

CSC 415/515 GRADUATE PROJECT AND PRESENTATIONS

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Each graduate student in CSC 515 should select a topic related to web applications that will not be covered in class, explore the topic, write a 10 page paper, and do a thirty minute oral presentation to the class. The written paper is due on the last day of class.

Typically, I expect the student doing a graduate course project to go beyond just reading and writing about a particular web technology: I expect the student to learn how to use the technology. The student should design and write a web application that demonstrates the use of the selected technology. The project does not need to be extensive, but it does need to demonstrate the use of the technology in some meaningful way.

Here is a list of topics you might consider. You may also pick a topic of interest to you that is not listed here, in which case the topic must be approved by the instructor.

- (1) **NODE.JS**: This is a JavaScript framework for writing networked servers. Node.js can be used to write web applications. I will consider two graduate students working together on a project that explores both Node.js and Express.js. In that case, the two students can do a one-hour joint oral presentation on the two technologies.
- (2) **TYPESCRIPT**: This is a JavaScript-like language that is typed.
- (3) **HTML 5 CANVAS**: This is a way to do graphics in HTML
- (4) **WEB SOCKETS**: WebSockets is an advanced technology that makes it possible to open an interactive communication session between the user's browser and a server. With this API, you can send messages to a server and receive event-driven responses without having to poll the server for a reply.
- (5) **HTML / JAVASCRIPT DRAG AND DROP**: This is a JavaScript API that allows you to implement drag and drop in the browser.

Other possibilities are various JavaScript frameworks, such as Angularjs, backbone.js, etc.

Email me a ranked list (lower number indicate higher preference) to select one of these topics. Topics will be assigned on a first-come-first-served basis. Every student must select a topic by Wednesday of Week 6.