

Project 1: Topic and system (or product) concept statement

Overview

In this project assignment you get started by establishing the target product or system that you will work on for a client and by writing a system (or product) concept statement.

What To Do

1. Establish a client for your project (virtual or fictitious is ok).
2. Establish a product or application system for which you will develop the user interaction design.
3. Get your client and target product or application system approved by the instructor before the due date for this project part. Earlier approval is better, in case you have to make some adjustments or find a different client.
4. Write and refine (several times) a system concept statement for your target system.

The Importance of Making These Choices

We urge you to choose carefully, since you will be living with your decision for the whole semester. Your choices for a product or system can range from an information system to a Web site to a commercial product such as a new kind of mobile or personal device. You can even design a new system with gestural interaction on a wall-size display. We are requiring you to pick a domain such as those discussed in class on the first day of lectures and listed below. These are not requirements but

- Car + Phone for music experience, or navigation (GPS), or shopping with location based reminders, etc.
- Large public displays in common areas coupled with your phones and proximity
- Bike + exercise coupled with your iDevice to manage your health, fitness, competitive spirit
- Public transportation + iDevice for daily travel or vacations, save energy, bike, car, share-ride, etc.

Please consider a choice that will involve lots of creative design, as that is one of the important emphases in this course. We also urge you to consider a product or system that will involve emotional impact and phenomenological issues in the design and evaluation. Finally, and as evidenced by the examples above, pick a domain that requires multiple use of computing devices or that depends on ubicomp and cloud-type computation.

How To Do It

1. Define a client (or client type)

Define a client organization, someone or some organization who needs a new system or a revision of an existing system, that will provide the setting for a hypothetical system your team will develop in subsequent projects. It is ok to have a virtual or fictitious client, it does not have to be a real one. It is fine to use connections you already have (e.g., places you have worked, places where friends work), or you can use the Yellow Pages or campus directory. The virtual client and/or potential users will play a role throughout the project, so you need to define someone well enough to help think about what the client would do.

In some cases, where your product or application system is for the general public and/or you are developing it as an entrepreneurial venture, you can be your own client. You would then use people outside your project team, such as other students, friends, or family, as representative users. In those cases, though, make sure you have contacts with the kinds of people you will need to represent all your different user classes (e.g., you might need someone to represent the system administrator role as well as public users).

It is acceptable to choose a client who is the employer of one of your team members. However, that team member cannot act as a client representative in this project. That person must assume a role on *your* team and cannot be a significant source of client information, especially for client interviews. You must still visit the client and talk with other people there. Otherwise, it is a conflict of interest.

Get your choice of client and product or system approved by the instructor. Then contact your client, explain your project assignment, and get acquainted with your client contact. If your first choice for a client cannot participate, keep looking for a client!

2. Choose a product or application system

First, be sure the system is the right size. Very large and complex systems are not good choices as vehicles for learning the interaction design process. On the other hand, be careful not to select a system that is too small or too simple. The criterion for selection here is that you will need to identify at least a half dozen somewhat different kinds of user tasks. That usually means, for example, that a Web site used only for information seeking is not a good candidate, because information seeking is only a single type of task. You should also choose a system that has more than one class of user. For example, an e-commerce web site for ordering merchandise will have users from the public doing the ordering and employee users processing the orders.

If the primary users of your system are the public, it is still possible to have a client for the project. Even a public system like an information kiosk has *someone* who pays for the system, who owns it, and who is responsible for it.

We are often asked if an extension to or redesign of an *existing system* would be an acceptable choice. The answer is yes. You will still do the analysis and design for the new part of the existing system you will be working on. Your work should lead to a new design for this part of the system.

We are also asked if a real project can be used, with the idea that what you learn and do in this course can be leveraged and applied to produce a useful product. We recommend *against* using this project to develop a system or interaction design that might, for example, apply to part of your job or to something like an independent study or thesis. It is better to use this course to learn the process and then apply it to a real system. The reason is that real projects have constraints and requirements that usually compete or interfere with the goal of learning the process for developing interaction designs. Some rare exceptions can be made, if you can convince me that you are truly willing to relinquish control and allow the design to go where the team and the course requirements take it. Pedagogical goals outweigh all other possible goals for this project. Whenever other needs and constraints conflict with the use of this project as a vehicle for learning the usability process in this course, the course has to take precedence. You can follow up in any way you want, of course, after this class is over.

In any case, you must keep it simple. More of the time spent can be for learning, it will be less work load, and it will be more fun and easier to carry out all the development steps. If one of your team tries to get you to accept such a real project as a topic, try to talk them out of it. If that doesn't work, let me know right away and I will talk with them about it and we can decide.

3. Get your choice of client and target product or system approved

Each team must get its choice of project topic (client and target product or system) approved by the instructor as early as possible (before Project 1 is due). Ask about it after class, during office hours, or by email.

4. Write a system concept statement, per the description in the book and lecture slides

5. Write a more detailed (half page, up to one page) technical summary of your target application system.

You can further motivate usefulness and capabilities in terms of what users will be able to do. Make it clear if the system exists or not. The audience for this part is me (your boss, the project manager). This writeup should be a little bit larger and it should be more technical and more complete than the system concept statement above—about 1/2 a page to a page, compared to the limit of 100 to 150 words for the system concept statement.

Deliverables

In addition to the final blog writeup of your project report for grading, we are requesting that you maintain an electronic version that we might use after this course is over as a sample of a successful project. You might want to have multiple blog entries to document other materials you use.

At the end of the semester we will ask your permission to copy, quote, and use the material in your project report for academic purposes (e.g., to post them on the course/book Website as examples of how to do it right!). When the time comes for this, we hope you will agree to this by signing a permission form at the end of your Project 6 deliverable and sending us a link to the files in your project report.

Grading

Read what you write, because someone else will! Work on writing as a team. This is the time to really get the spirit of this project and nail this assignment! Beyond trying to assess objectively whether all requirements of each project assignment are met, we try to assess subjectively *how well* requirements are met. This is based on our own knowledge and can sometimes be somewhat relative among the projects of the class. Your grade is based on our perception of how much you put into it and how well you understood, interpreted, and applied the material covered in class to your project. You can be sure this is done is the fairest way possible. Please don't expect us to just skim each deliverable and hand out all high grades.

Iteration

Because of the importance of the system concept statement to each successive project deliverable, it is essential that you work together, as needed, to get it just right. If we think your system concept statement is inadequate, the GTA will ask you to rewrite (one or more times) it and hand it in, again.

Audience for All Reports

The purpose for all your project reports is to document all work done on the project, and the audience (except the system concept statement in this deliverable) is your technical manager, who is not involved in the day-to-day development activities and is not highly knowledgeable about the usability engineering process, but wants to be kept up to date on all the technical details of what you are doing. Use clear, plain English. Don't use esoteric, domain-dependent terminology, jargon, or acronyms.

Passive Voice

A pet peeve of the professor is the use of passive voice. Do not use passive voice or you will lose points. In particular, if you use passive voice without an agent, we will add an agent to your sentences. The agent we will use is "by zombies." So, if you write something like:

Interviews will be used to gather the requirements.

We will correct this statement to read:

*Interviews will be used **by zombies** to gather the requirements.*

So avoid this situation and correct sentences by having an agent that does the action.

Members of the team will conduct interviews to gather the requirements.

Team Member Evaluations (TMEs)

~~See the Web page on Team Member Evaluations for details. For every project assignment report submitted by the team, each team member is to individually fill out and turn in a confidential paper copy of the Team Member Evaluation Form (print from Web) for that project assignment. This form is a required individual deliverable to report the relative effort/contribution of each person, including yourself, to this project assignment. These ratings, possibly moderated by the instructor, are used to assign individual grades for each project assignment, based on the team grade for the assignment and pro-rated by individual team member evaluations.~~

~~Each team member evaluation is due to be handed to the GTA at the time the team project report is handed in. Fold it and put it in an envelope to protect confidentiality. On the outside of the envelope, please write:~~

- ~~• Your team number~~
- ~~• The project assignment number and name~~
- ~~• Your name~~

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