Instructor: Michael J. McCarthy  
mm6+@andrew.cmu.edu  
Office: Hamburg Hall 3025  
Phone: (412) - 268-4657  
See Home Page for Office Hours

Teaching Assistant:  
TA: Mohit Krishna  Email: mohitkri@andrew.cmu.edu  
Office Hours: Monday 6:30 PM - 8:30 PM HBHA2020A and Friday 11 AM - 1 PM Room A020B. Also, see Blackboard for changes.

Teaching Assistant:  
TA: Anirudh Venkatesh  Email: avenkat2@andrew.cmu.edu  
Office Hours: Wednesday and Thursday 2PM - 4PM HBH A117

Prerequisites: 95-712 Object-Oriented Programming in Java or by permission of the instructor.

Course Overview  
This course is designed as a programming intensive introduction to web technologies. We will study and build software programs using several different programming languages, markup languages and meta-markup languages. We will consider and work with two styles of client side programming - programming within the browser and programming stand alone clients. On the server, we will program using Java, XSLT and Ruby on Rails. Along the way, we will study several different markup languages. These include XHTML, RSS, and RDF. The prerequisite for this course is 95-712 Object Programming in Java and this is a technical course that focusses on technical problems and their solutions. However, many students, primarily interested in business problems, have also found this course to be quite valuable.

Grading Scale:  
97.5 - 100 A+  
92.5 - 97.4 A  
90.0 - 92.4 A-  
87.5 - 89.9 B+  
82.5 - 87.4 B  
80.0 - 82.4 B-  


Assignments: Between three and five programming projects equally weighted (50%).

One of the projects will be chosen and demonstrated by a student team.

Exam 1 (10%).

Closed Book Final Exam (40%).

Late Assignment Policy: One assignment may be turned in late (up to one week) with no penalty. This policy is meant to cover such issues as job interviews, travel and so on. The other assignments must be turned in on time with a penalty of 10% per day late.

Policy on collaboration: Unless otherwise noted, collaboration is not permitted. While it is fine to discuss projects with others it is a cheating violation when code is copied or shared. If a student is caught sharing his or her work with another, a failing grade will be assigned for the course. Likewise, if a student uses another's work when completing his or her own, a failing grade will be assigned for the course. In either case, the Dean will be notified.

Policy on complaints about grading: Grading mistakes may occur. Please contact the TA who graded your assignment about grading mistakes. It will be up to the TA to handle the complaint. If you are still not satisfied with the TA's grade please contact me immediately. My initial reaction will be to support the TA's grade. In some cases, however, I might agree with the student and ask for the grade to be adjusted. Please make any grading concerns known to the TA immediately. Set up an appointment with the TA and get the matter resolved.

Use of Blackboard: There will be a blackboard site for the course. Grades will be posted there and assignments will be submitted there. We will also make good use of the discussion board. It is far better to post a question to the discussion board than it is to send your instructor or TA an email. Answers posted there are available for all to see. The main site for the course (syllabus, course description and schedule) will be at www.andrew.cmu.edu/~mm6.

Software Requirements: The student needs to download and install the most recent Netbeans IDE. Choose the "All" option at this link:


Time/Place: TR 1:30-2:50 HBH 1004
Project Grading:
The TA will normally be assigned to grade the projects.

Policy on electronic devices:
Please confine the use of electronic devices to class related activities.

Required Textbook:
Programming the World Wide Web, Eighth Edition
Robert W. Sebesta, University of Colorado, Colorado Springs
Publisher: Addison-Wesley
There will be a copy on reserve in the engineering library.

Learning Objectives:
1. Examine and critique some of the most important technologies that are being used today by web developers to build a wide variety of web applications.

2. Build web applications using proven developer tools and message formats. We will build web applications using technologies such as Java, Javascript, AJAX, Ruby on Rails, XML, RSS, XSLT, and JSON.

3. Describe the differences and similarities between two important meta-languages - XML and JSON.

4. Explore several new standards that may play a significant role in the World Wide Web of tomorrow. We will study RDF, RDFa, OWL and Jena.

5. Formulate and build extensible web applications using the Model View Controller design pattern.

6. Develop a conscience of the semantic web of tomorrow.

7. Develop an understanding of and an appreciation for the wide variety of XML languages that are being used in many industries.

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