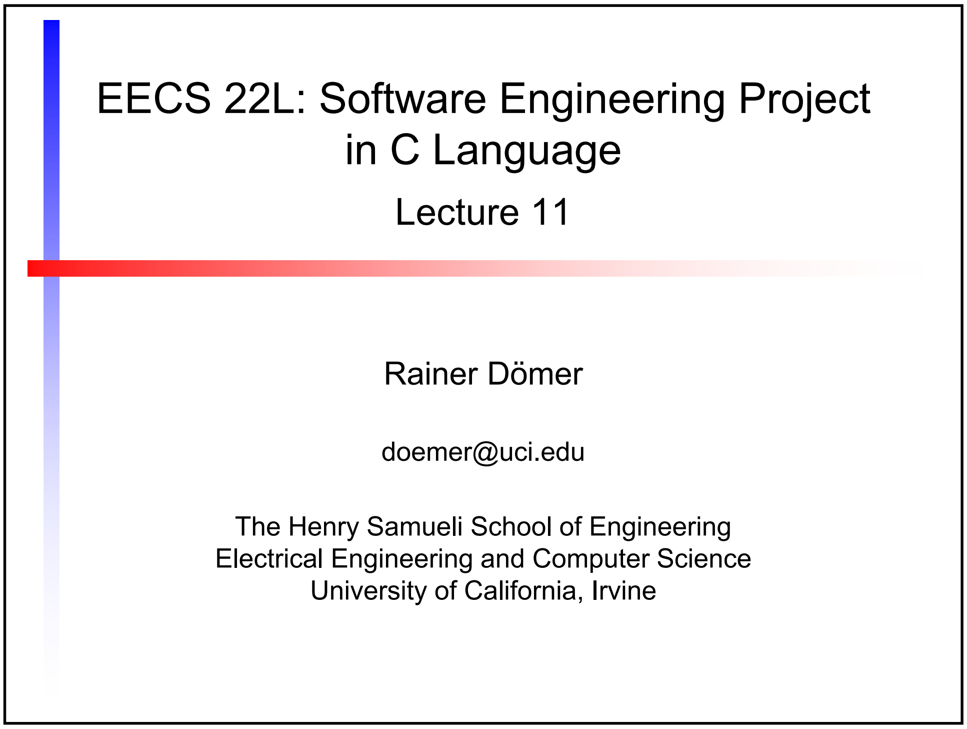

EECS 22L: Software Engineering Project in C Language

Lecture 11

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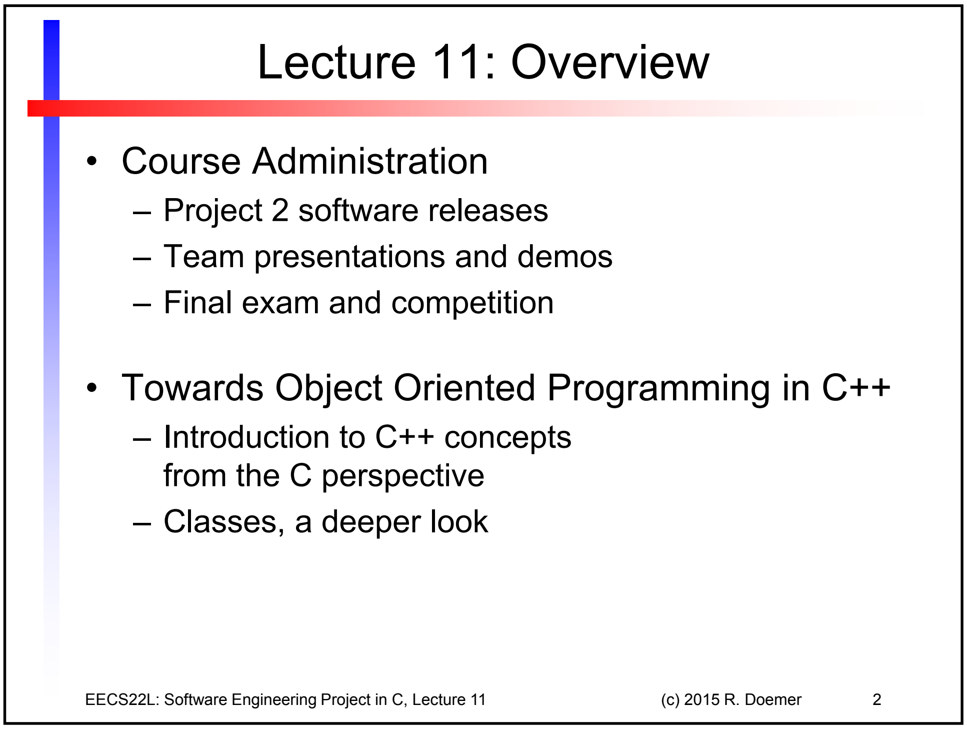
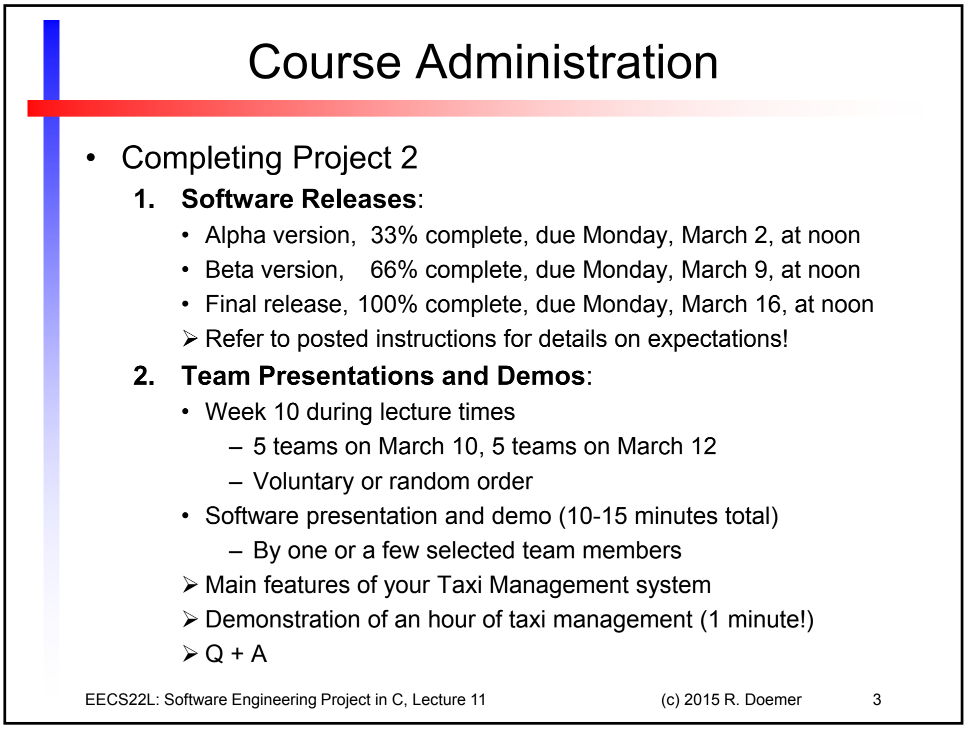


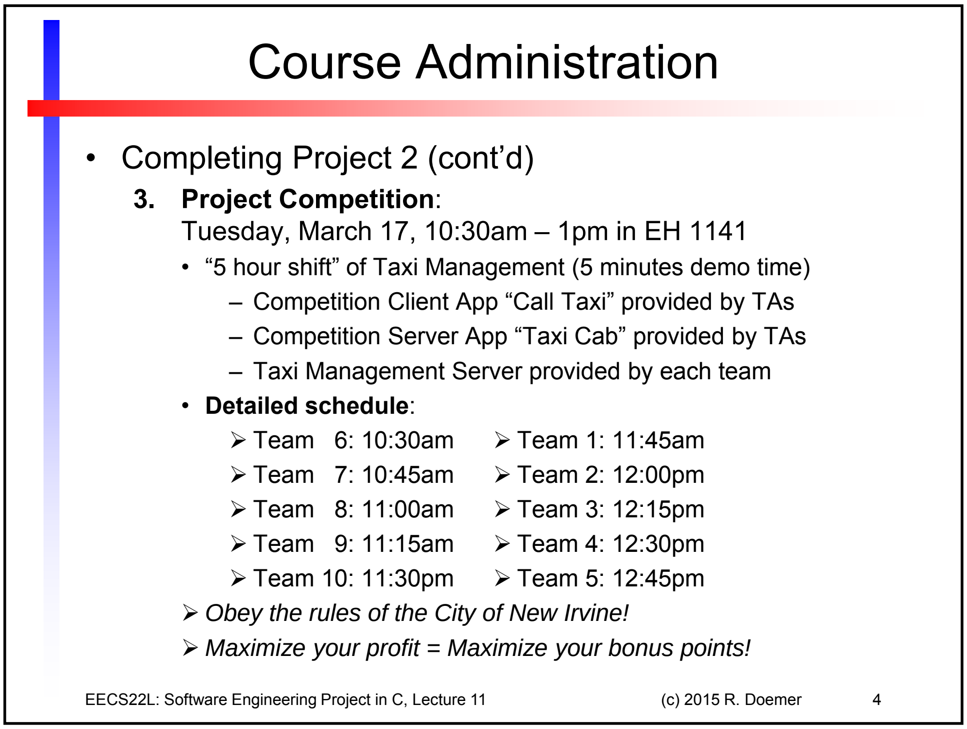
Lecture 11: Overview

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



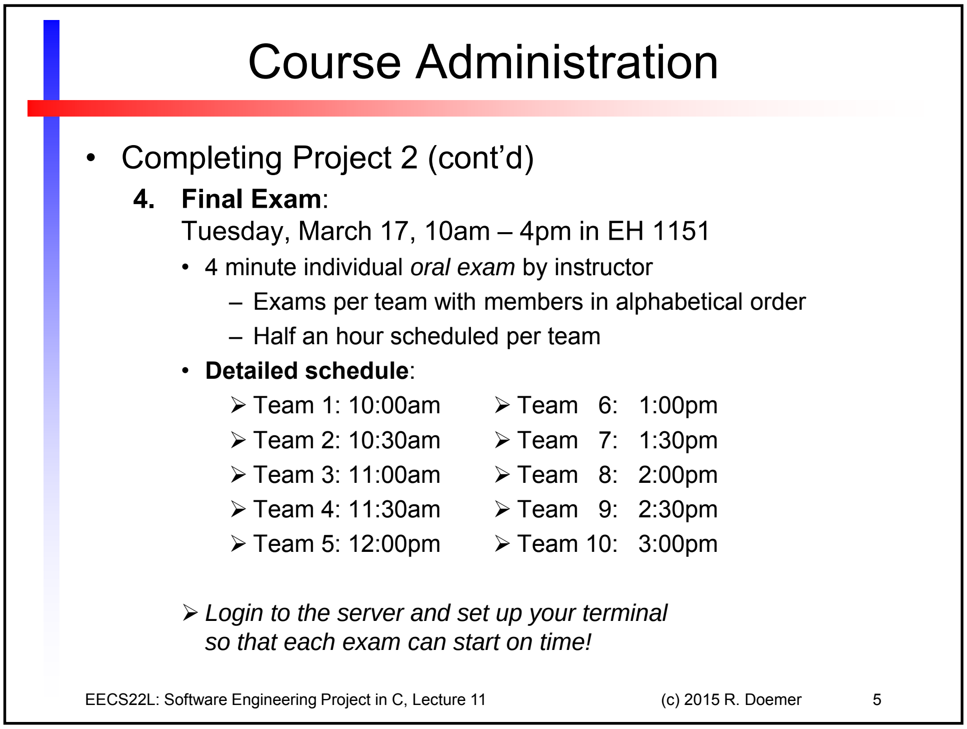
Course Administration

- Completing Project 2
  1. **Software Releases**:
     - Alpha version, 33% complete, due Monday, March 2, at noon
     - Beta version,   66% complete, due Monday, March 9, at noon
     - Final release, 100% complete, due Monday, March 16, at noon
     - ➢ Refer to posted instructions for details on expectations!
  2. **Team Presentations and Demos**:
     - Week 10 during lecture times
       - – 5 teams on March 10, 5 teams on March 12
       - – Voluntary or random order
     - Software presentation and demo (10-15 minutes total)
       - – By one or a few selected team members
     - ➢ Main features of your Taxi Management system
     - ➢ Demonstration of an hour of taxi management (1 minute!)
     - ➢ Q + A



Course Administration

- Completing Project 2 (cont'd)
  3. **Project Competition**:
     Tuesday, March 17, 10:30am – 1pm in EH 1141
     - "5 hour shift" of Taxi Management (5 minutes demo time)
       - – Competition Client App "Call Taxi" provided by TAs
       - – Competition Server App "Taxi Cab" provided by TAs
       - – Taxi Management Server provided by each team
     - **Detailed schedule**:
       - ➢ Team 6: 10:30am
       - ➢ Team 7: 10:45am
       - ➢ Team 8: 11:00am
       - ➢ Team 9: 11:15am
       - ➢ Team 10: 11:30pm
       - ➢ Team 1: 11:45am
       - ➢ Team 2: 12:00pm
       - ➢ Team 3: 12:15pm
       - ➢ Team 4: 12:30pm
       - ➢ Team 5: 12:45pm
     - ➢ *Obey the rules of the City of New Irvine!*
     - ➢ *Maximize your profit = Maximize your bonus points!*



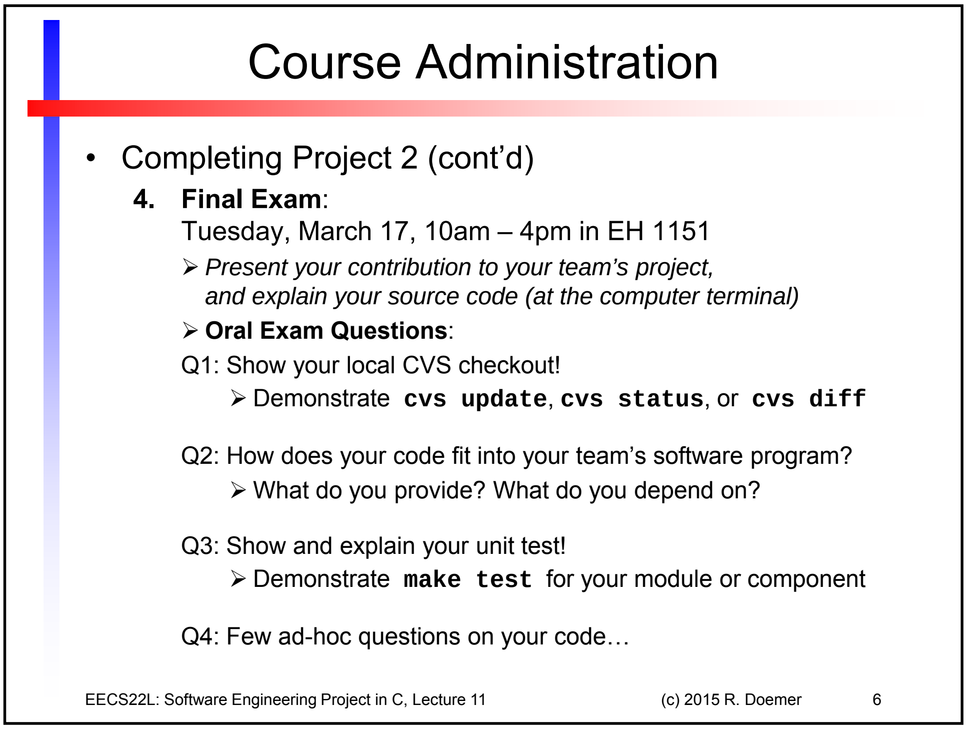
Course Administration

- Completing Project 2 (cont'd)

4. **Final Exam**:
Tuesday, March 17, 10am – 4pm in EH 1151

- 4 minute individual *oral exam* by instructor
  - Exams per team with members in alphabetical order
  - Half an hour scheduled per team
- **Detailed schedule**:
  - ➢ Team 1: 10:00am
  - ➢ Team 2: 10:30am
  - ➢ Team 3: 11:00am
  - ➢ Team 4: 11:30am
  - ➢ Team 5: 12:00pm
  - ➢ Team 6: 1:00pm
  - ➢ Team 7: 1:30pm
  - ➢ Team 8: 2:00pm
  - ➢ Team 9: 2:30pm
  - ➢ Team 10: 3:00pm

➢ *Login to the server and set up your terminal so that each exam can start on time!*



Course Administration

- Completing Project 2 (cont'd)

4. **Final Exam**:
Tuesday, March 17, 10am – 4pm in EH 1151

➢ *Present your contribution to your team's project, and explain your source code (at the computer terminal)*

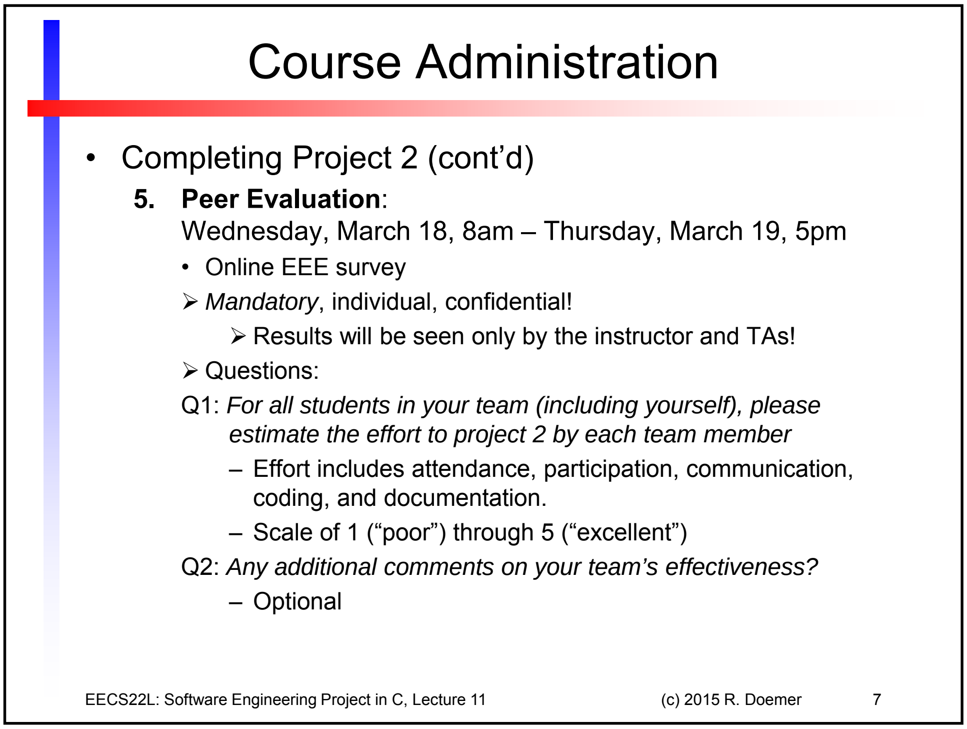
➢ **Oral Exam Questions**:

Q1: Show your local CVS checkout!
- ➢ Demonstrate **`cvs update`**, **`cvs status`**, or **`cvs diff`**

Q2: How does your code fit into your team's software program?
- ➢ What do you provide? What do you depend on?

Q3: Show and explain your unit test!
- ➢ Demonstrate **`make test`** for your module or component

Q4: Few ad-hoc questions on your code…

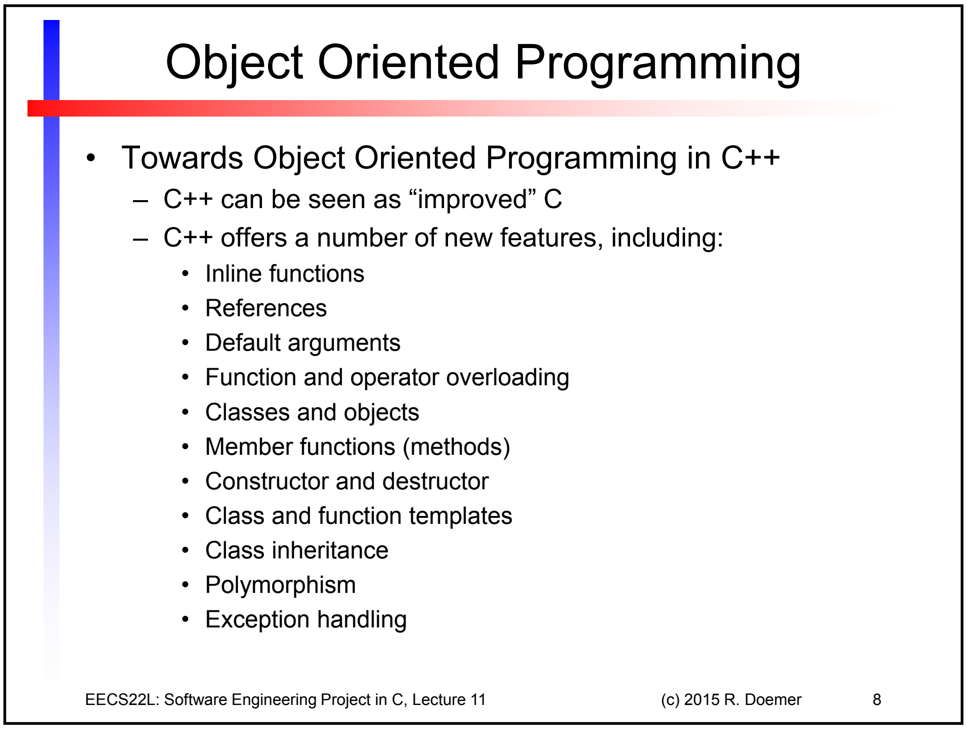


Course Administration

- Completing Project 2 (cont'd)
  5. **Peer Evaluation**:
     Wednesday, March 18, 8am – Thursday, March 19, 5pm
     - Online EEE survey
     - ➢ *Mandatory*, individual, confidential!
       - ➢ Results will be seen only by the instructor and TAs!
     - ➢ Questions:

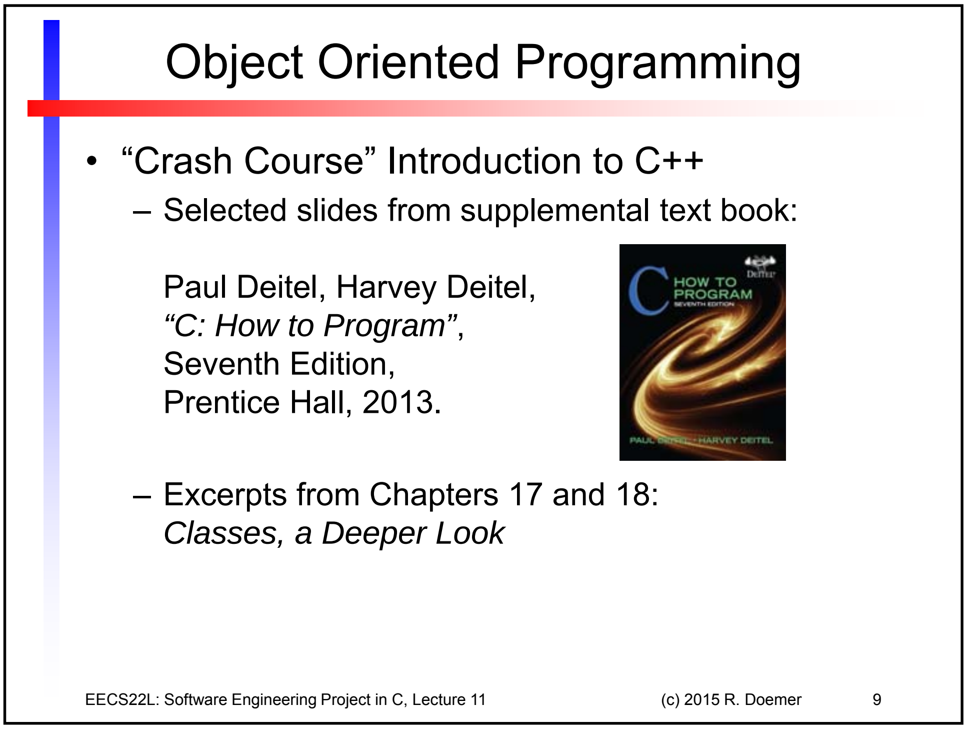
     Q1: *For all students in your team (including yourself), please estimate the effort to project 2 by each team member*
       - Effort includes attendance, participation, communication, coding, and documentation.
       - Scale of 1 ("poor") through 5 ("excellent")

     Q2: *Any additional comments on your team's effectiveness?*
       - Optional



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 Chapters 17 and 18:
    Classes, a Deeper Look