



GEEN 1400: Computing in Social Networking Sites

Design Project

Explore the Design Process

Date Out: 10 February 2009

Date Due: See Deliverables

In preparation for this assignment, please read Chapter 7: Design Process from the textbook.

Explore this chapter carefully as the different stages of the design process outlined in the chapter will have to be documented in your final report and at the design expo.

The objective of this design project is for you to explore further the different phases in the iterative process of engineering design. This is your major semester project that will count for 50% of your final grade. The main emphasis of the design projects in GEEN 1400 is on Physical Representations of Social Networks and its implications of people communicating with technology.

Deliverables and Grading

Deliverable	% of Grade	Due Date
Project Proposal	30%	19 February 2009 by 11:59pm
Status Report	20%	12 March 2009 by 2pm
Demo for Class	10%	21 April 2009 (In Class)
Demo for Expo	15%	25 April 2009
Final Report	25%	30 April 2009 (In Class)
Peer Review	% of the total grade the peer review yields	30 April 2009

An example of grading: Darla's group gets 1% for getting their application being approved on time; 45% on their project report; and 48% on their project presentation for a total of 94 points. Unfortunately, Darla missed two after class group meetings and her teammates did not appreciate her absence. Her total peer review grade was an 80%. Thus, Darla will receive receive a 75% on this assignment ($94 \times 80\% = 75\%$). Meanwhile, her teammate Jaime received a 110% on her peer review - in this case, her peer review grade will be 100% and she will receive a 94% on this assignment.

Terms

Home Team: Your team of five people who are working on a specific part of the group project (e.g., Rube Goldberg to represent writing on a wall).

Project Group: Multiple home teams working together on a larger themed project (e.g., Rube Goldberg machine to visually represent a social networking website profile).

Logistics: Lab meetings will be broken up between home team and project group work. Home teams and project groups will be expected to share status updates with the class to learn from each others barriers and how problems were overcome.

Project Proposal

The project proposal should be written in grammatically correct English (no chat/texting spelling). Bulleted lists should be used sparingly and only when appropriate. The document should read as if one unifying body wrote it instead of 4-5 different people wrote it - thus someone in the group will have to be the editor of the document to ensure it is readable. Students are encouraged to use the writing resources discussed during the first week of class and avoid needless words (see <http://www.bartleby.com/141/strunk5.html> #13).

Outline of Project Proposal:

- Background Description of the problem
 - Write this so the general reader knows what this project is going to be about. About 200 words.
- Statement of the problem to be attacked
 - This is well-scoped description of the project that you've created after thinking about this with your home team and project group. This will represent a solid (not vague) starting point that will enable you to structure a good project. You will refine and rescope this, since you will have real experiences to help you to be more precise and certain. About 100 words.
- Key literature references
 - Identify some published work relevant to your topic. This could address the same domain area (mobile phone use, medical informatics, on-line tutorials, etc), related technology, or a similar problem in another domain. About 400 words.
 - Use in-line citations like this: "A study of distance learning high-school students using on-line math tutorials found that frequent feedback about tutorial progress is critical (Doe, 2004)."
 - Include a bibliography section at the end of your document that references those cited papers, like this:
 - Doe, Jane (2004). A Study of 11th Grade Distance Learning Students. *Journal about Something Terrific*, vol 15, issue 1, pp. 4-24.
 - You may use any bibliographic style you prefer, but please make sure you are consistent and that the references are complete.
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- Timeline
 - Using the deliverables above as the master plan, plot out the details of your project as exactly as you are able. This might change as you go along, but the point now is to make sure you have all the scheduling pieces on the table and have accounted for them (including known constraints or barriers in your schedule).
 - Schedule group and individual milestones. You might need to adapt this as you go on, but you should have a clear plan in place now.
- Management Plan
 - Elect a team leader. See more notes below. This is a coordination function. This is not a dump-everything-on-the-project-leader function, nor is it a I'm-the-boss-of-you function. Problems and work are shared across the entire group. The leader will help make sure things go smoothly.
 - Plan for HOW, WHEN & WHERE the team will communicate and coordinate. Strong teams use a combination of email, phone, instant messaging; a standing time when they know they can meet face-to-face; planned additional meetings to meet milestones; and so on.
- Exposures
 - An exposure is something that might happen that would upset your plans in a serious way. You can't account for all, but look for ones that could happen where a backup plan would help you quickly recover. A common form of an exposure is a dependency, something you are assuming you can rely in your project, but which may not happen, like the new Java Grounds environment becoming available by Feb 19, or Pat Smith of XCORP meeting with you to discuss the framemis application domain. Try to identify risks like these, and indicate how you can recover if the worst happens.
- Implementation environment and rationale
 - You should choose an implementation environment to suit the needs of your project, what environments or tools you have ready access to, and the skills you have or want to develop.
 - In the beginning, prototypes will be low-fidelity (paper sketches). However, as each project progresses, more building and manufacturing will be needed.
 - Please take stock of what your team can do, and share the workload accordingly across the prototyping phase of the project. There are plenty of sub-tasks in prototyping that can be shared. No one should worry about not being able to participate; nor should anyone need to worry about taking on more than others. Plan accordingly.
- Evaluation
 - Describe how you plan to evaluate your visual representation.
 - Will you evaluate your physical representation with people?
 - If so, how many? Where will you do it? When will you do this?
 - If not, discuss how it will be tested. Where will it be tested? When?
 - Logistics: what do you need to bring with you or have on hand? Where do you need to be in relation to your schedule to conduct this evaluation?
 - How will your team work together during the evaluation? Who will lead? Who will take notes? Will you rotate for each task in the evaluation?

Typical problems with project proposals are vagueness and an incomplete schedule:

- A specific, named team member should be responsible for each item in your schedule. While everyone may work on something, one person needs to be responsible for making sure it gets done.
- Do not write overly general descriptions about your planned activities; i.e., do not repeat general phrases from the task-centered design book. I know you will develop prototypes, conduct user tests, etc. Tell me what are the issues and challenges unique to your project and how you will deal with them. Be specific.

Team Leader

To ease group interactions I ask each project group to elect a leader. The leader will act as tiebreaker in any disputes regarding what will be done and who will do what. Choose carefully! The leader is not expected to do more or less work on the project than other members, and is not responsible for setting project direction. Rather, the leader should act to close off pointless thrashing by choosing between opposing positions regarding plans when there is no clear majority position. The leader will also coordinate with the other team leaders within the project group.

Status Report

Status reports should be no more than 3 pages (12 point font, 1" margins) long describing the following information:

- What is the problem you are trying to address
 - *If the problem has changed from the Project Proposal, detail specifically what has changed*
- How are you currently propose to address the problem
 - What is your team's role in the project group?
 - Describe what has been done to address the problem previously with appropriate references
- Discuss your physical representation with a description of sketches, pictures, etc. (low and high fidelity prototypes)
- Describe your status in regards to the initial time line/time table
 - If necessary, update time line/time table

Demo for Class

Each team must present their physical representation as they would at the expo with the working physical representation and poster that (discussed in class) gives appropriate background information.

Demo for Expo

Each team must present their physical representation at the expo with the working physical representation and poster that (discussed in class) gives appropriate background information. If changes were recommended at the project demo, teams will be evaluated on their prioritization on recommendations and which recommendations were integrated into the demo.

Final Report

- What is the problem you addressed [*You should be able to copy and paste from Status Report*]
 - ***If the problem has changed from the Update Report, detail specifically what has changed***
 - Describe the problem with IEEE/ACM citation style references similar to the papers we have been reading (2-3 references)
- How you addressed the problem [*You should be able to copy and paste from Status Report*]
 - What is your team's role in the project group?
 - Describe what has been done to address the problem previously with appropriate citations
 - What resources did you use to address the problem (people, books, articles, stores to obtain materials)
- Discuss your findings/progress from each step detailed in your time line/time table
 - Low and high fidelity prototypes [*You should be able to copy and paste from Status Report*]
 - Discuss your prototypes with screenshots/pictures
 - Evaluation
- What recommendations were you given after your Demo for Class?
 - How did you prioritize the recommendations?
 - What recommendations did you integrate into your prototype (show pictures/sketches/etc. if necessary)
- Discuss future directions of this work
 - How could it be improved?
 - What could be added to it?

Peer Review

Each student must submit a peer review form (available here:

<http://tinyurl.com/GEEN1400PeerReview>) to evaluate themselves and their teammates. If all teammates on the team worked together and did the same amount of work, then the student should give all of their peers a score of 10. The 1 through 10 Likert scale should be thought of as a 100 point scale (e.g., if you rate someone a 7, they would get a 70% in your opinion).