CS150

Introduction to
Java Programming

Why Computer Science?

- It's exciting
- It's lucrative
- It's fun (sometimes!)

Instructor

Russ Wakefield

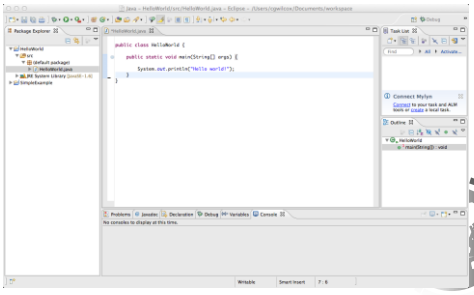
- cs150, Section 001, MWF 1:00 - 1:50pm, Aylesworth C111

Office: CSB 240
Email: Russ.Wakefield@colostate.edu
Office hours: 8-9am M-F
Teaching assistants on syllabus.

Curriculum

- C1: Languages, Computers, Operating Systems
- C2: Identifiers, Variables, Expressions, Operators
- C3: Conditionals, Booleans, Logical Operators
- C4: Math Functions, Characters, Strings
- C5: Loops: while, do/while, for
- C6: Methods: Parameters, Return Values
- C7, C8: Single and Multidimensional Arrays
- C9: Objects and Classes
- C12: Exceptions and File Input/Output

Java Programming



Resources: Textbook

zyBooks

A century ago, university education was revolutionized by the advent of textbooks. Today, the modern web — with the recent emergence of HTML5, the cloud, ubiquitous WiFi, and low-cost laptops/tablets — empowers a new revolution.

zyBooks is pioneering a new kind of learning content, created specifically for the modern web. A zyBook is web-native interactive content that helps students learn challenging topics, with auto-grading that saves instructors time and leads to better-prepared students in class — putting the fun back in learning.

Resources: Piazza

- Discussion board
- Used for communication with the teaching staff and with other students

Resources: Help Desk

- CS120A
- Assistance with Programming Assignments
- Sun – 4-8pm
- Mon-Thurs – 10am-6pm
- Fri – 10am-4pm
- Sat - Closed

Resources: iClickers

- Register your clicker on Canvas by August 25
- Bring your clicker to every lecture!

Grading Criteria

- Your grade will be based on:
  - Exams : 60%
    - 1st midterm : 15%
    - 2nd midterm: 15%
    - 3rd midterm: 15%
    - Final exam : 15%
  - Programming Assignments: 10%
  - Zybooks Assignments: 10%
  - Lab Assignments: 10%
  - In Class / Online Quizzes (Canvas/IClicker): 10%

Grading Policy

- If you think you have been graded unfairly, visit the cs150 help desk for an explanation.
- If you cannot resolve the problem, email the instructor / teaching assistant.
- 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.

Programming Assignments

- All programming assignments are auto-graded.
- You will be introduced to the auto-grader in the Mon lab.
- Pre-testing is 60%

Recitations

- Each recitation is worth 4 points
  - 1 point for attending the recitation
  - 3 points for successfully completing the lab during recitation hours
  - 2 points for showing a completed lab at the beginning of the next recitation

IClicker Quizzes

- Given in lecture
- Requires you bring your Iclicker to lecture every day
- Used to query:
  - Previous lectures
  - Current lectures
  - Peer instruction

Communications

- Talk with your teaching assistant before or after labs, at help desk, or during 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.

Late Policy

- Every assignment lists a due date
  - Almost always on Tuesdays at 6pm
  - Full credit requires meeting this deadline
- Every assignment lists a late date
  - Late submissions have 20% penalty
  - After this deadline, no credit is given
- Exceptions only for excused absences
  - Medical emergencies, family emergencies, with documentation
  - If an emergency happens, email your instructor right away

Getting Help

- Web Sites:
  - www.cs.colostate.edu/~cs150
- Lectures, Recitations, Lab Hours, Help Desk
- Lab operators (general questions)
- Office Hours (see syllabus)
- Tutors, Friends, Consultants (be careful)
- Online Textbook, Internet

Academic Integrity

- All assignments, labs, quizzes, exams are solo
  - Unless otherwise specified
  - 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!

Lecture Expectations

- Come to class
  - Attendance predicts success
- Be active, not passive:
  - Take notes, Ask questions
- Be prepared
  - Do reading assignments before the lecture
- Be on time
  - Lectures start and end on time

Lecture Expectations

- Cell phones off or on vibrate-only
  - If you need to answer, leave the room first
- Laptops for note taking or coding!
  - No games, audio, video, inappropriate websites
- Respect your colleagues
  - No snide or rude comments
  - No comments on abilities
  - No extended conversations

Lab Expectations

- Use the Linux Lab – COMSC 120
  - Not the Windows Lab – COMSC 110
  - No uncovered drinks and no food
- Lab operator on duty during day
  - You can ask then general questions
- 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, not ever!

Practical Matters

As a student in this class…

- You have CS department email:
  - Your address is eid@cs.colostate.edu
  - Automatically forwarded to CSU email
  - You should read this mail regularly
- You have an account of CS systems:
  - CS systems not the same as ACNS machines
  - Your RamCard provides access to Linux lab
  - Same as the EID that you use to login to RamWeb
  - Password is your CSU ID, you should change it!

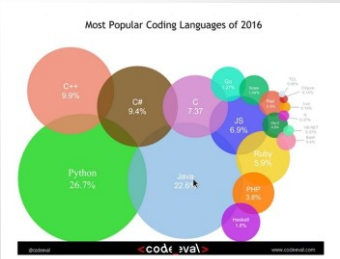
Reality

A student asks a roommate, "Could you please go shopping for us and buy one carton of milk and, if they have avocados, get six." A short time later, the roommate returns with six cartons of milk. "Why did you buy six cartons of milk?" asks the student. The reply: "They had avocados."

Reader's Digest, September 2010

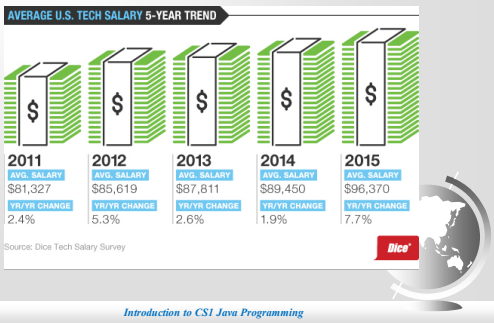
This is exactly what your Java program will do, because computers do what you ask them to do, not what you want them to do!

Motivation



Most Popular Coding Languages of 2016

Motivation


AVERAGE U.S. TECH SALARY 5-YEAR TREND
2011
AVG. SALARY
$81,327
YR/YR CHANGE
2.4%
2012
AVG. SALARY
$85,619
YR/YR CHANGE
5.3%
2013
AVG. SALARY
$87,811
YR/YR CHANGE
2.6%
2014
AVG. SALARY
$89,450
YR/YR CHANGE
1.9%
2015
AVG. SALARY
$96,370
YR/YR CHANGE
7.7%
Source: Dice Tech Salary Survey
Dice