Introduction to CS2: Data Structures and Algorithms

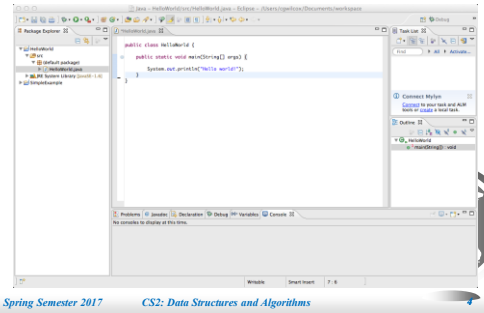
Course Structure

- The course is run from the course **website**
  http://www.cs.colostate.edu/~cs165
- Let's go look at it:
  - **Personnel (Instructors, TAs)**
  - **Syllabus / Policies**
  - **Programs / Resources**
  - **Checkin / Canvas**
  - **Most of all: Schedule, your weekly activities**

Curriculum

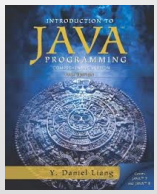
- Review of CS1: recursion, objects
- Supplemental: Program Verification
- C11: Inheritance and Polymorphism
- C20: List, Stacks, Queues, Priority Queues
- C23: Advanced Sorting: Merge, Quick, Heap
- Supplemental: Grammars, Expressions, Parsing
- C25: Binary Search Trees
- C26: Balanced Search Trees
- C24: Implementing Data Structures
- C27: Hashing
- C28: Graphs
- C29: Weighted Graphs
- Misc: Problem Solving, Testing, Debugging, Graphics

Eclipse Tool
be or make yourself familiar



Resources: Java Textbook

Introduction to Java Programming – Daniel Liang, 10th Edition, Revel License (license from last semester still should be current!)



Resources: iClickers

- Register your clicker on Canvas by August 24th
- Bring your clicker to every lecture!

Grading Criteria

- Your grade will be based on:
  - In-Class Exams : 50%
    - 1st midterm : 15%
    - 2nd midterm: 15%
    - Final exam : 20%
  - Programming Assignments: 20%
  - Programming Quizzes: 10%
  - Labs: 10%
  - Quizzes (in class, Canvas): 10%

Recitation Grading

- 4 points possible for every lab assignment
  - 1 point for participation
  - 3 points for completion in recitation
- If you do not complete the lab assignment in recitation
  - 2 points for showing completed lab assignment in the next recitation

Grading Policy

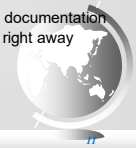
- If you think you have been graded unfairly, visit the cs165 help desk.
- If you cannot resolve the problem, post on the Piazza section privately to instructors
- All grades and exams are returned within one week of the due date (usually even faster).
- Complaints about grades must be made within two weeks of when the grade is released.

Communications

- Talk with your teaching assistant before or after labs, at help desk, or during Linux lab hours.
- Talk with your instructor before or after lectures or during office hours.
- Email your instructor directly only if privacy is needed (health issue, staff complaint, etc.)
- Do not attach comments to Canvas, use the Piazza bulletin board instead.
  - Piazza is in Canvas modules.
  - Topics for assignments, grading concerns, ...

Late Policy

- Every assignment lists a due date
  - Almost always on Wednesdays at 6pm
  - Full credit requires meeting this deadline
- Every assignment lists a late date
  - The day following the due date at 6 pm
  - Late submissions have 20% penalty
  - After this deadline, no credit is given
- Exceptions only for emergencies
  - Medical emergencies, family emergencies, with documentation
  - If an emergency happens, email your instructor right away
- Do not miss in-class quizzes!
  - Need documentation for excused absence, as defined in syllabus



Cheating

- What is cheating? What is not?
  - **Where would you find a definition?**
- What is gained / lost when cheating?
- What are the consequences?
- When / how does it happen?
  - **How can cheating be avoided?**

Cheating

- What is cheating? What is not?
  - **Where would you find a definition?** Syllabus
- What is gained / lost when cheating? You avoid work, but it will get harder and harder to get by without, **then you get caught**
- What are the consequences? **You are not learning!** Loss of points (negative points), record in University files
- When / how does it happen? When you do not do the work (come to class, lab), wait until the last moment to start on the assignment
  - **How can cheating be avoided?** Time management.

Academic Integrity

- All assignments, labs, quizzes, exams are solo
  - Unless otherwise specified
  - Tests (quizzes, exams): no notes, books, internet, other people
  - You may get help from course instructors and TAs
  - You may discuss concepts with other students, but:
    - Never share code with another student
    - Never copy code from another student
    - Never let anyone else type in code for you
- Know the department academic honesty code!

Linux Lab Expectations

- Use the Linux Lab – COMSC 120
  - Not the Windows Lab – COMSC 110
  - No uncovered drinks and no food
- Help desk available, see syllabus for hours
- Treat the lab as a professional workplace
  - No disparaging comments
  - No loud/rude/distracting behavior
  - Professional comportment at all time
  - No sexual harassment of any sort, ever!

Expectations

- Program copying will be monitored and students that plagiarize will be prosecuted – resulting in a negative score!
- Late submissions will not be accepted without documentation of illness, injury, or emergency.
- Help desk will show you how to debug and test your programs, they will not give you code!
- Peer instruction quizzes will be given almost every day, and lab scores will primarily be based on attendance.