

CS490

Senior Team Projects

Prof. Jeff Johnson

Credit: Prof. Olga Karpenko for earlier version of slides

Contacting Prof. Jeff Johnson

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- Office Hours: HR 510i (near elevator)
 - Mon, Wed: 1:45-3:15 pm
 - Tue, Thu: 10:30-11:00 am

Purpose

- CS Students work in teams to develop large software projects under guidance of project sponsor
- **New:** Students from USF Business School assigned to some teams
 - Enrolled in BUS 398-02: Software Development Teams
 - Instructor: Lou Lucaccini
 - Will help with business analysis, testing & evaluation, writing reports (not coding)

Learning Outcomes

- Specify, design, implement, test, and document significant software project.
- Solve problems that arise during development of a software project, on a deadline.
- Provide detailed technical documentation for users, and for developers wishing to enhance the software.
- Communicate effectively, productively, and professionally with project sponsor, instructor, team members, and potential users.
- Design digital products and services using a design process that focuses on the needs of potential users.
- Clearly verbally communicate technical concepts in numerous settings: small groups, class presentations, and presentations to the wider USF community.

How Project Teams are Formed

- Students indicate CS background, skills
 - Fill out 1st questionnaire on Canvas
- Today, Thursday, maybe Monday: Project proposals pitched to class
- Students indicate preferred projects, teammates
 - Fill out 2nd questionnaire on Canvas
- Instructor forms teams, assigns to projects
- Teams start work

Expectations

- Document project *plan*: Draft Specification
- Design and implement the project
- Meet project sponsor *weekly*
- Meet instructor for Status Reviews (9)
- Write Final Report
- Present your work in:
 - Status Meetings
 - Midterm and Final presentations
 - A poster presentation session (TBA)
- Attend lectures
- Expect to spend ~15 hours a week

Grading (for CS Students)

- 2% Class Attendance
- 5% Draft Specification
- 10% Midterm Presentation
- 10% Status Reviews
- 20% Final Status Review
- 20% Final Presentation, including demo of project
- 20% Final Report
- 10% Project poster
- 3% Poster Presentation (date TBD)

Status Reviews

- Team meeting with the instructor
 - ~20 minutes/team
 - We discuss your progress on project
 - Please bring a laptop with project
- Your goal: Convince me you are on track
- Most problems: Discuss with sponsor
- Sponsor or team issues: Discuss with me

Deliverables

- Code: to sponsor
- Final Report
 - including project documentation
- Final Presentation
- Poster
- Poster Presentation

Lectures

- Lou: Team dynamics
- Jeff: Understanding users and tasks
- Jeff: Conceptual design
- Jeff: Preparing a draft specification
- Jeff: Preparing a presentation
- Jeff: Preparing a poster

After Teams Formed and Projects Assigned

- Meet with sponsor ASAP
- Start writing Project Specification

To Do

- See remaining project pitches
- CS490: Fill out "Project & Team" form
 - Indicate top 3 projects to work on
 - Indicate possible teammates
- BUS398: Tell Prof Lucaccini your prefs
- CS490 is 4 units; BUS 398 is 2 units
 - Workload on teams should match that

Proposed Projects on Canvas

USF CS-490-01 - Pages - Project Sponsors

View All Pages

Project Sponsors

PATTY RALLY, POSITIVE COACHING ALLIANCE

- Title:** RallyScores Mobile Phone App
- Description:** The RallyScores app connects all those interested in youth sporting events to the action. RallyScores allows parents, fans and enthusiasts a way to keep up with youth and high school sporting events all in one place. Rather than having to rely on text messages, social media updates, official team pages, etc. RallyScores makes being close to the action simple and easy.
- Slide:** [RallyScores Presentation](#)

JON RAHOI, TEN-X AND NOOGAMES

- Ten-X Messenger Bot: a chatbot interface for querying our APIs and talking to customers.
- Ten-X Interview tool: a system for managing candidates, questions, feedback, and job descriptions.
- Lunisolar: a calendar visualization project.
- NooGames Next Game: help us build the next game on our multiplayer real-time gaming platform

Slides: <http://rahoi.com/usf/learning/2/tech.pdf>

PROFS ALARK JOSHI & SOPHIE ENGLE, USF CS DEPARTMENT

- Title:** Enabling the benefits of using ISOTYPE visualizations for comparison tasks.
- Description:** Area comparisons are traditionally harder for human beings, which is why visualization scientists

Possible Projects: Tuesday

- Patty Rally, Positive Coaching Alliance: RallyScores mobile app
- Jon Rahoi, Ten-X & NooGames:
 - Ten-X Messenger Bot
 - Ten-X Interview Tool
 - Lunisolar
 - Backgammon (or other simple game)
- Profs Alark Joshi and Sophie Engel, USF CS: Benefits of ISOTYPE visualizations for comparison tasks
- Austin Bushree: Sustainability Networking App

Possible Projects: Thursday

- Jose Alvarado, SF Dev Shop: five project ideas
- Prof Jeff Johnson, USF CS:
 - Tablet for people with Macular Degeneration
- Matt Butner, Stride Health
 - Extracting medical information and prices from labels and receipts
- Andy Edmonds, Adobe:
 - Worker cognition research study
 - Updating Scrutinizer in Adobe Air or a browser plugin
 - Search UX Prototype for Adobe Stock

And Now... Today's Projects