Welcome to CS1007!

Introduction to Computer Science
or
Programming in Java

Fall 2001

Section 001:   TR   2.40pm   -   3.55pm   417 Int'l Affairs Building
Section 002:   TR   11.00am   -   12.15pm   209 Havemeyer Hall

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course objectives.

- learn your first (?) programming language

- become fluent in Java

- understand abstract computer architecture

- develop good programming habits
  - structuring code
  - commenting code
  - debugging

- gain skills that can transfer to other programming languages, like C or C++

resources.

- lectures

- textbook
  - Lewis & Loftus: Java Software Solutions

- lecture notes

- web page
  - *http://www.cs.columbia.edu/~sklar/cs1007*

- TA's

- me
  - BUT DON'T E-MAIL ME CODE!!

textbook.

Java Software Solutions: Foundations of Program Design.
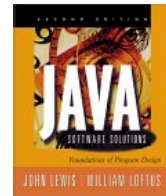
by Lewis and Loftus
Addison Wesley
JavaPlace edition, 2001
ISBN 0-201-75052-X
available at Labyrinth Books
(112th, between Broadway & Amsterdam), from Sept 4

assessment.

- homework assignments (40% total)

- 3 exams (60% total)
  - midterm I: 15% (tentatively 2 Oct)
  - midterm II: 20% (tentatively 1 Nov)
  - final exam: 25% (TBA)

a word about homeworks.

- should be done on your own, as much as possible

- get help from TA's, me, friends
  but you must acknowledge all help received by citing the names of those who helped you in the comments of your program (I'll explain what comments are before you need to do this)

- This not only protects you from being accused of cheating, but also protects you in case your helper gives you misinformation.

- This also lets me know who is really helpful, which is useful in selecting TA's for next semester.

homeworks: late policy.

- Homeworks are due on the day that they are due.

- In a perfect world, all homeworks will be due and handed in on Tuesdays, and solutions will be discussed in class one week after they are due.

- But we live in an imperfect world...
  - Homeworks handed in on the Thursday (2 days later) will be docked 25%.
  - Homeworks handed in on the Tuesday (1 week late) will be docked 50%. *THEY MUST BE IN BEFORE CLASS!!!*

- Death, dismemberment, trauma and other dire straits must be documented; and suitable arrangements will be made fitting the circumstances.

homeworks: a word to the wise.

Save early and save often!

- disk drives crash

- floppies have bad sectors

- power supplies fail

- monitors die

- mice get trapped

- paper print-outs are the best security known to mankind

a word about lectures.

- Brief lecture notes will be placed on the web page after every lecture

- but they are no substitute for coming to class.

- I know, I used to skip classes too.

- HOWEVER...
  I reserve the right to examine you on material discussed only in class. So if you miss a class, please ask one of your classmates for a copy of their notes.

a word about exams.

- are the only way I know you are doing your own work

- are the only way YOU know you are doing your own work

- are not hard if you really know the material

a word about feedback.

- Homeworks and exams let me know how you are doing.

- And in a way, they let me know how I am doing, as a reflection of how you are doing.

- But, I welcome feedback from you.

- Email, phone calls, anonymous written notes, etc.

a word about academic integrity.

- the work you submit for assessment should be completed ON YOUR OWN

- you may get help from me, TA's, friends

- you must acknowledge all help given

- you should not mail code or copy files

- if someone asks you to do this, *JUST SAY NO!*

topics covered.

- compiling, linking and running programs
- basic Java language elements
- debugging techniques
- program organization
- writing your own Java classes
- graphics
- animation, simulation
- applets, web pages and interfaces

how to learn a programming language.

You are responsible for your own learning!!!

I will point you in the right direction...
but you must PRACTICE, PRACTICE, PRACTICE, PRACTICE, PRACTICE and PRACTICE some more!!!

If you don't understand, then ASK for help!

which environment?

- There are lots of Java compilers and programming environments.
- In class, we'll use the CUNIX system and EJAVA (the Emacs editor and the Java environment).
- This is a text-based environment, which may be boring, but it's free and it's easier to understand because it doesn't try to do everything...

getting started.

- programming is like solving puzzles
- think differently
- the world is now made up of
  objects
  and
  actions

to do soon.

- Please get a copy of the textbook!
- Please attend one of the AcIS training sessions:
  "Introduction to UNIX for Java Programming"

day	date	time	room
Friday	Sept 7	10am-noon	252 ET
Friday	Sept 7	12.30pm-2.30pm	252 ET
Friday	Sept 7	2.30pm-4.30pm	252 ET
Monday	Sept 10	5.00pm-7.00pm	306 Butler
Tuesday	Sept 11	3.30pm-5.30pm	306 Butler
Wednesday	Sept 12	5.00pm-7.00pm	306 Butler
Friday	Sept 14	12.30pm-2.30pm	252 ET
Friday	Sept 14	2.30pm-4.30pm	252 ET
Monday	Sept 17	5.00pm-7.00pm	306 Butler
Wednesday	Sept 19	5.00pm-7.00pm	306 Butler

about me.

- undergrad: Barnard, CS major, class of 1985
- 10 years of industry experience working as a scientific and business programmer
- grad school: Brandeis University, PhD 2000
- previous teaching:
  - Monash University, Melbourne, Australia
  - Boston College, Massachusetts
- research interests:
  - educational robotics
  - Internet communities
  - software agents

about you.

please take out a piece of paper and write down...

1. your name

2. your class and major OR if you are a non-matriculating student, categorize yourself

3. your background in computers, if any

4. why you are taking this course

5. what you hope to get out of this course

6. one sentence about one wonderful thing you did over the summer

...and give it to me before you leave