Garfield AP CS A

Introduction

Reality Check

- Is everyone signed up for IB Programming?
- This is NOT an IB class
- Seattle Schools has never had AP CS
- Name change should happen before semester grades out (hopefully)

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- It is about PROCESS ("how to do things")

Computer Scientists

- Some do research to make computers faster, smaller, cooler, cheaper
- Some make animated flesh look real
- Some never touch computers -- they invent new approaches to solving problems
- Some work on web advertising
- Some create modern art installations

Programming

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Flexible implementation tool

Programming

- Flexible implementation tool
- Why do it?
 - The sheer joy of making things.
 - The pleasure of making things that are useful to other people.
 - The fascination of fashioning complex puzzle-like objects of interlocking moving parts.
 - The joy of always learning.
 - The delight of working in a tractable medium.

Computer Science Myths

- Computer scientists eat Cheetos and drink Mountain Dew all day
- Computer scientists can't get jobs
 - Dot-com bubble burst, out-sourcing, etc...
- Students who do well have programmed since they were five



Wednesday, September 9, 2009



This course is:

- solving tricky problems
- learning fundamentals of programming
- mastering Java syntax
- discovering CS application areas
- writing lots of small programs
- AWESOME

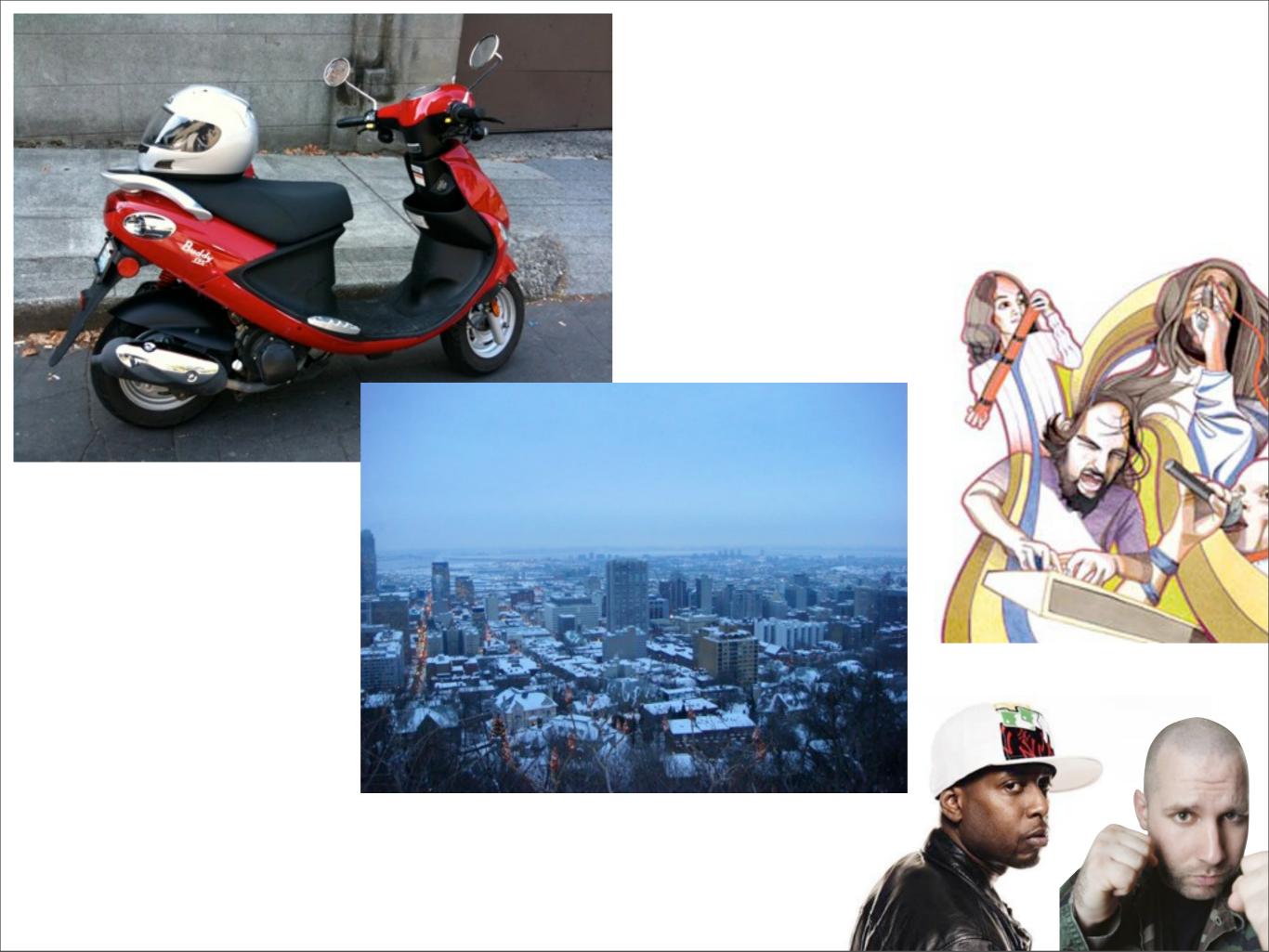
This course is not:

- learning to use computers
- about how much C++ you know
- about how good you are at Half-Life
- socializing time
- for the weak-spirited

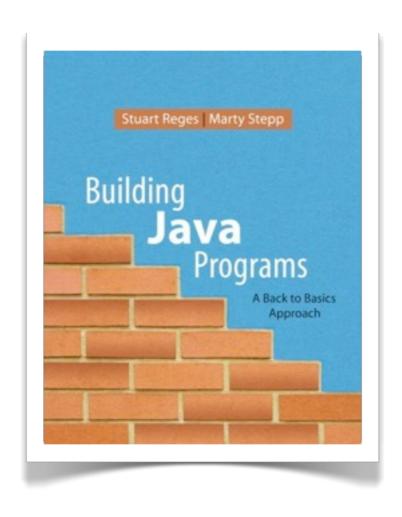
Your instructor: Hélène Martin

- University of Washington graduate
- Computer Scientist
- Linguist
- Tinkerer
- Learner
- Digital Native





Things I have done



- FIRST Robotics in High School
- Worked IT in UW libraries
- Interned at Microsoft
- UW CSE 142 TA for 3 years
- Edited <u>Building Java Programs</u>
- Worked at a non-profit

Why I am here

- Computer science is fun -- I want to share!
- Love explaining things
- Enjoy the creativity of teaching
- Want to increase diversity in field
- Want more youth to have access to computing careers

Class website

http://garfieldcs.com

The AP test is in 7 months, 26 days

- Where I'll post all assignments
- Will try to make blog post every day



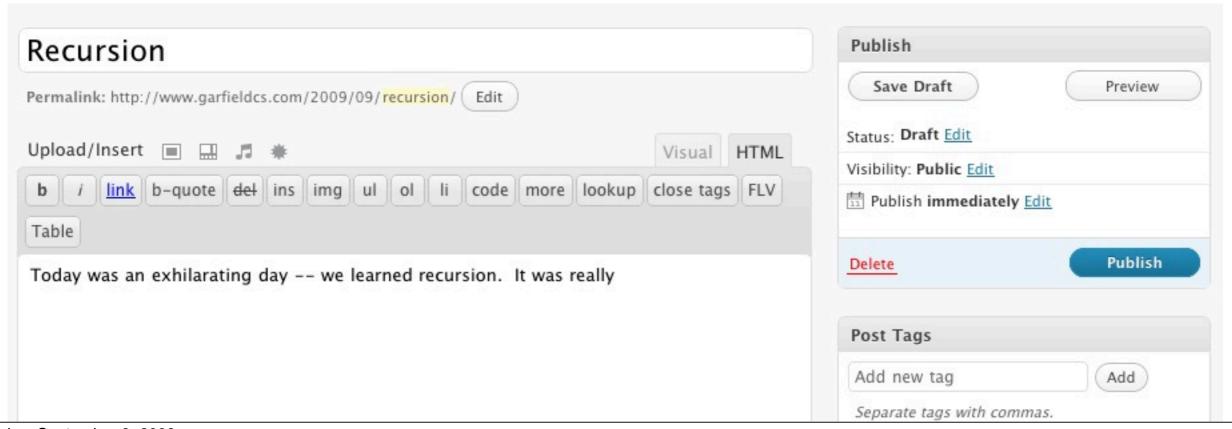


Assignments

Resources

Blog posts

- Would love help writing these
- Opportunity for you to review the day
- 5 points extra credit each! (4 max)



Grading

- 35% programming projects, exercises and participation
- 25% two midterm exams, quizzes
- 25% final exam
- 15% final project

AP test

- May 4th
- Mostly 2nd semester topics but we need to build up to them
- I hope not to "teach to the test"
- Will throw in AP questions pretty often



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Homework 0

- Give your guardian their copy of the syllabus and outline
- I'm assuming that you are all mature and know Garfield school rules so I am not having you sign a "contract"

Activity: Sorting

- Goal: sort yourselves alphabetically by first name as quickly as possible
- 10 minutes to decide on a strategy
- Go go go!
- Debrief