



1. Course Overview

CSE 498, Collaborative Design



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S CSE 498

- Collaborative Design
"Senior Capstone"
- Wayne Dyksen
Brian Loomis
Nan Zhang
- Lecture
MW, 3:00-3:50pm, 1257 AH
- Labs, 3358 EB
TT, 3:00-3:50pm
WF, 8:00-9:50am
WF, 12:40-2:30pm

S Web Site

- Details
 - URL: www.cse.msu.edu/~cse498
 - User name: cse498
 - Password: 040498
- Check it Often for
 - What's new?
 - Meeting Notes
 - Team Projects
 - Useful Links

S Course Objectives

- Learn to architect, develop, and deliver a complete software application to a client
- Learn to work effectively in a team environment
- Develop your written and oral communication skills
- Become proficient with software development tools and environments
- Learn about system building and system administration
- Integrate everything you have learned in your other computer science courses
- Give you something job interview talking points
- Etc...

S Team / Project Generalities (1 of 2)

- Clients
 - Vary in Size and Type
 - Client contact/mentor is a "volunteer".
- Team Contact Person
 - Picked By Team
 - Main Point of Contact for Client
- Challenges
 - Architecture
 - Specifications

S Team / Project Generalities (2 of 2)

- Project Level of Difficulty
 - Hard Enough
 - But Not too Hard
- Deliverable
 - To the Client
 - By the Due Date
- Documentation
 - System Administration Manual
 - Users Manual

S Project Specifics (1 of 2)

- Boeing
F/A-18 Memory Unit (MU) Data Visualization
- DaimlerChrysler 1
Trucking On Board Computer Replacement
- DaimlerChrysler 2
Sales Executive Information System
- Image Space, Inc
Gaming Graphics Enhancements
- MSU MATRIX
XML Implementation of American Voices
- MSU Men's Basketball
Real-Time Game Stats System
- Motorola
Video Control System

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S Project Specifics (2 of 2)

- Vary
 - Type
 - Current State of Specificity
- Challenge
 - Connect with Client
 - “Nail Down” the Project
 - Hard Enough
 - Not too Hard
 - Course Feature, Not Bug

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S Course Environment

- Business-Like
- Team = Startup Company
- Dyksen & Loomis
 - Your
 - Venture Capitalists
 - Board of Directors
 - Expect
 - ROI
 - Results

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S Team Dynamics

- Remember the freshman seminar?
- Organize as See Fit
 - Really Hard Stuff
 - Really Important Stuff
- Board of Directors...
 - Hires
&
– Fires
- (Be Ready to Discuss During Interviews)

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S Project Deliverables

- Technical Specification Document
- Technical Specification Presentation
- Software Packaging
- Administration and Users Guide
- Mid Term Demonstration
- Final Demonstration
- Project Poster and/or Video
- Project Web Site
- Final Presentation

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S Class Meetings

- Format
 - Lectures
 - Peer Reviews
 - Team Progress Reports
 - Formal Team Presentations
 - Professional
- Attendance
 - Required
 - No Excuses
 - Factor in Grade

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S CSE498 Lab

- 3358 EB
- Door Lock
 - “Pump” Handle (to Generate Electricity)
 - Code = 040498
- Systems
 - Two (new) PC's per Team
 - Server
 - Development Machine
 - Team 100% Responsible
 - Building
 - Maintaining
 - Securing
 - Backing Up
- Books

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S Schedule Lab Times

- No Formal Lab Sessions
- Placeholders for Team Meetings
- Teams may meet at any time.
- Students must be available during their scheduled lab time.

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S Expectations & Workload

- Extremely High For Both
- Your MSU Career Capstone
- Addition to Your Personal Portfolio
- View Like an Internship
- Interview Talking Points
- Leverage Into a Job Offer

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S Grading (1 of 2)

- Team (75%)
 - Technical Specification Document 10
 - Technical Specification Presentation 5
 - Software Packaging 5
 - Users Guide 10
 - Mid Term Demonstration 10
 - Final Demonstration 10
 - Project Poster or Video 5
 - Project Web Site 5
 - Final Presentation 5
 - Project Management 10
- Individual (25%)
 - Technical Contribution 10
 - Team Contribution 10
 - Team Evaluation 5

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S Grading (2 of 2)

- We reserve the right to make changes with sufficient notice.
- No special consideration will be given for final grades including but not limited to
 - status in any academic program including CSE,
 - financial aid,
 - rank in the armed forces,
 - job,
 - graduation,
 - mortgage,
 - marriage, or
 - visa status.

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S Integrity of Scholarship

- MSU's policies will be enforced.
- Individual and team work must be original.
- Violators...
 - Will be referred to the appropriate deans.
 - May receive a grade of F in the course.

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S VISA

- Verified Individualized Services and Accommodations
- Let us know ASAP.
- We will work with you.

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S Caveat Emptor / Nota Bene

- CSE 491
 - is new for both instructors.
 - will be different than in previous years.
 - will be a work in progress.
- Together we will
 - ...be designing the course "just in time".
 - ...do some things right.
 - ...do some things wrong.
 - ...increase our marketability.
 - ...get to know each other.
 - ...work very hard.
 - ...have fun.

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S Office Hours

Your Choice

- Either
 - Any Time...
 - Visit
 - Call
 - Send Email
 - Make Appointment If Necessary
- Or
 - Two Hours Per Week, Period
 - Make Appointment If Necessary

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S Introductions

- What's your name?
- Where are you from?
- What did you do during the summer?
- What do you want to be when you grow up?
- Are you job hunting? How's it going?
- Are you thinking about grad school? Where?
- Etc???

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S First Assignments

- Check out the Lab
 - See if you can find it
 - See if you can get in
- Check out the Web Site
 - See if you can log in.
 - Check out the "Other Links" links
- Read Case Study
- Research Clients
 - Boeing
 - DaimlerChrysler
 - Image Space
 - MSU MATRIX
 - MSU Men's Basketball
 - Motorola

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