# GRP02 : contextual inquiry, task analysis, competitive analysis

==================*overview*

This is a group assignment.  In this assignment you will use the contextual inquiry methodology to learn more about the work practices of the target users for your proposed final project: the interviews will help you perform a task analysis of your idea. Try to focus on *as specific a group of users as you can*. It will be easier and more effective to develop an application that helps a specific group of users such as *backpackers visiting Berkeley from Japan who don't know any English*, rather than *all backpackers visiting the US*.

You will also design rough sketches of your proposed user interface, and survey what other solutions already exist. Be sure to start early on this assignment. It will take time to schedule users for interviews, and the bulk of the assignment is based on your interview data. Remember, **we will not give extensions** for group assignments.

===============*requirements*

- **contextual inquiry -** Interview at least three (3) target users (no CS160 classmates and ideally they should not be your friends either) using contextual inquiry. You should carefully choose your target user group. Try to be as focused as possible and address the needs of a specific group.
- **task Analysis -** Answer the 11 task analysis questions presented in class (see slide 16)
- **task definition -** Describe 6 tasks in moderate detail that users will perform with your application. There should be two (2) each of easy, moderate, and difficult tasks. Explain why you rated each task as easy, moderate or difficult. You should consider two aspects of difficulty.
  - **How difficult is it to currently perform the task with existing tools and applications?**
  - **How difficult would it be to perform the task using your proposed application?**
- Based on your analysis and tasks, explain your proposed interface. Describe in text and support your description with rough sketches of important screens. You may want to use Framer.js, balsamiq, or a similar mockup tool. Just make sure your interfaces are low-fi! You

should include a sequence of screenshots or dialog segments your application will use to support 3 (one easy, one moderate, and one difficult) of the 6 tasks you chose earlier.

- Based on the tasks and your proposed interface, find the 3 most related applications that already exist (you may reuse work from your GRP01 assignment here!). Describe how your application will differ. This is your **Competitive Analysis**.

==============*deliverables*

You will submit a writeup of text and sketches as on hackster.io as described below. Your writeup should follow the outline below and will be graded using the writing guidelines described below. Try to be succinct but complete. Long-winded descriptions are just as bad as descriptions that are too short.

- Each team member's name and a short description (one sentence per person at most) of how they contributed to this assignment.
- Description of users you observed. Give a bit of relevant background on each subject. For privacy reasons, do not use real names or identifying information about your subjects.
- Problem or task that your application addresses and a short explanation of how it addresses the problem or task. (short, 1 paragraph)
- Contextual inquiry interview descriptions and results (multiple paragraphs)
- List of tasks: 6 tasks your application will support; two each of easy, moderate, difficult.
- Task analysis questions
- Interface design
    - Functionality summary (what you can do with it)
    - User interface description and sketches/mocks (how you use it)
    - Three (3) scenarios of example tasks with sketches
    - Any additional sketches
- Competitive Analysis: Find the most closely related applications; describe each in 2-3 sentences; describe what is unique about your application.

=========*writing guidelines*

## Target Users (8 points)

Describe the target user you selected in more detail. For each of the three interviewees, give some details of their background, their likes/dislikes and priorities. Avoid information that may reveal their identity.

## Problem and Solution Overview (3 pt)

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

## Contextual Inquiry - Interview Descriptions (10 pts)

Describe the process you followed when conducting the interviews, and environment where you observed their work. Identify tasks and themes that the interviewees shared in common in their work practices. Then, note anything unique about each interview and comment on the rationale behind these events.

## Task Analysis Questions (5 pts)

Answer the 11 task analysis questions. Use examples from your interviews when applicable.

## Analysis of Tasks (10 pts)

Choose 6 tasks (2 easy, 2 moderate, 2 difficult tasks) and describe them. These should be real world tasks that have details.

## Interface Design (15 pts)

Show your design ideas and give rationale for your ideas. This section should clearly indicate the functionality of your artifact and what the user interface will be like (described and sketched -- reference the figures in your text). You should then describe three scenarios of how someone would use it to accomplish three of the tasks above. Scenarios include the steps customers will go through to accomplish the task. You should include "storyboards" of the sequences described in your three scenarios.

## Competitive Analysis (9 pts - 3pts per app)

- **List of competitors**: Compile a list of **at least three** closely related applications. For each, provide a URL for the most relevant site about the application. Check the Android Marketplace and the iPhone app store first. There are > 100,000 mobile applications so chances are high that applications with similar goals already exist. If you cannot find three related mobile applications, broaden beyond mobile applications. (We realize that there will likely not be any smart watch based apps to compare against.)
- **Analysis** Briefly review each identified application along the following topics. As a point of comparison, take the top idea you submitted in your group brainstorm.:

- ○ **Target User Group** What is the target user groups of the competitors? How does it match or differ from your group project's target user group? (1 sentence)
- ○ **Functionality**: What benefits does the application offer to the user? What is the scope of functions offered? How will your proposed idea differ and improve upon the offered functionality? (1 sentence)
- ○ **Usability**: What are the successes and challenges of the competitor in terms of usability? How will your proposed idea improve upon or avoid potential usability problems in competitors? (1 sentence)
- ● **Summary** (1 short paragraph): After reviewing the applications individually, summarize your findings. What application aspects are already well covered by the competition? What is the unique value proposition of your group's project? If you find your proposed idea has been covered, suggest how you might adapt your focus to offer unique value.

**Sources of Information**: To gain the necessary information about target applications, you will ideally run the application and test it. We realize you may not have access to hardware or the applications might be too expensive to purchase. In this case, you have to be resourceful: find application reviews, demo videos of the application, or discussion forums online for the application.

*=========submission*

As usual, we will be submitting via hackster.io. Your team will need to collaborate on a single submission there. Ensure that you include everyone's name and details of what they did!