

# ESM & Task Analysis (Group)

**Due: Thursday, October 16, 2008**

## Overview

In this assignment you will use the **experience sampling** methodology to learn more about the work practices of your target customers. This information and the data from your prior **contextual inquiry** will help you perform a **task analysis** of your idea.

## Requirements

1. Run *at least two* full days of ESM studies on a mobile phone with *at least two additional* target customers (again no CSE440 classmates and no overlap with the contextual inquiry).
2. Answer the standard **task analysis** questions (attached).
3. Present revised versions of your **three tasks** based on these new results.

## Deliverables

### Presentation

One member of your team will present your results from **assignments 2 and 3** in class during a **six** minutes PowerPoint-based presentation. Practice in advance! You must **make the slides available for download on the class web site**. Look at the final presentations from this class in 2007 to see what good slides look like.

### Essay

You will submit **two (2)** copies of a printed essay of *no more than 3 pages* of text in class (12 pt. Times font or equivalent). You must also put a copy of the essay **online on your project web site hosted on the course site**. Your essay should follow the outline below and will be graded using the writing guidelines on the next page.

1. Each team member's **name, role** and a **URL** to an online copy of this essay.
2. Problem and solution overview (short, 1 paragraph)
3. ESM description (customers, questions, survey trigger technique, etc.) (3/4 page)
4. ESM results (3/4 pages)
5. Task analysis questions and revised tasks (1 page)
6. Additional appendices with raw questions/data (not part of page limit)

## Writing Guidelines

### Problem and solution overview & 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.

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

Group manager (coordinate – big picture)      Design (visual/interaction)

Documentation (writing)      User testing

### 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.

### ESM description (20 pts)

Describe the rationale behind your choice of target ESM customers. For each of the two (2) customers, give some details of their background. Describe the questions you programmed the ESM tool to use, how often the questions were asked, and any contextual triggering you used.

### ESM results (20 pts)

Summarize the resulting data and point out any important results that should be taken into account in your initial tasks or designs. How often did your participants respond? What surprised you? What would you have changed about your questions if you could do it again? What was good and bad about the tool?

### Task analysis questions (40 pts)

Answer the standard task analysis questions. Use examples from your contextual inquiry interviews or ESM data when applicable (indicate where the examples came from with “(CI)” or “(ESM)”. Revise your three tasks you described on the Contextual Inquiry assignment based on this new data and any new thinking you have on these results.

## Presentation Guidelines

The presentation grading will be broken into two components: the individual grade of each of the presenters and a group grade for the presentation of the study results & task analysis. 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 last year's final presentations.

### Presenter's grades (NAME: \_\_\_\_\_)

- Suggested Organization
  - \_\_\_ Overview (1 slide)
  - \_\_\_ Overall problem & solution (1 slide)
  - \_\_\_ Contextual inquiry description & results (2 slides, include images)
  - \_\_\_ ESM description & results (2 slides, include images if you have any)
  - \_\_\_ 3 representative tasks (1 slide)
  - \_\_\_ Early design sketches (1-3 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 6 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 not be able to gain points for the 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?
- ESM
  - \_\_\_ Was the procedure carried out experimentally sound?
  - \_\_\_ Were the results illuminating in terms of the problem being attacked?
- Representative Tasks
  - \_\_\_ Did they provide coverage of the functionality?
  - \_\_\_ Where the tasks too easy or too hard?
  - \_\_\_ Did they come out of the CI and ESM?
- User Interface Sketches
  - \_\_\_ Did the UI ideas have a strong connection to the results of the CI and ESM?
  - \_\_\_ 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?