CS320: Web and Internet Programming

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1 Course Information

Instructor: John Tran
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Lectures: Tuesday 6:10 - 10:00 PM E&T C 159
   Office hours: Tuesday 5:30 - 6:10 PM or by appointment
   On-line office hours: 24hrs/day

Course Description: This course introduces students to server-side programming, which is essential for providing dynamic content on the web. Among the many existing web technologies, we will focus on Java servlets and JSP technologies, especially Java Beans, expression language, JDBC, JSTL, and custom tag libraries.

Prerequisites: CS120, CS122, and CS203 Students are expected to have strong Java programming skills, and working knowledge of HTML.

Grading policy: Your grade for this course will be largely based on 4 programming projects (20 points each) and a final project (25 points). It is possible to get a maximum of 105 points for the class. You must however complete the final project. Please note that failure to complete the final project will result in an “F” grade for the course even if you have received a perfect score (80 points) on the programming projects. Generally speaking, the grade breakdown is as followed. A: 90 - 100, B: 80 - 90, C: 60 - 80, D: 40 - 60, and F: below 40.

Textbook(s): Core Servlets and JavaServer Pages, Vol. 1: Core Technologies, by Marty Hall and Larry Brown. Please note that there is an electronic version of the textbook available free on-line at http://courses.coreservlets.com/Course-Materials/. In addition to the text, you will be given additional reading materials – including papers, lecture notes, and tutorials.

2 Schedule

We will make every effort to adhere to this schedule. Note, however, because the dynamics of the class can change – thus, it is possible that we may cover materials not listed above or omitted some of the materials.
9/25 Administrative issues, Introduction to server-side programming, Tomcat setup and configuration, development on a linux server, servlet basics. Reading assignment: Hall Chapters 1, 2.1 - 2.4, 2.5 - 2.6 [optional], 2.7 - 2.11, 3.1 - 3.7, and 3.8 [optional]. Goodwill’s “Deploying Web Applications to Tomcat” (this article is a little dated but should give you a basic feel for the process).

10/2 Handling HTTP requests and generating HTTP responses. Reading assignment: Hall Chapters 4.1 - 4.5, 5.1 - 5.4, 5.6 [optional], and 6.1 - 6.2, 6.3 - 6.4 [optional].


10/23 JSP Standard Tag Library (JSTL). Reading assignment: Bergsten’s “JSTL 1.0: Standardizing JSP” (Part 1-3), Kolb’s “A JSTL primer, Part 1: The expression language”

10/30 Database access (MySQL). Reading assignment: Baldwin’s “USING JDB with MySQL, Getting Started”

11/6 Custom tag libraries. Reading assignment: TBD

11/13 Web applications and MVC, and introduction to web application security. Reading assignment: Hall Chapter 15.1 - 15.4, and 15.5-7 [optional].

11/20 Introduction to apache’s JAVA technologies: strut, tapestry, maven, and velocity template engines. Reading assignment: TBD

11/27 Introduction to PHP and ASP. Reading assignment: TBD

12/4 Finals Week: No finals for this class; but we will use this time final project presentation and demo.

3 Academic Integrity

Cheating will not be tolerated. Cheating on any assignment or exam will be taken seriously. All parties involved will receive a grade of F for the course and be reported to the Academic Senate. If you have questions or concerns regarding what is permitted and not permitted in terms of collaboration or team work, please do not hesitate to confer with the instructor for clarifications.