

CMSI 499

INDEPENDENT STUDIES: INTERACTIVE WEB TECHNOLOGIES

<http://myweb.lmu.edu/dondi/fall2009/cmsi499>

Fall 2009 — Doolan 106

Variable sessions and meetings, 3 semester hours

Office Hours: TR 9-10:30am, R 3–6pm, or by appointment

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Objectives and Outcomes

To embark on a self-directed course of study in a specific area of computer science, under the guidance of the instructor. The student selects the topic and assists in identifying source material. In addition to learning more about the specific topic, the student will learn how to organize, execute, and document an intensive, individualized semester of self-study. Additional objectives depend on the selected subject matter.

Course Requirements

For individual studies in interactive web technologies, the student must have proficiency with structured text editing tools and be well-versed with moving and manipulating files and directories, both on local volumes and across networks.

Materials and Texts

- Assorted handouts, articles, and sample code to be distributed throughout the semester.

The following text is recommended and not required — but it will fill in some details:

- Ray Toal and John David N. Dionisio, *The JavaScript Programming Language*, Jones & Bartlett Publishers, 2009.

In addition, do not hesitate to look for further information regarding the concepts, techniques, tools, and paradigms that we will discuss.

Course Work and Grading

Graded coursework consists of 1 study journal web site (50%) and 1 final study report (50%). Letter grades are determined as follows: $\geq 90\%$ gets an A– or better; $\geq 80\%$ gets a B– or better; $\geq 70\%$ gets a C– or better. I may curve grades upward based on qualitative considerations such as degree of difficulty, effort, class participation, time constraints, and overall attitude throughout the course. Grades are never curved downward.

Study Journal Web Site

You will maintain a web site of your study progress, which you will make accessible at:

<http://www.cs.lmu.edu/~username/fall2009/cmsi499>

Due to the subject matter in the class, this site should not only contain the raw content of your progress, but should also demonstrate that you can apply what you have learned so far. Thus, elements of design, interactivity, and demonstration are expected to be a part of this web site.

Your study journal will be graded according to both technical and written criteria. In addition, the source files for your site should be committed to version control, the use of which is also graded:

1. *Design (30%)*: Clarity, flexibility, and ease of maintenance; elegance and innovation; applies proper separation of concerns; satisfies the “one change, one place” property
2. *Functionality (30%)*: Works as intended; produces correct answers/results; performs in a reasonable amount of time; includes tests that demonstrate correct behavior
3. *Naming (20%)*: Clarity and consistency; names correspond to roles, types, or actions
4. *Documentation (15%)*: Presence of README or overview material; abundance of comments in code; genuinely useful information
5. *Version control (5%)*: Sufficient frequency; informative commit log

The study journal will be graded at the end of finals week, December 18. You are, of course, free to maintain the site beyond the semester — the spirit of a 499 course is, after all, to give you an opportunity to get official credit for something that you would want to study on your own anyway. Continuing the web site provides you with a framework for pursuing this study beyond the scope of the semester.

Version Control

Version control is an indispensable part of today's computer science landscape in industry, the academe, and the open source community. We use CVS (Concurrent Versions System) heavily in this course: most deliverables will be turned in via CVS.

Final Study Report

You will formally document the overall result of your studies in the form of a final report to be submitted at the end of the semester. The report shall consist of at least the following sections:

1. An introduction that states the background and motivation for this course of study,
2. A literature review describing the source materials studied,
3. A summary or survey of what was learned during the semester, and
4. Any commentary that you would like to make about your study journal web site, in terms of its design, functionality, and relationship to the selected topic.

To help you to focus on the actual work and content of the report (as opposed to busy work such as formatting and reference management), it must be written using LaTeX.

There are no hard limits on length, but 10–20 pages in LaTeX's default article format, not including the list of references cited, is typical. The report will be evaluated along the following criteria:

1. *Content (40%)*: What is the quality of the work? Are the background and motivation relevant and well-stated? Is the literature review thorough and well-described? Is the summary or survey complete and substantive? How well-documented is the programming project?
2. *Organization (30%)*: Is the text structured well? Are its ideas and flow easy to follow? Are distinct sections or topics clearly identified?
3. *Writing (20%)*: Are statements clear and easy to follow? Is the language precise and grammatically correct? Is the paper's tone appropriate?
4. *Polish (10%)*: Is the content properly proofread? Are there any misspellings, typos, or other formatting faux pas?

The final study report is due at the end of finals week, December 18.

Attendance

Meeting and session schedules are determined individually, and may vary according to the specific subject matter and/or course work. The last day to add or drop a class without a grade of W is September 4. The withdrawal or credit/no-credit deadline is November 6.

LMU has published H1N1 flu prevention guidelines that are applicable to this course:

<http://www.lmu.edu/resources/emergency/status/H1N1.htm>

Special Accommodations

Students with special needs who need reasonable modifications, special assistance, or accommodations in this course (such as a documented disability [physical, learning, or psychological]) should contact the Disability Services Office (Daum Hall, Room 224, x84535, <http://www.lmu.edu/dss>) as early in the semester as possible. All discussions will remain confidential. In addition, please schedule an appointment with the instructor early in the semester to discuss any accommodations for this course for which you have been approved.

University Policy on Academic Honesty

Loyola Marymount University expects high standards of honesty and integrity from all members of its community. All students are expected to follow the LMU honor code, as stated in the *LMU Undergraduate Bulletin 2008-2010*, pp. 58–59 (online at <http://www.lmu.edu/Page13245.aspx#honorcode>).

Topics and Important Dates

Dependent on the specific subject matter and on-going progress.