CSCE4902/4925: Capstone II

Instructor: Jonathon Doran, Jonathon.Doran@unt.edu

Class Meeting: Thursday: 5:30pm-8:20pm
Office Hours: TBA

- Also via appointments. Feel free to email me times that you are available

Overview

: Second course in the senior capstone sequence. Focus is the application of techniques to the design of electronic systems that have digital hardware and software components. Students apply the theory acquired from numerous engineering courses to solve real-world design problems. The design will consider realistic constrains including economic, environmental, sustainability, manufacturability, ethical, social, safety.

Textbook

: None

Objectives

:

Students should gain these skills by the end of the course:

1. Create a detailed systems design and implementation plan using standard software engineering tools and methodology.
2. Implement the design for a large-scale information system.
3. Create a test plan and series of test procedures for a project and execute the procedures against the components created.
4. Create a delivery and maintenance plan for a large scale information system.
5. Utilize configuration management, project management and design tools in the course of the project.
6. Create a lifecycle plan for the information system developed.
7. Understand the classification and characteristics of large computing systems.
8. Demonstrate the ability to perform common systems installation, integration, maintenance, and administration tasks.
9. Demonstrate the ability to plan and execute the deployment of an IT system or components into a client environment.

Prerequisites

CSCE 4905

Attendance: Attendance is required and will be periodically monitored

Major Assignments:

The majority of assignments in this course will relate to a large group project that will be completed based on preliminary work in CSCE 4905.

There will be a few initial individual assignments and a number of group deliverables throughout the semester.

There will be no examinations

Grading:

The various components of your grade are weighted as follows:

Team Project Deliverables	50%
Team Presentations	10%
Peer and Client Performance Reviews	10%
Client/Instructor Assessment	30%
Total	**100%**

Topics:

- System Implementation
- Unit, Subsystem and System Testing
- Acceptance and Delivery
- Reliability
- Ethics and Social Responsibility

Schedule

(Subject to change)

Date	Topics	Due

W1: 8/23 – 8/25	Course overview, Project Plan Updates	
W2: 8/30 – 9/1	Lecture: Testing	
W3: 9/9	Lecture: System Implementation	Status Report 1
W4: 9/16		
W5: 9/23	(Work week)	Status Report 2
W6: 9/30	Lecture: Test Plans	
W7: 10/7	(Work week)	Status Report 3
W8: 10/14	Lecture: Test Procedures	
W9: 10/21	(Work week)	Status Report 4
W10: 10/28	Lecture: Maintenance Documents	
W11: 11/4	(Work week)	Status Report 5
W12: 11/11	Lecture: User Documentation	
W13: 11/18	(Work week)	Status Report 6
W14: 11/25	Lecture: Reliability	
W15: 12/2	(Work week)	Status Report 7/
Finals 12/9	Presentations and Demos	Presentation and Pr

Course Policies:

- ABSOLUTELY, NO LATE project assignments will be graded, unless specific arrangements are made with the instructor in advance
- All assignments will be turned in via Canvas, which will accept submissions until 11:59pm on the due date
- ALL requests for extensions on assignments must be made prior to the due date, and must be for a valid "emergency" reason. In extreme circumstances, contact after the due date may be accepted if there is a COMPELLING reason.
- Attendance and participation is required, and is a factor in your individual assessments.
- You are responsible for all information presented during the lecture period, regardless if you attend or not. You are also responsible for all team assignments made by your team lead.
- You must provide University accepted documentation for excused absences.
- Lecture and Project assignments are included in this syllabus. However, you should regularly check Canvas, as well as take note of in-class announcements for changes in the schedule or assignments.
- You should plan to spend, on average, about 10-15 hours per week outside of the normal class meetings working on the various aspects of your project. If you find yourself spending significantly less time, the scope of your work may be insufficient.
- As deadlines draw near, the time commitment may increase.