thu
18	TBD	Tue/Thu
19	TBD	Tue/Thu
20	NachoEaters	Mo/We/Fr
21	Noir de Jack (BLACKJACK)	Tue/Thu
22	TBD	Tue/Thu
23	ZotZing	Mo/We/Fr
24	TBD	Mo/We/Fr
25	TBD	Tue/Thu
26	TBD	Mo/We/Fr

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Course Administration

- Completing Project 2 (cont'd)
 - 3. Individual Contribution to Project 2:
 - · In lieu of Final Oral Exam
 - · Week 10 during discussion and lab sessions
 - Administered by TAs
 - Q1: Show your local CVS checkout!
 - > Demonstrate cvs update, cvs status, or cvs diff
 - Q2: Show and explain your unit test!
 - > Demonstrate make test for your module or component

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- Completing Project 2 (cont'd)
 - 4. Final Course Evaluation:

Thursday, Feb. 22, 11:45pm - Sunday, Mar. 18, 11:45pm

- · Online via EEE Evaluation application
- · Feedback from students to instructors
 - Voluntary, anonymous, confidential
- ➤ Help to improve this class!
 - > Student feedback is very valuable

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- Completing Project 2 (cont'd)
 - 5. Peer Evaluation:

Monday, March 12, 8am – Monday, March 19, 2pm

- · Online EEE survey
- > Mandatory, individual, confidential!
 - > Results will be seen only by the instructor and TAs!
- > Questions:
- Q1: How does your code fit into your team's software program?
 - What do you provide? What do you depend on?
- Q2: For all students in your team (including yourself), please estimate the effort to project 2 by each team member
 - Effort includes attendance, participation, communication, coding, and documentation.
 - Scale of 1 ("poor") through 5 ("excellent")
- Q3: Any additional comments on your team's effectiveness?
 - Optional

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- Completing Project 2 (cont'd)
 - 6. Chat Program Field Test:
 - · Live chat with remote instructor during final exam slots
 - QV: Monday, March 19, 4:00-6:00pm
 - RD: Thursday, March 22, 8:00-10:00am (16:00h GMT+1)
 - · Pre-allocated 10 minute slot per team
 - · Prepare a 1 page Quick-Setup Guide for your app
 - Instructor will follow the guide and chat with the team
 - ➤ Bonus points for TW9!

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Object Oriented Programming

- Towards Object Oriented Programming in C++
 - C++ can be seen as "improved" C
 - C++ offers a number of new features, including:
 - · Inline functions
 - · References
 - · Default arguments
 - · Function and operator overloading
 - · Classes and objects
 - · Member functions (methods)
 - · Constructor and destructor
 - · Class and function templates
 - · Class inheritance
 - · Polymorphism
 - · Exception handling

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Object Oriented Programming

- "Crash Course" Introduction to C++
 - Selected slides from supplemental text book:

Paul Deitel, Harvey Deitel, "C: How to Program", Eighth Edition, Prentice Hall, 2013.



Excerpts from Chapters 17 and 18:
Classes, a Deeper Look

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