08-672 J2EE Web Application Development

Syllabus for Fall 2016, Mini #2

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Instructors

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Course Description

This course will introduce concepts in programming web application servers. We will study of the fundamental architectural elements of programming web sites that produce content dynamically. We will be demonstrating the course using Java Servlets and Java Server Pages. We will also cover the related topics as necessary so that students may build significant applications.

Such topics are expected to include: HTML, CSS, HTTP, Relational and Non-Relational Databases, Object-Relation Mapping Tools, Security Issues, AJAX, and Cloud Deployment. Students are required to be familiar with Java Programming before taking this course. Those who are not are encouraged to take 08-671 in mini 1 before taking this course. Students are required to have a reasonably modern laptop computer on which install the Java software used for this course.

Prerequisites

- Students are required to be familiar with Java Programming before taking this course. Those who are not are encouraged to take 08-671 before taking this course.
- Students are required to have a reasonably modern laptop computer on which to install the Java software used for this course.

Course Text:

- You may choose any text or texts that covers the topics listed, below. Such books are commonly available. In the past students have used *Head Servlets and JSPs (O'Reilly)*.
- Also, information on all these topics can readily be found on the Internet. We will provide links during lectures, when necessary.

Class Meetings:

- Lectures are on Tuesday and Thursdays from 12:00pm to 1:20pm in Baker Hall Room A51 (Giant Eagle Auditorium)
- Recitations on Fridays from 10:30am to 11:20pm in Doherty Hall Room A302.

Homework Assignments

- Four homework assignments are planned – which will be due on Monday nights.

Exams & Quizzes

- Quizzes will be given during some recitation sessions.
- Final Exam – There will be a 2-hour final exam. The registrar will schedule this exam during exam "week". You must be at the exam on-time in order to take it.

Late Homework Policy

- Homework may be turned up to four days late, without penalty.
- Homework turned in more than four days late, may be graded, if we can. You will receive a penalty at the end of the course when computing your grade. (Basically, if you use a small number of excess late days and are near a grade boundary, you'll get the lower course grade. However, you have a lot of excess late days, I'll lower your course grade significantly.)
- If you are going to submit homework more than four days late, you must contact the TA that would have graded it before the end of the fourth late day.

Grade Computation

- The expected computation of students grades will be:
  - Homework: 60% – 70% (easy homeworks may be weighted less)
  - In-class Quizzes: 0% – 5%
  - Final Exam: 30 – 40%

Course Website

- As with many other CMU courses, we will use the "Blackboard" server to host our course website. It's accessible via https://blackboard.andrew.cmu.edu.
- Posted on the course website will be:
  - contact information for the course staff,
  - copies of the lecture materials,
  - links to sample code,
  - links to videos of the course lectures (but please come to class), and
  - homework specifications.

The lecture schedule (subject to change) is:

10/25	HTML & HTTP
10/27	JavaScript, CSS, and DOM
11/01	Servlets & Tomcat
11/03	Threads
11/08	Cookies & Sessions
11/10	SQL & JDBC
11/15	Object-Relation Mapping
11/17	Transactions
11/22	Java Server Pages
11/23	Thanksgiving (No Lecture)
11/30	Model-View-Controller
12/02	Tag Libraries
12/07	Security (SSL, SQL Injection, Cross-site Scripting)
12/09	Cloud Deployment (EC2 & Google AppEngine)

Academic Integrity

- You must adhere to the University's Academic Integrity Policy.
    - This includes the standard behavior of not communicating with others during exams, not copying from others and not allowing others to copy from you.
- You may use the course examples as a basis for your solution (so you may copy code from them).
- Do not electronically copy from any source code from any other sources (unless we have specifically given you permission to do so).
    - In this course, the typical violation is copying source code from other students or from the Internet. Do not do this.
- Do not allow others to copy your files (or portions thereof).
    - You may discuss your homework with other students and even show them your solution to get comments, **but you may not allow other students to copy your files** (or portions thereof).
    - Protect your files:
        - Don't share them in the cloud
        - Don't e-mail them (or portions of them)
        - Don't post them (or portions of them) on Piazza when asking questions – you can tell the TAs that your solution is in your class repo and they can see your files, there.

At the end of the day, please remember this is just class. *So, take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.*

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help: call 412-268-2922 and visit their website at http://www.cmu.edu/counseling/. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.