CS 211: Course Mechanics

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Expectations

Kauffman can

- Provide guidance, entertainment, information, challenge
- Will do all of those in lecture, office hours, projects, exams

Kauffman cannot

- Force you to pay attention, do your HW, attend labs, learn
- Cannot force you to care, the most important aspect in CS or any education

Kauffman's Expectation

- You care some and will cultivate a further attitude of curiosity and discipline
- You will put some effort into our time together as I have

Mechanics of class

Syllabus

Read It. The following slides are a summary of its contents but not a substitute.

Schedule

Available now here:
`http://www.cs.gmu.edu/~kauffman/cs211/schedule.html`
Lists all approximate dates for major events and reading schedule

Lecture Materials

`http://www.cs.gmu.edu/~kauffman/cs211/lectures.html`
Slides and code download for our work during meetings

We're on Piazza

Piazza For

- Project and Lab Discussion
- Questions about programming
- Announcements from Staff
- Course Schedule
- 95% of communication/questions
- Read the etiquette post (up shortly if it's not already)

Email for

- Appointments outside of office hours
- Unresolved grading disputes
- Personal emergencies/problems

Blackboard for

- Assignment Submission
- Grades

Lecture

Mechanics

- Talk
- Code
- Try
- Ask

Hot Seats

- Front few rows are hot seats
- I will grill hot seats
- Just try: answer questions, give feedback
- Up to 3% overall bonus
  - Susy has 20 pts, max in class, 3% bonus
  - Sammy has 10 pts, 1.5% bonus
- Don't want/need participation, don't sit in hot seats
- Don't like lectures, don't come, but don't complain if you miss something
- Remember: *someone* is paying $1,272.75 or more for the privilege of you being in this room.

Lab

50% Exercise Labs

- Submit code for credit
- Exercise labs are Open Resource / Open Collaboration
- Attendance is required for 1st week
- Attendance optional for Exercise labs in later weeks

50% Quiz or Task Labs

- Write paper quiz or write short program and submit for credit
- Closed resource, no collaboration
- Attendance required at all quiz/task labs

Reading and Practice

Building Java Programs (Reges/Stepp) 3rd or 4th edition

- Pretty good book and funny too (count pop culture refs)
- Good online resources for practice
- New buys get code to watch video supplements
- Don't need MyProgrammingLab supplement

Lab Manual

- Required, good group exercises in there
- Read before lab

Java Docs

- Official documentation of Java library
- Becomes more important later in the class

Practice! It!

PracticeIt

- All textbook exercises available online for practice
- Site gives immediate feedback on correctness of programs
- PracticeIt Web Site

CodingBat

- Alternative practice site with lots of good intro java exercises
- Coding Bat Site

Others

- Probably lots of others: post them on Piazza

Coordination

All standard sections of CS 211 are coordinating on

- Projects
- Labs
- General schedule of exams
- General topic coverage

Standard sections are not coordinated with SPARC sections

Kauffman sections (002, 006) will be specialized on

- Lecture Content
- Exam Content
- Extra Bonus Credit
  - Participation in your sections
  - Bonus exam questions in other sections

Making Programs

Edit, Compile, Run, Fix: You need

- Text Editor (`jedit, emacs, vim, notepad, etc`)
- Compiler (`javac`)
- Run environment (command line like `cmd.exe` on `mingw` or `Terminal.app`)

That's it, the rest is gravy

Making Programming Faster

- An IDE combines these things in a sensible way
  - Text Editor
  - Compiler interface button
  - Run interface
- Fanciness
  - Debugger interface
  - Testing interface
  - Documentation generation
  - File browser
  - Read, Eval, Print Loop for interactive testing

DrJava does all this, but...

All IDEs dumb down the act of creating programs and disguise many details.

Tools

The official java tools of the course are

- jdk 1.8, official build and run tools from Oracle
- DrJava, a simple, superior java IDE (if you're into IDEs)
  - Download GMU edition: `https://cs.gmu.edu/~kauffman/drjava/`

Special Note:

- *I do not know how to use eclipse*
- *I will not be learning how this semester.*
- *If I can help it I will never learn eclipse.*
- *TAs may be able to help you but are not required to do so.*
- *In class I will use DrJava, Emacs, and command line.*
- *If you have questions on those I'm happy to help.*

Tools that Grow

DrJava

Eclipse

Emacs

Special Note on DrJava

We've made some improvements for GMU

- Download here: `https://cs.gmu.edu/~kauffman/drjava/`
- Unofficial, trying to get into main distrib
- Strongly encourage DrJava users to grab this version

Cheating

Don't cheat

- Easy to catch
- Likely to get caught
- Painful for everyone (makes me ornery)
- You can't lie to nature

  For a successful technology, reality must take precedence over public relations, for Nature cannot be fooled.
  – Richard Feynman, Challenger Disaster Report

Unsure if something constitutes cheating?

- Stop and ask me
- Sharing on Lab Exercises is fine
- Sharing on projects is not

Cheating

PRIME DIRECTIVE: Be able to explain your own work including homework code and exam solutions. The work you submit should be the product of your own effort and reflect your personal understanding.

Follow this because. . .

> *. . . I can say that at my workplace I've seen more than one freshout who clearly hadn't made it through college without significant assistance from Stack Overflow and other people's blogs. None of them lasted very long. Perhaps knowing how to solve problems for yourself isn't necessary to get a college degree nowadays, but it's surprising how useful it can be in a career where you solve problems for a living.*

– bunderbunder, Discussion of cheating using StackOverflow on http://news.ycombinator.com/item?id=4910406