

EECS 485 Web Databases & Information Systems



Welcome!

- EECS 485
Web Databases & Information Systems
Winter 2010
- Professor: Michael Cafarella
- GSI: Vahed Qazvinian
- Lectures: "How the Web Works"
- Programming Assignments: "How to Build a Website"

2

Course Info

- Lectures M,W 10:30AM-12:00PM
- Discussion section most F 10:30-11:30
- Two in-class midterms, plus final on **April 28, 10:30-12:30**
- 7 programming assignments, plus a final project
 - All assignments done in groups of 3
 - You will declare your group on Friday!
 - Final project is a major multi-week project of your own choosing
- The Web and this class draw from many sub-disciplines of computer science

3

Some Lecture Topics

- Web architecture
 - Why is there a reload button?
- Security & Cryptography
 - Why is a connection to Amazon secure from eavesdroppers?
- XML & Web Services
 - The "Web for Machines"?
- Information retrieval & search engines
 - How can Google search >10B pages in <1sec?
- The Domain Name System
 - How does typing yahoo.com work?
- Web scaling, MapReduce & Cloud Computing
- Others

4

Outside of Lecture

- EECS 485 has a substantial workload and expects a lot of you outside of class
- I won't talk about PHP or programming assignments very much.
- Discussion on Fridays
 - Led by Vahed
 - Some short lectures on PHP
 - Help with the current assignment
 - Discussion of lecture topics (w/review questions)



5

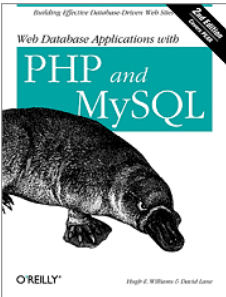
Final Project

- Culmination of skills from assignments and lessons from lecture
- You will design and build a major database-backed website of your own choosing
- Some ideas:
 - Class-recommender system
 - Collaborative software engineering
 - Environmental data explorer
- Many other possibilities
- Chance to build something fantastic

6

Unusual Point #1

- No textbook: handouts instead
- Recommended:
 - Web Database Applications with PHP and MySQL, by Williams and Lane. O'Reilly, 2004.
 - Others, some free online. See syllabus.



7

Unusual Point #2

■ FIELD TRIP

- The only class in EECS with a field trip
 - I think
- Where are we going?

8



Unusual Point #2

■ FIELD TRIP

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 - I think
- Where are we going?
- The University of Michigan Datacenter
 - In Ann Arbor, a busride away
 - Not mandatory, but strongly recommended
 - Will take place in late March / early April

12

Class Mechanics

- Programming Assignments
 - Go out regularly, starting this Friday
 - Each builds on the last; don't fall behind
 - You have 4 late days for semester. No more than 2 per assignment. See syllabus for more.
 - Seek advice from anywhere, but your code is your own
- Grade
 - 30% final project, 25% final exam
 - 20% midterms, 20% assignments, 5% other

13

Your Background

- EECS 484, or other SQL experience (with instructor's permission)
- "Programming maturity"
 - Know at least one major software engineering language
 - Experience with large programming project
 - Be comfortable learning a new language using primary sources
- We like students with non-traditional computer science backgrounds

14

My background

- Research
 - Information extraction
 - Information integration
 - Structured Web data and search
- Non-research
 - Five years at Silicon Valley startups
 - Co-creator, Nutch search engine
 - Co-creator, Hadoop tool suite
 - Two years at Google



15

Contact

- Professor: Michael Cafarella
 - Email: michjc@umich.edu
 - Office: CSE 4709
 - Office Hours: M/W 12:00PM-1:00PM, immediately after class
- GSI: Vahed Qazvinian
 - Email: vahed@umich.edu
 - Office Hours: immediately after discussion on Fridays, 11:30
- Check out the class site on Ctools

16