Course Syllabus





CS 4500-001 Fall 2022 Senior Capstone Project

Welcome to CS4500.

Please be aware of and follow the Spring 2022 Covid Guidelines (https://coronavirus.utah.edu/).

Course Objectives

This course is the capstone experience for graduating Computer Science seniors. It involves the development of significant software systems by small, self-selected student teams, with emphasis on applying sound, disciplined software engineering practice. Projects are defined and selected at the beginning of the semester, after which progress is demonstrated through documentation, meetings, and demos. The class culminates in a Demo Day at which students present their projects to faculty, students and project sponsors.

Prerequisites

Prerequisites: C- or better in CS 4000 AND Full Major Status in Computer Science.

Course Description

Students will realize the projects designed in CS4000.

Required Materials

No specific required materials.

Assignments

The assignments are:

- Design Documents: These must be completed by the due date and turned in one per team as PDF files through Canvas.
- User Guide: These must be completed by the due date and turned in one per team as PDF files through Canvas.
- Weekly Management Reports (WMR): These must be submitted each Friday by 5pm. See assignments for details.
- Personal Logs: These must be submitted by each student every Friday by 5pm. See Assignments

for more details.



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Date	Topic	Material	Assignments
August 22- September 16	Class will meet in CTIHB on August 22. Update Design Document; Develop Project; Prepare alpha demo		Assigned: Update Design Doc (due 9 Sept); alpha demo - each team will demo during Sep 12-16 (http://www.cs.utah.edu /%7Etch/CS3100/problems /A1/A1.pdf)
September 19-30	User Guide (1st draft)		Assigned: User Guide (due 30 September)
October 3 - 28	Update Design Document; Develop Project; Prepare beta demo		Assigned: Design Document update (due 21 Oct); beta demo (week of Oct 24-28) (http://www.cs.utah.edu /~tch/CS3100/solutions /quizzes/quiz6-sol.pdf)
October 31 - December 2	Final Design Document; Prepare Project; Final User Guide		Assigned: Final Design Document (due 2 December); Final User Guide (due 2 December) (http://www.cs.utah.edu /~tch/CS3100/problems /A3/A3.pdf) (http://www.cs.utah.edu

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/<u>~tch/CS3100/solutions</u> /<u>quizzes/quiz8-sol.pdf</u>)

December 2 - 9

Final Demos

Assigned: Final demos (http://www.cs.utah.edu/~tch/CS3100/solutions/quizzes/quiz10-sol.pdf">http://www.cs.utah.edu/http://www.cs.utah.edu/<a href="http://

(http://www.cs.utah.edu/~tch/CS3100/solutions/quizzes/quiz12-sol.pdf)

(http://www.cs.utah.edu
/%7Etch/CS3100/problems
/A6/A6.pdf)

(http://www.cs.utah.edu/">http://www.cs.utah.edu/<a><a>/~tch/CS3100/solutions<a>/quizzes/quiz13-sol.pdf)

Class Schedule and Assignments

The class will meet in CTIHB 101 on August 22. Otherwise, teams will have a weekly meeting (over Zoom) to discuss progress. The meetings will be held during the class time MWF 10:45-11:35.

Days with no class:

Monday 5 Septemberr 2022: Labor Day Holiday

Monday 10-14 October 2022: Fall Break

Friday 25 November 2022: Thanksgiving Holiday

Instructor

Instructor:

Thomas C. Henderson (http://www.cs.utah.edu/%7Etch), Professor

E-Mail: tch@cs.utah.edu

tch@cs.utah.edu

Office Hours (Zoom): Teams will meet for 10 minutes a week with the instructor to discuss progre Individual appointments may be scheduled by sending an email request.



There are no TAs.

Grading Information

The grading distribution will be as follows:

Design Documents: 50%User Guide: 30%

Individual Logs and Effort:
 20% (due Friday 5pm every week)

You are expected to make a good effort on all assignments based on a careful understanding of the requirements of the assignment. I will assign a grade based on how reasonable your solution is given the quality of your work product, how it addresses concerns, and its style and content. My goal is to look at all your work, and to assign a grade based on your demonstration of thoughtful effort and results. It's better to ask questions before and during an assignment, than to try and understand what went wrong after it's due. The proportions given above delineate how I intend to apportion the weight of the various work in the course.

Assignment Due Time

Unless otherwise stated in an assignment, all assignments will be due by 5pm on the due date (every Friday for Logs, and assigned due date for Design Docs and User Guides). You should upload PDF's to Canvas for assignments (submission of other document types - e.g., doc, etc. - will lower the grade). The time that we use for an assignment is the submit time. To hand in assignments electronically, use the upload facility in Canvas.

Appeals Procedure

See the Code of Student Rights and Responsibilities, or the Class Schedule for more details.

Appeals of Grades and other Academic Actions

If a student believes that an academic action is arbitrary or capricious he/she should discuss the action with the involved faculty member and attempt to resolve. If unable to resolve, the student may appeal the action in accordance with the following procedure:

- Appeal to Department Chair who should be notified in writing within 40 working days; chair must notify student of a decision with 15 days. If faculty member or student disagrees with decision, then,
- 2. Appeal to Academic Appeals Committee (see flyers posted in MEB and EMCB for members of

committee). See II Section D, Code of Student Rights and Responsibilities for details on Academic Appeals Committee hearings.



Assignment Late Policy

No late work is accepted.

Individual Work

Every individual is expected to contribute to the project, and these contributions must be documented in the Design Doc as well as the logs. Moreover, response to information requests will also be used to assess individual grades.

Registration

See university web page for the full academic calendar (<u>Calendar web page (http://registrar.utah.edu/academic-calendars/fall2022.php)</u>). See the university web page for a copy of the withdraw guidelines as well, or see the <u>Student Code (https://regulations.utah.edu/academics/6-400.php)</u>.

The college Guidelines for Spring 2022 can be found at <u>College Guidelines</u> (https://www.coe.utah.edu/semester-guidelines).

American with Disabilities Act (ADA)

The University conforms to all standards of the ADA. If you wish to qualify for exemptions under this act, notify the Center for Disabled Students Services, 160 Union. The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

Dealing with COVID

If issues arise due to the COVID pandemic and its ramifications, feel free to discuss accommodations (e.g., assignment extensions, etc.). If you are interested in a credit/no credit option, you need to discuss the ramifications with SoC undergraduate advisors.

Course Summary:

Date Details Due