



CSC309 Programming on the Web

About Me

Mashiyat Ahmed Shah Mashiyat



- Worked in the industry for several years
 - In Start Up,
 - In mid-size company, and
 - In large consultancy firm

Teaching Assistants

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Any One here Do not Like Web Programing?

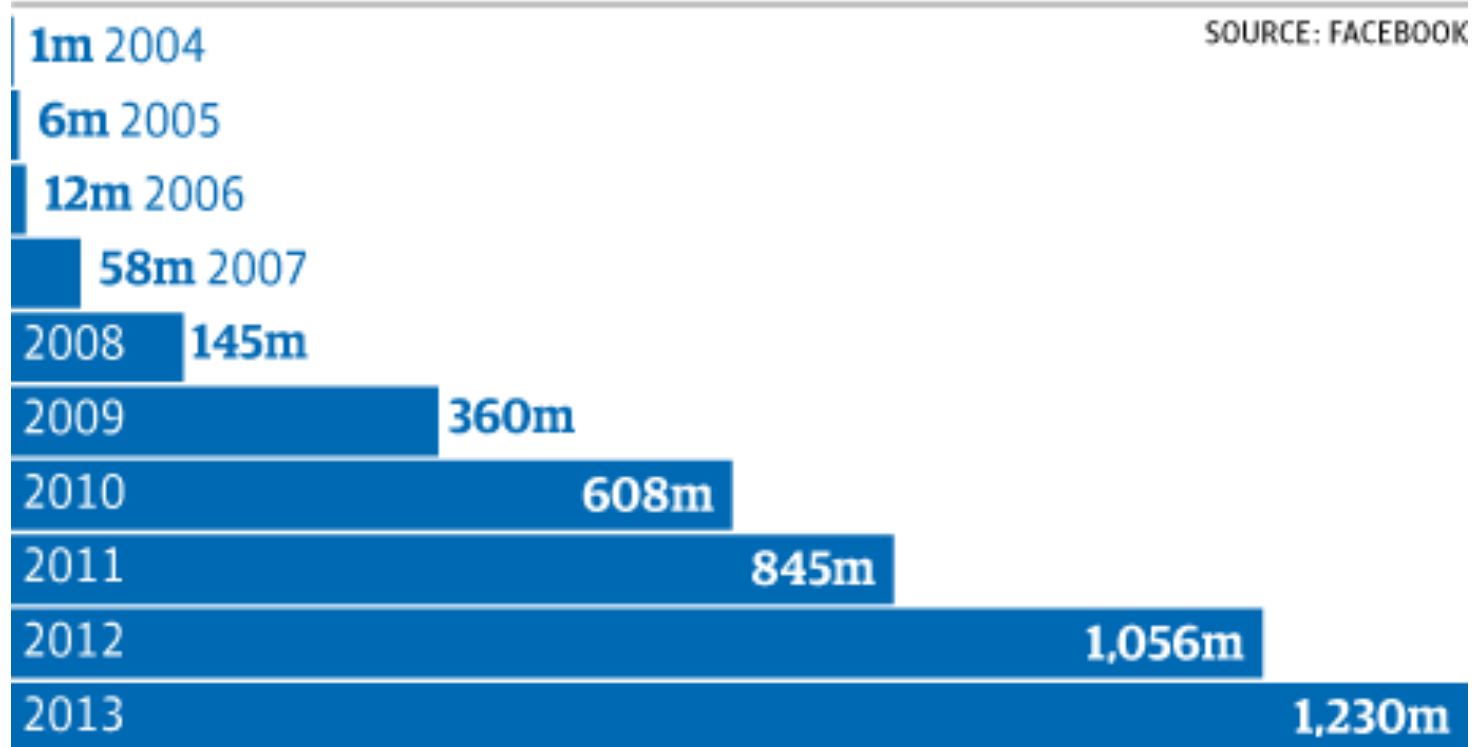


What do you like about web programming?

Why I like Web

-- Massive reach! Facebook has 1.23B users (People have multiple accounts)

Facebook monthly users



Fast Scaling Power

1. AAPL, \$479 billion

2. **GOOG, \$404 billion**

3. MSFT, \$316 billion

4. IBM, \$195 billion

5. **FB, \$184 billion**

6. ORCL, \$175 billion

7. **AMZN \$171 billion**

8. QCOM, \$130 billion

9. INTC, \$123 billion

10. CSCO, \$116 billion

<http://www.usatoday.com/> March 13,

2014

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→ Alibaba.com \$168 Billion

What CSC309 is about?

This course provides an introduction to **concepts and technologies of web development**

- Static/dynamic client-side programming
- Static/dynamic server-side programming
- Web architectures
- Web development processes
- Security, Scalability, Usability on the Web

CSC309 Objectives and Outcomes

- Enabling Knowledge


Ability to define and explain protocols, concepts and technologies that enable web applications

- Critical Analysis and Problem Solving

Ability to analyse, design and implement web applications that accommodate specific requirements and constraints with regard to issues of usability, performance and security

- Communication

Ability to work as part of a team or individually, explore relevant alternatives and make decision recommendations



How many of you have prior web programming experience?

Course Overview

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- The Internet and the Web
- HTML Basics
- Cascading Style Sheets (CSS)
- Client-side Scripting (JavaScript)
- Server-Side Programming (NodeJS)
- Database Design
- Asynchronous Communication (Ajax) & JSON
- Web Architectures
- Web Security Issues
- Web Performance Issues
- Other Topics (Going live!, Monetization Strategies, ...)

Self Study Topics

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- **Almost Everything! The purpose of the class is not to introduce all topics in detail**
- We introduce concepts and technologies in some detail in class but is left to you to excel by
 - Reading online material
 - **Practice, Practice, Practice**
 - Incorporating them to your projects
 - Doing the course assignments

Lecture Materials

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Lecture Notes and material are mostly from,

- Eyal de Lara, Professor, DCS
- Manos Papagelis, Co-Instructor of this course in some previous terms.
- Juan Gonzalez, Founder/CEO at Videogami
- TAs who have worked with me in previous terms
- “Web Programming Step by Step” by Marty Stepp, Jessica Miller, Victoria Kirst.
- And of course from Web



CSC309 ADMINISTRIVIA

Course Information

Section L0101/L2001

Class: Mondays, Wednesdays, 10am-11am, Room: SS2118

Tutorials: Fridays, 10am-11am, Room: SS2102

Section L2501/L5101

Class: Mondays, 6pm-8pm, Room: BA1170

Tutorials: Mondays, 8pm-9pm, Room: BA1170

□ Instructors:

□ Ahmed Mashiyat (mashiyatATcs.toronto.edu)

□ Website:

<http://www.cs.toronto.edu/~mashiyat/csc309/index.htm>

□ Discussion & Communication:

Piazza: <https://piazza.com/class/ij76iue0b6i6wl>

Communication

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- Office hours :
 - Mashiyat (BA3289): Fridays, 4.30pm-6pm (or by appointment)

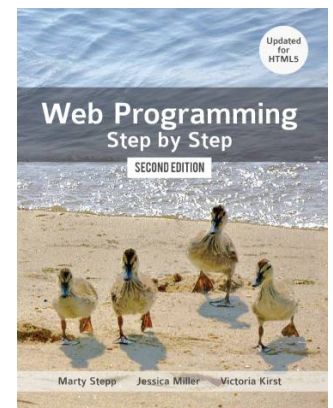
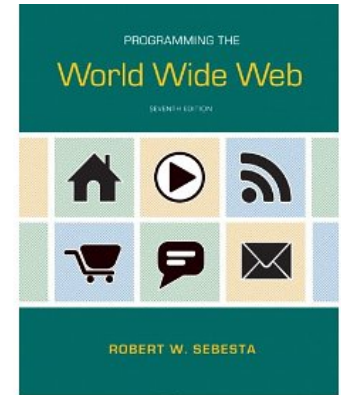
- Email (I prefer communication through piazza):
 - Email must include your **Name, Student number and CDF login**
 - Subject must include “309”
 - Your Email should:
 - State your question clearly, with enough context

Course Textbooks

- Course Textbooks:
 - Robert W. Sebesta. Programming the World Wide Web, 7/E. Addison-Wesley, 2011. (Sebesta)

 - Marty Stepp, Jessica Miller, Victoria Kirst. Web Programming Step by Step, 2/E. 2012. (Webstepbook)

 - Online Resources!



Course Prerequisites

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- Make sure you have the prerequisites!
 - ▣ CSC209H1 - Software Tools and Systems Programming
 - ▣ CSC343H1 - Introduction to Databases (Automatically Waived)

Note: Students that would like to attend CSC309 but miss prerequisite CSC209H1 would need to email the instructor asking for a course prerequisite waiver.

Assignments

- Assignment 1: Redesign Course Website
- Assignment 2: Online Game (Group of 2)
- Assignment 3: Web Service
- Assignment 4: Large App (Group of 4)
 - ▣ Part 1: Idea and Frontend
 - ▣ Part 2: Full app

Class Participation

- Class participation
 - ▣ Its not attendance, however highly encouraged
 - ▣ Ask interesting questions (in class or in Piazza)
 - ▣ Most importantly help each other in finding answers to the questions posted.
 - ▣ Be a good team mate (Counts towards group assignments marks)

Submission Policies

- All deliverables will be submitted electronically using MarkUs
- Deliverables are due at 11:59 p.m. on the due date - check website for final due dates
- Late Work Policy: Accepted up to 2 days after the due date with a 10% penalty per day
- Absolutely no deadline extension, unless you have documented reasons.

Plagiarism

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- “The work you submit must be your own, done without participation by others. It is an academic offense to hand in anything written by someone else without acknowledgement.”
- You are not helping your friend when you give him or her a copy of your work
- You are hurting your friend when you ask him or her to give you a copy of their work

What is Cheating?

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- Cheating is
 - ▣ copying parts or all of another student's assignment
 - ▣ including code from books, web sites, other courses without attribution
 - ▣ getting someone else to do any parts of your assignment
 - ▣ giving someone else your solution
- Cheating is not
 - ▣ helping to find a bug in a friend's code (be careful)
 - ▣ helping each other understand example code

Course Marking Scheme

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Work	Weight	Comment
Assignment 1	10%	Course Website
Assignment 2	15%	Online Game
Assignment 3	15%	Web Service
Assignment 4 Part 1	5%	Large App Idea and Frontend
Assignment 4 Part 2	20%	Large App
Final	35%	You must get $\geq 40\%$ to pass the course

A Few Do's and Don'ts

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□ Do

- ask questions if you don't understand something
- work together to understand concepts/projects
- use tutorials and office hours
- read material online & practice

□ Don't

- hand in other peoples' work (it's cheating)
- harass others (see the University's policies)
- distract or disrupt the class (it's immature)

Today's Overview

- Course Administrivia
- Introduction
 - ▣ History of the Internet Video (~8min)
<http://www.youtube.com/watch?v=9hIQjrMHTv4>
 - ▣ The Internet and the World Wide Web
- Simple Web Request