CS 3801 Design Project I

Course Information

Meeting Times:

0905 - 0955 MWF U A Whitaker Biomedical Engr 1103 (Section JD1)
1005 - 1055 MWF U A Whitaker Biomedical Engr 1103 (Section JD2)

Instructor: Bob Waters

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Office Hours: 0900 - 1100 Tuesday (Other times on request, Open Door Policy).

Learning Objectives

Purpose:

CS3801 fulfills part 1 of the capstone project requirement for the computing degree. Over two courses, students will experience a full lifecycle project, from conception to delivery in a multi-person student-led team. CS3801 is integrated with the technical writing course.

Outcomes:

(Accomplishment) As part of a multi-student team, produce and document a non-trivial software system which solves a complex problem requiring analysis of "design tradeoffs", "non-functional requirements" and "real-world customer needs".

(Experience) Upon completing the course, reflect upon the impact of your team's design decisions and the challenges of being part of an interpersonal team.

(Competency) Demonstrate the ability to identify, develop, and document customer requirements for a software-intensive system. Write these up in a statement of work which is also part of your technical writing requirement.

(Competency) Given a set of developed user requirements, demonstrate the ability to generate multiple high-level designs, evaluate their merits, and choose the best overall design for the

given problem.

(Competency) Prepare and orally present details of your project and justify the decisions and facts in your presentation during question and answer periods.

(Competency) Demonstrate the ability to plan and execute a semester-long project, tracking progress and making adjustments as necessary to stay on schedule.

(Competency) Demonstrate the ability to plan acceptance tests to ensure the system meets both functional and nonfunctional requirements.

(Competency) Demonstrate the ability to produce an appropriate prototype for customer evaluation.

Deliverables

Description	Grading Criteria	Weight
Project Management / Status Reports	Criteria	10%
Statement of Work **	Criteria	20%
Feasibility Analysis **	Criteria	20%
Design Architecture	Criteria	10%
Sprint 1 Closeout	Criteria	5%
Sprint 2 Closeout	Criteria	5%
Final Presentation **	Criteria	10%
Acceptance test	Criteria	5%
Prototype	Criteria	15%

** joint assignment with LCC

Grading

You grade is computed based upon deliverables (See deliverables section) and then adjusted per your team contract. Note that you must pass both the CS and the LCC portions of the course. It is not possible to pass 3801 but fail the LCC portion.

There are no late assignment rules. We begin grading after the due date, and we grade whatever is submitted. Be sure you have your latest versions submitted to your team pages.

Schedule

The course schedule is shared with LCC and is on Google Docs at this link:
https://docs.google.com/document/d/1C3sX_GIAJeuTNGZprELboi9-xU9EpdU-RvoNgtGP-hw/