Syllabus

Course: CSE 405 Server Programming
School: CSUSB
Quarter: Winter 2014
Meetings: Wed. 4:00 - 5:50 JB 359
Prerequisite: CSE 322 or knowledge of Web page programming
Textbook: Various readings available for free on the Web
Instructor: David Turner
Office Hours: 3:30 - 6:30 Mon, 6:00 - 7:00 Wed JB 340

Course Format

This course is 100% Web-based with an optional weekly meeting on campus. There are no exams. All reading material is freely available on the Web. Your grade is based on the timely completion of a sequence of assignments, which is maintained at the following site.

https://github.com/csusbdt/405-2014

In addition to the optional weekly meetings, you can communicate with the class as a whole by posting to the CSUSB CSE 405 Winter 2014 Google Group.

You will maintain most of your work in a remote Git repository that I will set up for you. Only you and I will have access to your repository. I will evaluate your work by looking at your source code in addition to accessing your deployed application code from a browser.

System Requirements

You can do all required work in this course using any of the three common operating systems: Windows, Mac OS X and Linux. All required software can be downloaded and installed for free.

It is probably more convenient to complete the course assignments using a personal computer. However, computers are available in JB 358 and JB 359 that you can also use. The open times for accessing these labs is available from the CSE website or by contacting the CSE main office.

Course Goals

The goal of this course is to increase your understanding of server programming. Certain topics covered in this course -- such as cloud computing, system integration, security, communication protocols, logging -- are common to all server programming problems. Other topics -- such as

Git, Android SDK, Javascript, Node.js, and Reddis -- are specific to the development environments of individual projects. Therefore, the course encourages the acquisition of knowledge that is common to all problems while developing specialized skills.

Learning Objectives

- Learn how to develop Web-based mobile applications.
- Learn how to develop server-side logic using Javascript.
- Learn how to use a Reddis database.
- Learn how to create scalable cloud computing services.
- Learn common security problems and how to avoid them.
- Learn how to use ajax and DOM manipulation to create single-page Web apps.

Labs/Assignments

In this course, you will complete a sequence of assignments. The assignments involve research, programming and problem solving. I will grade your performance on programming assignments based on the following criteria.

Criterion	**Description**
Readability*	Is source code well-organized? Have unnecessary variables and logic been removed from the code? Does the indentation and line spacing show logical structure? Is indentation and spacing done consistently? Are concerns separated when possible? Are the responsibilities of components clear and consistently assigned? Does the code contain names for variables, functions and classes that unambiguously express their purpose in the program? Are comments included when needed? Are superfluous comments omitted?
Correctness	Has the student correctly solved the problems? Is the application interface and internal documentation free of grammar and spelling errors?
Completeness	Has the student met all stated requirements?
Comprehension	Does the student understand the work they submitted? Can the student explain the submitted work and answer questions about it?
Timeliness	Has the student completed the assignment in a timely manner? Were materials submitted by the deadline?

* Please note that writing a program to produce required behavior is not good enough for a full score in this class: you must also write code that is readable by humans. Program readability is important because real-world programs are read over and over again in the process of fixing bugs and adding new functionality.

Grading

Each assignment is worth 100 points. Your score will be computed by dividing the total of all points earned by the total possible points. The normal scale will be used to assign a letter grade.

Percent	Grade
95-100	A
90-94	A-
87-89	B+
84-86	B
80-83	B-
77-79	C+
74-76	C
70-73	C-
67-69	D+
64-66	D
60-63	D-
0-59	F

Students with Disabilities

If you are in need of an accommodation for a disability in order to participate in this class, please let me know as soon as possible, and also contact Services to Students with Disabilities at UH-183, (909)537-5238. You are advised to establish a buddy system and alternate in the class if you require assistance in the event of an emergency. Individuals with disabilities should prepare for an emergency ahead of time by instructing a classmate and the instructor.

Academic Regulations and Procedures

See the CSUSB Bulletin of Courses for the University's policies on course withdrawal, cheating, and plagiarism.

Computer Science and Engineering Club

The Computer Science and Engineering Club is a student-run organization that uses a

combination of email and campus meetings to plan events, ask and answer technical questions, post job and internship openings, and discuss other topics of interest to computing majors at CSUSB. Club-sponsored events include seminars, workshops, tutoring and fun activities.