

# Contextual Inquiry, Task Analysis & Rough Sketches (Group)

**Due: Thursday, October 9, 2014, 11:59 PM**

## Overview

In this assignment you will use the **contextual inquiry** methodology to learn more about the work/play/use practices of your target customers. The interview data will form the basis for a **task analysis** of your idea. But more importantly you will also start to **sketch to brainstorm, iterate and communicate** your design ideas to both yourself and to your teammates.

## Requirements

1. Interview at least **three target customers** (no classmates) using contextual inquiry. Remember to use the Master-Apprentice model and not just interview people. **Take pictures!**
2. Answer the standard **task analysis** questions (attached) using your contextual inquiry results as a start.
3. **Brainstorm** with your team on different high-level application/intervention/product ideas based on the results of your interviews. Move far beyond the initial project proposal that led to your group. Generate many ideas and then pick the one application idea that your team deems best. Briefly describe the three best application ideas and the reasoning for the application idea you picked (remember: significance, feasibility, interest)
4. Analyze new and existing tasks that your application enables. **Describe three to five tasks in moderate detail** that users will perform with your top application idea. There should be at least one each of simple, moderate, and complex tasks. **Compare and contrast** your tasks with any existing tasks that your customers are performing already. *Note: tasks do not say how to carry out the activity, but instead say **what** the user is trying to achieve.* Focus on user behavior, not features. Label each task along two dimensions: frequency (high, medium, low) of use by the customer and importance (high, medium, low) to the customer or application.
5. **Brainstorm and draw 20-25 rough sketches** of at least **5-7 different design ideas to implement your chosen application idea**. You'll only turn in your sketches related to 3 distinct design ideas that show the best that came out as well as a variety of **divergent design ideas**. Think about using different physical, digital or input technologies (e.g., haptic, speech, visual, etc.) as well as different core feature sets. **All team members** should participate in the sketching (label each sketch with the name of the team member who worked on that sketch).

## Deliverables

### Essay

You will submit **an essay** of no more than **6-8 pages of text (12 pt. Helvetica font or equivalent, single-spaced)**. Have one team member submit on coursework (**images are encouraged and free**—not counting in the page limit). Your essay should follow the outline below and will be graded using the writing guidelines on the last page.

1. Title of project (come up with something short and catchy)
2. Value proposition (phrase or short sentence communicating what your project will offer customers)
3. Each team member's name and **role** (manager, design, development, user testing, documentation)
4. Problem and Solution Overview (short, 1 paragraph)
5. Contextual Inquiry Customers (3/4 page)
  - a. Who? How recruited? Background? Skills? (1 short paragraph for each)
6. Contextual Inquiry Results (1 and 1/4 pages text)
  - a. What did you learn?
  - b. **include images taken of the interview locations & tasks taking place**

7. Task Analysis Questions & Answers (2.5-3.5 pages)- [subsection for each question]
  - a. Answer the 11 questions with a subsection for each
  - b. For tasks, carefully analyze old and new tasks:
    - i. Describe 3-5 tasks your application will support (at least one each of simple, moderate, complex)
    - ii. Give the rationale on why each task was chosen
8. Three Best Application Ideas (1/2 page)
  - a. Describe the three briefly
  - b. Analyze based on significance, feasibility, and interest (use a table)
  - c. Reasoning behind the idea you picked to pursue further
9. Sketches of important screens—include the best sketches that give a flavor for a **variety of 3-4 different design ideas to implement your chose application idea** (not part of page limit)

## Examples

For the Contextual Inquiry portion see the To:Do team's assignment from winter 2013:

[http://courses.cs.washington.edu/courses/cse440/13wi/projects/2do/files/2Do\\_ContextualInquiry.pdf](http://courses.cs.washington.edu/courses/cse440/13wi/projects/2do/files/2Do_ContextualInquiry.pdf)

For the Task Analysis portion of the write-up see the StyleEye team's version of this assignment from winter 2012:

[http://courses.cs.washington.edu/courses/cse440/12wi/projects/styleeye/reports/StyleEye\\_TaskAnalysis.pdf](http://courses.cs.washington.edu/courses/cse440/12wi/projects/styleeye/reports/StyleEye_TaskAnalysis.pdf)

## Presentation

On Oct. 10<sup>th</sup> (Friday), one member of your team will present your results from the CI/TA assignment in studio during a **9-minute** slide-based presentation. Practice in advance (required)! You must **make the slides available for download on your team web site (later assignment)**. Look at the **final** presentations from prior versions of this class:

see <http://www.cs.washington.edu/education/courses/cse440/13wi/projects.html>

## Writing Guidelines / Grading Criteria

### Overall writing quality (10 pts)

Make sure that your writing is easy to read. First and foremost this means making sure your writing is clear and concise. This also means using bolded section headings, liberally adding whitespace, and including images in the body of the write-up with appropriate figure numbers and captions. Refer to the figures (e.g., “(see Figure 2)”) in the body of your text. Check your essay for grammar errors.

### Title, Value Proposition & Team Roles (10 pts)

We will grade you on the creativity and marketability of the title you come up with and how well your value proposition communicates your idea.

Make sure to include which team members are responsible for which roles:

Team manager (coordinate – big picture)	Design (visual/interaction)
Documentation (writing)	User testing                      Development (prototyping)

### Problem and solution overview (10 pts)

This overview should be a concise statement of the problem you are tackling and a brief synopsis of your proposed solution.

### Contextual inquiry customers (15 pts)

Describe the rationale behind your choice of target CI customers. How appropriate are they for the problem domain? For each of the three (or more) customers, give some details of their background, the environment where you observed their work (**including images**), and your role as the “apprentice”. Describe how you used the Master-Apprentice model rather than simply interviewing your target customers. When appropriate, the customers should be diverse (e.g., age, background, etc.). Students who live on a college campus are not a representative sample unless that is your target customer (if it is your target, Stanford students are not the only ones in town).

### Contextual inquiry results (15 pts)

Identify high level activities, tasks, and themes that the customers shared in common in their practices. Then, note anything unique about each interview and comment on the rationale behind these events. **Include images (if of the participants, make sure to blur out their identity or not show the face).**

### Task analysis questions & answers (15 pts)

Answer the standard task analysis questions. **Use examples from your contextual inquiry interviews.** Make sure to consider both existing ways of doing things (old tasks) and your proposed new way (new tasks) in answering these questions. You need to describe and analyze the new and existing tasks in detail. These should be real world tasks that have details (e.g., programming your DVR to record the Daily Show). These tasks should not have any specific relation to the exact interface sketches that you brainstorm next. Do not work backwards from a design idea that you already have in mind.

## Application ideas (10 pts)

Describe the three best application ideas your team developed by brainstorming. Analyze them based on significance, feasibility, and interest (displayed in a table). Describe the rationale for the application idea you picked to pursue further.

## Sketches (15 pts)

Include 3-4 widely divergent ideas for what the interface might look like for your chosen application. These sketches should be quite rough and completed on paper or a whiteboard (and then scanned in). The details do not yet matter and you can do these quickly. We just want to get you to start thinking visually and broadly about how you might solve this problem. Remember, these should be for **very different design ideas**, not just multiple screens from the same user interface design.

## Presentation Guidelines

The presentation grading will be broken into two components: the individual grade of the presenter and a group grade for the presentation. **One person** on your team will make the presentation (each team member will have a chance to make the presentation later in the quarter). Note that you should use images liberally and try to keep the text on the slides relatively brief (and **use large fonts** – no less than 20 pt anywhere). The grades for each of these components are explained in more detail below. **See prior year's final presentations.**

### Presenter grade (NAME: \_\_\_\_\_)

- Suggested Organization
  - \_\_\_\_ Overview (1 slide)
  - \_\_\_\_ Overall problem & solution (1 slide)
  - \_\_\_\_ Contextual inquiry description & results (3-5 slides, **include images**)
    - make sure you say who your participants were, why chosen, how recruited, & where interviewed
  - \_\_\_\_ Task analysis results (3-5 slides)
  - \_\_\_\_ 3 Representative Tasks (3 slides)
  - \_\_\_\_ 3 Application Ideas (3 slides)
  - \_\_\_\_ Early design sketches (3 slides)
  - \_\_\_\_ Summary
- Presentation
  - \_\_\_\_ Use slides. Ensure that the presentation shows appropriate preparation, and that visual aids are effective, properly prepared, and properly employed. Make sure that people at the back of the room can see your slides.
  - \_\_\_\_ Cover the required scope within the **9 minute time period** (there will be 2 extra minutes for questions). **Practice and time your presentation in advance as we will cut you off if you go over and you will be unable to gain points for material you could not cover.**
  - \_\_\_\_ Ensure the presenter makes eye contact.
  - \_\_\_\_ Ensure the presenter projects their voice well.

### Group grade (GROUP NAME: \_\_\_\_\_)

- Contextual inquiry
  - \_\_\_\_ Was the procedure carried out experimentally sound?
  - \_\_\_\_ Were the results illuminating in terms of the problem being attacked?
- Task Analysis
  - \_\_\_\_ Were the questions answered sufficiently?
- Representative Tasks
  - \_\_\_\_ Did they provide coverage of the functionality?
  - \_\_\_\_ Were the tasks too easy or too hard?
  - \_\_\_\_ Did they come out of the CI/TA?
- User Interface Sketches
  - \_\_\_\_ Did the UI ideas have a strong connection to the results of the CI/TA?
  - \_\_\_\_ Were the ideas presented appropriate for the supported tasks?
  - \_\_\_\_ Were the ideas presented at the proper level of fidelity? (i.e., **rough sketches?**)

## Standard Task Analysis Questions

1. Who is going to use the system?
2. What tasks do they now perform?
3. What tasks are desired?
4. How are the tasks learned?
5. Where are the tasks performed?
6. What's the relationship between customer & data?
7. What other tools does the customer have?
8. How do users communicate with each other?
9. How often are the tasks performed?
10. What are the time constraints on the tasks?
11. What happens when things go wrong?