

EECS 22L: Software Engineering Project in C Language

Lecture 10

Rainer Dömer

doemer@uci.edu

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

Lecture 10: Overview

- Course Administration
 - Reminder: Final course evaluation
- Wrapping up Project 2
 - Software release
 - Peer evaluation
 - Final exam
- Towards Object Oriented Programming in C++
 - “Crash Course” introduction to C++

Course Administration

- Final Course Evaluation
 - Open until end of 10th week (Sunday night)
 - March 1, 2013, through March 17, 2013, 11:45pm
 - Online via EEE Evaluation application
- Mandatory Evaluation of Course and Instructor
 - Voluntary
 - Anonymous
 - Very valuable
- Your feedback is appreciated!
 - Pioneer's input is most important! Thanks!

Course Administration

- Wrapping up Project 2
 1. **Software Release:**
 - Final delivery due Monday, Mar. 18, 12pm (noon)
 - Binary program and documentation (`OCR.tar.gz`)
 - Source code and documentation (`OCR_source.tar.gz`)
 - Refer to posted instructions for details on these packages!
 2. **Prize Challenge:**
 - Multi-page example
 - `91b_Prize_Coffee200DPI001.jpg`
 - `91b_Prize_Coffee200DPI002.jpg`
 - ...
 - Team with first recovered, compiled, and executed code wins a very special prize!
 - **Open until Wednesday, Mar. 20, 12:00pm (noon)**

Course Administration

- Wrapping up Project 2 (cont'd)
 - 3. Peer Evaluation:**
 - Wednesday, Mar. 13, noon – Wednesday, Mar. 20, noon
 - Online EEE survey
 - *Mandatory*, individual, confidential!
 - Results will be seen only by the instructor and TAs!
 - Questions:
 - Q1: For all your team members (including yourself), please estimate the *effort to Project 2* by each team member
 - Effort includes attendance, participation, coding, documentation, etc.
 - Scale of 1 (“poor”) through 5 (“excellent”)
 - Q2: Optional: Comment on your team’s effectiveness.

Course Administration

- Wrapping up Project 2 (cont'd)
 - 4. Final Exam:**
 - Thursday, Mar. 21, 8 - 12pm (noon) in EH 1151**
 - 6 minute individual *oral exam* by instructor
 - One hour scheduled per team
 - Individual exams with team members in alphabetical order
 - **Detailed schedule:**
 - Team 1: 8:00am, 8:06am, ..., 8:42am
 - Team 2: 9:00am, 9:06am, ..., 9:42am
 - Team 3: 10:00am, 10:06am, ..., 10:42am
 - Team 4: 11:00am, 11:06am, ..., 11:42am
 - Log in to the server and set up your terminal so that each exam can start on time!

Course Administration

- Wrapping up Project 2 (cont'd)
 - 4. **Final Exam:**
 - Thursday, Mar. 21, 8 - 12pm (noon) in EH 1151
 - Present your contribution to your team's project, and explain your source code (at the computer terminal)
 - **Oral Exam Topics:**
 - Q1: Show and explain your local CVS checkout!
 - Demonstrate 'cvs update', 'cvs status your_file', 'cvs diff -r previous_revision'
 - Q2: Show and explain your unit testing!
 - Demonstrate 'make test' for your module
 - Q3: Which part of your contribution was the most challenging?
 - Discuss the *lessons learned* in this project
 - Q4: Few ad-hoc questions on your module...
 - Q + A on your source code

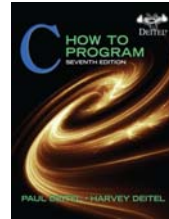
Object Oriented Programming

- 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

Object Oriented Programming

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

Paul Deitel, Harvey Deitel,
“C: *How to Program*”,
Seventh Edition,
Prentice Hall, 2013.



- Excerpts from Chapter 18