CS4912 Syllabus

Instructor: Mark Guzdial, School of Interactive Computing

Office Hours: 11-12 on Wednesdays, 1-2 pm on Fridays.

Office: 324 TSRB (above Moe's)

What this class is about: Unless you were in a co-op or internship, all your assignments up until now were written by a teacher *who knew that they could be completed.* In this class, you will have a *customer* who will want more from you than you can provide in a single semester. That customer will give you a significant part of your grade -- you can't get an A unless your customer gives you an A. This class is practice for your first job, with explicit instruction in project management, team management, reporting, and requirements gathering.

Learning Objectives

- Use design and project management practices common in digital media industry in creating an artifact that meets a customer's needs.
- Create digital artifacts with an awareness of history, audience, and context.
- Be able to work effectively in teams to accomplish a common goal.
- Be able to communicate information and ideas, orally and in writing, to a range of audiences.

Students with Disabilities

Any student who feels that he or she may need an accommodation for any sort of disability, please make an appointment to see me during my office hours. The Office of Disability Services for Students offers a variety of resources for students with disabilities. Learn more about the ADAPTS program here: http://adapts.gatech.edu.

Course Culture

Students in CS4912 will treat each other and the instructor with respect, in class and in on-line media. *In Class Cell Phone and Laptop Policy:* Simple: Put them away. Please be respectful of your classmates and our learning community. Students who cannot comply with the requirement to be respectful will be asked to leave the class session.

Honor Code

The penalties for plagiarism (submitting other people's or team's words or ideas as your own) are severe. I will report all cases of academic dishonesty to the Office of Student Integrity. Please adhere to the Georgia Tech Academic Honor Code. You may review that code at www.honor.gatech.edu.

Attendance

Attendance is mandatory during the lectures in the first four weeks, and at the Sprint 1 and Sprint 3 Reviews. There will be a sign-in sheet at the Reviews. Miss your presentation: 1 letter grade (off final grade). Miss other team's presentations: -5 pts per miss (off presentation grade).

Grading Information

Description and **Weight**

Team Contract and Weekly Status Reports -- 5%

Design Docs: Total: 22%

- Project Planning-- 5%
- Requirements, Vision, Use cases -- 5%
- Design, Architecture, Rationale -- 12%
- Test Plan 3%

Sprint Reports: Total: 20%

- Sprint 1 presentation -- 5%
- Sprint 2 presentation and design review -- 5%
- Sprint 3 presentation -- 10%

Review, Reflection, and Summary: Total: 50%

- Delivery documentation -- 5%
- Individual design analysis -- 10%
- CM Capstone Essay -- 10%
- Peer and self evaluations -- 5%
- Customer and advisor evaluation -- 20%

Every team must have an advisor. For GT-sponsored projects, the customer can be the advisor. Advisors meet with each team frequently to assess progress, typically during class times. Each week students send their advisor a status report in a pre-defined format. Advisor assigns 20% of your grade, based mostly on customer feedback (if different than advisor).

Your project page must be a T-Square site. All your team materials for grading (design docs, vision statement, delivery documentation) gets uploaded there. Be sure to create a folder in Resources for "Grading Documents."

Week 1

Students pick their project and organize their team.

- Aug. 19: Course overview. What do you need to do to manage a large project? init.ppt in Resources.
- Aug 21: Overview of iterative development using agile methods.
  - Required reading: [Requirements analysis in Wikipedia](). *[Five most common errors in Requirements Analysis]().*
- Aug 23: How to gather requirements from customers.

Team status reports are due by midnight each Friday Weeks 2-15.

Week 2

Make a project site in T-Square. Contact customer and start writing project vision.

- Aug 26: Writing a Vision statement and Use cases.
- Aug 28: Project Planning using Scrum.
- Aug 30: First external speaker on their industrial practices. SR1 Due

Week 3

By end of Week 3, students should have a vision document, and their first product backlog and Sprint 1 Backlog.

- Sept 4: Documenting system architecture and design.
- Sept. 6: Developing a quality project: The necessity of a Test Plan. SR2 Due (*must* include who your advisor will be and your team contract!)

Week 4

By end of Week 4, students have Sprint 1 Use Cases and first round Design.

- Sept. 9 and 11: Second and third external speakers on their industrial practices
- Sept 13: How to present a design and demo. SR3 Due.

From here on out, there are no lectures. Student teams meet with their advisors weekly or bi-weekly. Status Reports are due each week. Whole groups meet on these occasions:

- Students gather in Week #6 to present their projects. (Mandatory attendance.)
- Teams meet individually with instructor for Design Review and Demo at end of Sprint 2 in Week 11
- Students gather for final presentations. (Mandatory attendance.)

Week 5 Sept 16-20

Students are finishing Sprint 1.

Week 6 -- Sprint 2 starts!

Students complete midterm peer evaluations, and present their projects. Sprint 2 backlog and uses cases due by end of week.

- Sept 23-27: **Schedule TBD**

Week 7 Sept 30-Oct 4

By end of week, Sprint 2 Design Update--update your planning and design documents.

Week 10

Test plan due at end of Week 10 (Oct 25).

Week 11 -- Sprint 3 starts!

Students complete Sprint 3 Backlog and final product backlog by end of week. Each team meets with the instructor for 25 minutes to review their work so-far, demo the product so-far, and review the design in detail.

- Oct 28- Nov 1: **Schedule TBD**

Week 13-14

Start final presentations -- *all* students are expected to attend.

- Nov 18: **Schedule TBD**
- Nov 20:
- Nov 22:
- Nov 25:

Week 15

By midnight Friday of (Dec. 6), all documents (Vision document, Design document, all Use Cases, all Backlogs, Test Report) must be completed.

Finals Week

- Individual Design Assessment (with their personal reflection on the project and the design/development process) due by 5 pm ET on Monday Dec. 9. Delivery documents due. Peer and Self Evaluation is to be sent to advisors.
- CM Students' Reflection Essay Due Wednesday Dec. 11 at noon ET.