

HCI 440: Introduction to User-Centered Design

Assignment 3: Contextual Inquiry

Description

In this assignment, work as a team to create a *project description* for the activity you select from among the Assignment 1 ideas of the members of your team. Then, carry out a contextual inquiry to observe potential users while they perform tasks similar to those connected with an integrated experience of the activity.

- From among the activities represented in your team members' Assignment 1, select the activity that will be the subject of this and future team assignments in the course.
- Work with 6-8 people who might perform this activity (the 'subjects')—two subjects per team member—to determine how these subjects currently perform tasks similar to those associated with your activity, what their goals are for doing these, and what things work and do not work for them using their current approach.
- Complete the entries in the *Contextual Inquiry* template associated with this assignment specification document. These include: a project description; brief profiles of each subject; a pooled summary of observations, observation insights and insight groups; a retrospective on your contextual inquiry process; a list of team member contributions to the assignment; and, an appendix containing your complete contextual inquiry protocol, including screener(s), informed consent statement introduction, and probing and follow-up questions.

Remember, the goal of contextual inquiry is to determine how the subjects *actually* perform tasks now, what their goals are for doing these, and what things work and do not work for them using their current approach. Formulate questions that elicit this information from them. The tasks you set for your subjects can act as *proxies* for the sort of tasks done as part of an integrated experience of your activity. In other words, the tasks may not be identical to the tasks for your activity, but should be similar enough to be able to provide you with meaningful observations and insights into designing an integrated experience for your activity.

Note-taking is a sufficient means for recording the inquiry, though you are free to use audio recording, video, still photography, sketches, or any other recording form **if and only if** your subject consents to the use of these.

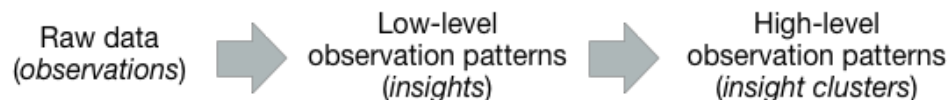
Assignment Content

Use the *Contextual Inquiry* Microsoft Word template associated with this assignment, or create your own document. The provided template is a minimal but functional version; feel free to create your own richer version. However, if you create your own template, you must include *exactly* the same information (including heading names) in *exactly* the same order as the provided template.

- *Project Description*. Provide a brief but descriptive project title. Identify the target users for your activity, along with a brief, one- or two-paragraph description of the project. In this description, focus on the activity area and what the project seeks to accomplish—do not describe an application or any technology options.
- *Subject Information*. Include a brief description of each of your subjects, including first name, age, occupation, gender, user type, and any other interesting, relevant background information about your subject. Include a brief discussion of the rationale you used to select your subjects, such as how you accounted for selection of subjects from an appropriate demographic and representation of sufficient diversity in your subject pool to make your contextual analysis results meaningful. *Note*: Do not use the full names of your subjects, in order to ensure confidentiality.
- *Observations, Insights, and Insight Groups*. Each team should create a Stormboard account on www.stormboard.com. Using Stormboard and the Affinity Diagramming technique discussed in Module 3, pool all of your team's contextual inquiry observations and create summary statements of these. This means carefully reviewing all the observations and putting them into a clearly

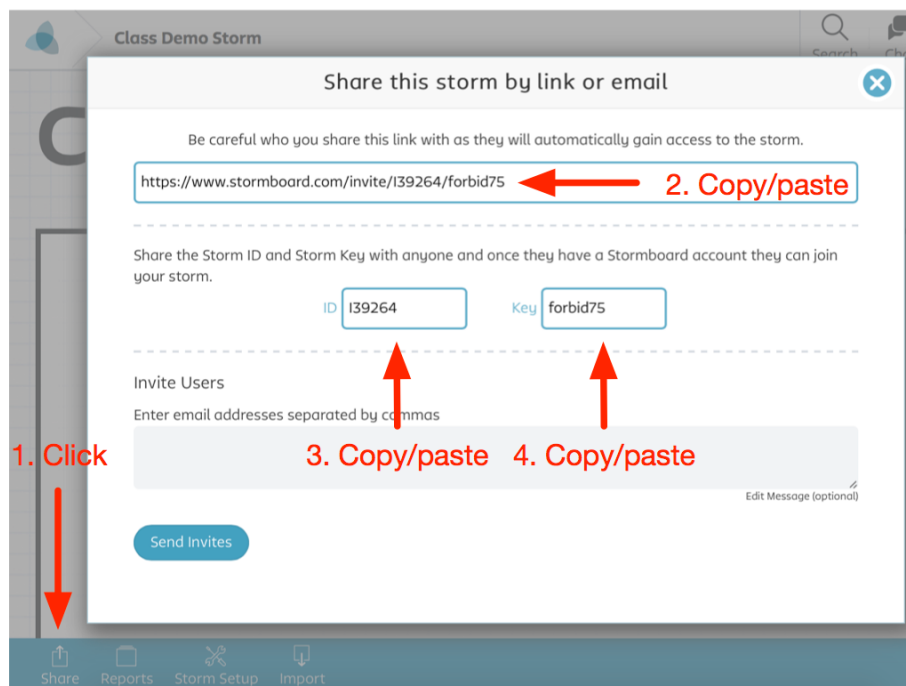
understandable phrase or sentence form. Combine seemingly duplicate observations *only* if they have absolutely *no* differences; keep the observations distinct if there are subtle differences—subtle differences may provide a lot of information. Preserve any quotes made by your subjects—include associated quotes along with the summary statement. The summaries and quotes must be included in the *Contextual Inquiry* document.

Next, describe any insights derived from the observations. Insights describe patterns of related observations, while insight groups describe patterns of related insights. Describe insights and insight groups with a sentence or two—don't just place these in the *Contextual Inquiry* document without framing them—the reader must understand what you are presenting. You can visualize the transformation sequence from observations to insights to insight groups as:



If you have any useful supporting artifacts for your observations include them in this section, along with a brief explanation of the artifact. Choose any supporting material carefully—include only artifacts (sketches and/or photos) that *substantially* clarify the observations. For example, if one of your sketches led to several important insights, then include it.

To allow me access to your affinity diagramming efforts, please include the Stormboard **link**, Storm **ID**, and Storm **Key**—items (2), (3), and (4) in the figure below—in the appropriate area of the *Contextual Inquiry* document.



Do not share your storm with me via email, **only** by **link**, **ID**, and **Key** in the *Contextual Inquiry* document.

- *Process Retrospective*. Create this section *after* your team has completed all the other work for the assignment. Identify what went right and wrong in the contextual inquiry process; what changes your team would make if you were to do the process again, say, in the next (hypothetical) iteration;

changes you would make to the subject sample, such as increasing cultural diversity; and changes in the specifics of your contextual inquiry methods.

- *Team Member Contributions.* In the table, provide the name for each team member, along with the *specific* contributions made by that member toward the final, submitted form of the assignment. Example contributions: “Created first draft of project description; performed two contextual inquiries; participated in discussion on insights; managed final review/revisions and submission process.”

Important: Include an entry for a team member even if he or she did *not* contribute to the assignment. (Obviously, I hope this does NOT happen!) Simply leave the contributions area for that team member blank or note ‘No contributions.’

- *Appendix.* Include a complete **blank** copy of the contextual inquiry protocol. Be sure to include the informed consent text. Remove any helper text enclosed in square brackets: [...]. ‘Complete’ means all elements of the template are complete—exactly in the blank form as it would appear when the team member begins a contextual inquiry session with a subject, but **without** the notes from the session.

Submission Requirements

- Submitted documents must follow the order and content guidelines as outlined in *Assignment Content*, above.
- Include your team number in the submission file filename; e.g., HCI_440_A3_(Contextual_Inquiry) (Team_13).doc.
- Submit your assignment to the D2L dropbox by the indicated time and date.
 - **Only one team member should submit the assignment for the entire team.**
 - *Reminder:* Assignments may be submitted up to 48 hours late with a 20% grade deduction. Assignments submitted more than 48 hours late receive no credit but will be graded as time permits.
- Documents must be in MS Word (.doc or .docx) or Adobe PDF only. If you wish to submit in any other format, you must contact the instructor *before* submission and obtain approval. Otherwise, submission in any other format results in an automatic 20% grade reduction for the assignment.
 - **Important note on formatting:** Some word processors, such as Google Docs, do a poor job of importing and exporting files, especially PDF. It is the team’s responsibility to ensure that the submission document is neat and consistent with the formatting of the assignment template. Oversized headers or footers, poorly formatted section headings, awkward page breaks, or other formatting blunders will result in a minimum loss of two (2) points from the last item in grading rubric (‘All other elements...’)—no exceptions.
- If you make a submission error, you can resubmit your assignment to D2L; the latest submission will be the one that is graded.

General Grading Criteria

For course assignments, I expect high-quality, professional documents, including proper spelling and grammar. I will use the following specific rubric to evaluate Assignment 3.

Assignment 3 Grading Rubric

Project Description. Clear and concise; includes all elements defined in the template. Describes what, not how, project will be accomplished.

1 Unsatisfactory 2 Satisfactory 3 Good 4 Very Good 5 Excellent

Subject Information. Required information provided for every subject; includes subject selection information.

1 Unsatisfactory 2 Satisfactory 3 Good 4 Very Good 5 Excellent

Observations, Insights, and Insight Groups. Includes Stormboard access info; observations are clear and understandable; insights describe low-level observation patterns; insight groups describe high-level observation patterns.

1 Unsatisfactory 2 Satisfactory 3 Good 4 Very Good 5 Excellent

Process Retrospective. Presents a realistic and constructive analysis of contextual inquiry process.

1 Unsatisfactory 2 Satisfactory 3 Good 4 Very Good 5 Excellent

Appendix. Contains a complete copy of the contextual inquiry protocol.

1 Unsatisfactory 2 Satisfactory 3 Good 4 Very Good 5 Excellent

All other elements of the template not specifically identified above are correct and complete; document meets relevant **Submission Requirements**, is well edited, neatly formatted, and easy to understand and interpret.

1 Unsatisfactory 2 Satisfactory 3 Good 4 Very Good 5 Excellent

Individual Criterion Descriptions:

- Excellent (5): *Greatly exceeds minimum assignment quantity or quality requirements.*
- Very good (4): *Significantly exceeds minimum assignment quantity or quality requirements.*
- Good (3): *Exceeds minimum assignment quantity or quality requirement.*
- Satisfactory (2): *Meets minimum quantity or quality assignment requirements. A **Satisfactory** rating is given when a criterion meets, but does not exceed, the **minimum** assignment requirements described in the Assignment Content section of this document and/or in the assignment template.*
- Unsatisfactory (1): *Does not meet minimum assignment quantity or quality requirements.*

Overall Assignment Score (a point score of 30 is the maximum):

- Excellent: 30 (normalized score: 100)
- Very good: 24 (normalized score: 90)
- Good: 18 (normalized score: 80)
- Satisfactory: 12 (normalized score: 70)
- Unsatisfactory: 11 or below
- Note: The formula for converting the points score to a normalized (0-100 scale) score:

$$\text{normalized score} = ((5/3) * \text{points}) + 50$$