COSC 111:
Computer Programming I

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Readings

- Last week:
  - Ch 1.1 – 1.2

- This class:
  - Ch 7.1-7.2, 7.7 (up to pg. 338) software process
  - Ch 1.4-1.6 Java programming and environment
  - Ch 4.1 classes and objects

Lab 1 & A0

- Labs start this week
  - First one is before Tuesday's lecture
  - Complete pre-lab before arriving to lab
  - Due: following week's lab
- Bonus assignment to help familiarize you with
  - The course website
  - The technology for submitting assignments
  - Our submission process
  - Due: next Thursday 10:59pm

Tentative Schedule

- What is computer software?
- From English to computer language
- Object oriented programming (OOP)
- Control flow
- Data structures
- Graphical user interfaces (GUI)
- Special topics

Tentative Schedule

- What is computer software?
  - Relation to hardware and input devices
  - Examples of software applications
- From English to computer language
- Object oriented programming (OOP)
- Control flow
- Data structures
- Graphical user interfaces (GUI)
- Special topics

Tentative Schedule

- What is computer software?
- From English to computer language
  - Software development process
  - Generating requirements & design
- Object oriented programming (OOP)
- Control flow
- Data structures
- Graphical user interfaces (GUI)
- Special topics

Tentative Schedule

- What is computer software?
- From English to computer language
- Object oriented programming (OOP)
  - Classes, objects, attributes, methods
  - Abstraction
  - Encapsulation
  - Class interactions
- Control flow
- Data structures
- Graphical user interfaces (GUI)
- Special topics

Tentative Schedule

- What is computer software?
- From English to computer language
- Object oriented programming (OOP)
- Control flow
  - Program control flow
  - Logic statements
  - Conditional statements
- Data structures
- Graphical user interfaces (GUI)
- Special topics

Tentative Schedule

- What is computer software?
- From English to computer language
- Object oriented programming (OOP)
- Control flow
- Data structures
  - Arrays (single and multidimensional)
  - Java collections
- Graphical user interfaces (GUI)
- Special topics

Tentative Schedule

- What is computer software?
- From English to computer language
- Object oriented programming (OOP)
- Control flow
- Data structures
- Graphical user interfaces (GUI)
  - Java Swing, JFrame, JPanel, text, images, shapes, etc.
  - Event handling
  - 2D animation, paint, collision
- Special topics

Tentative Schedule

- What is computer software?
- From English to computer language
- Object oriented programming (OOP)
- Control flow
- Data structures
- Graphical user interfaces (GUI)
- Special topics
  - Scoping
  - Overloading