Introduction to Human Computer Interaction & Design
Assignment #1: Needfinding
Due on course studio (10/3)
[Course material from James Landay of Stanford CS]

Instructor: Hao-Hua Chu
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Overview

In this assignment you will plan, develop, and execute the first needfinding round for your semester-long team project. You will present your plan (methodology) and findings, as well as an empathy map, in studio on 10/3.

Project Requirements

1. The teaching staff will work hard to create teams over the weekends and announce them on course FB page on 9/20. All registered students must join the course FB group (https://www.facebook.com/groups/546338088894744/). From 9/21-26, each team will schedule an appointment with Prof. Hao (email: hchu@csie.ntu.edu.tw) to discuss and finalize the studio theme/topic. The appointment signup sheet is (here). Before coming to the appointment, team members ought to hold their own discussion to reach some consensus on the topic(s) or problems to pursue. To help look for project ideas, check sample student projects from the Stanford HCI course or last year's HCID course.
    a. http://hci.stanford.edu/courses/cs147/2015/au/projects.php
    b. http://mll.csie.ntu.edu.tw/course/hci_s16/ (look under projects)
2. Make a plan to interview at least 3 people related to your studio theme. If you have a slightly narrower problem domain that you have identified within your studio theme (e.g., interested in "cancer" in the "health theme"), you can focus on that (ask your TA for guidance if unsure). The interviewees can be both potential end users and domain experts. The interviews can vary from short interviews, e.g. 20 minutes to long interviews, e.g. 60 minutes.
3. Shape your plan
    a. Determine what your domain of interest is (describe as well as you can & including pictures in the final report that helps to illustrate it).
    b. Who will you interview, why did you chose them, where and when the interview will take place, and did you offer any incentive/payment? Think about finding some extreme users.
    c. What questions will you ask? Try to outline areas of inquiry you intend to probe? Make sure to plan some questions and focus on "why" and "feelings."
4. Get out and interview
    a. Interview no more than one Stanford student - try to get off campus!
    b. Make an extra effort to get to observe and interview at least some people in action in the context of your problem domain: whether they are commuters commuting, people wasting/saving water or food, students learning/not learning mediated by technologies, etc. Record what, how, and why they are doing what they are doing.
    c. Remember that the more creative you are in accessing these contexts, the more unique and valuable insights you are likely to discover.
    d. Note - If you have trouble accessing the users you want to reach, let us know as soon as possible so that we can try to help (if you wait too long, we can't help you!).
    e. Remember these interviewing tips in the types of things to look for and how to ask. Get stories! Use the techniques you practiced in studio #1!
5. Unpack the needfinding data by using the empathy map method (see below for more information) and identify surprises, contradictions, tensions – and things that intrigue your team! You will revise this initial empathy map based on the feedback and insights you gain during studio next week - this will be valuable in the next assignment in making sense of your user's point of view, brainstorming "how might we's" and in building experience prototypes.

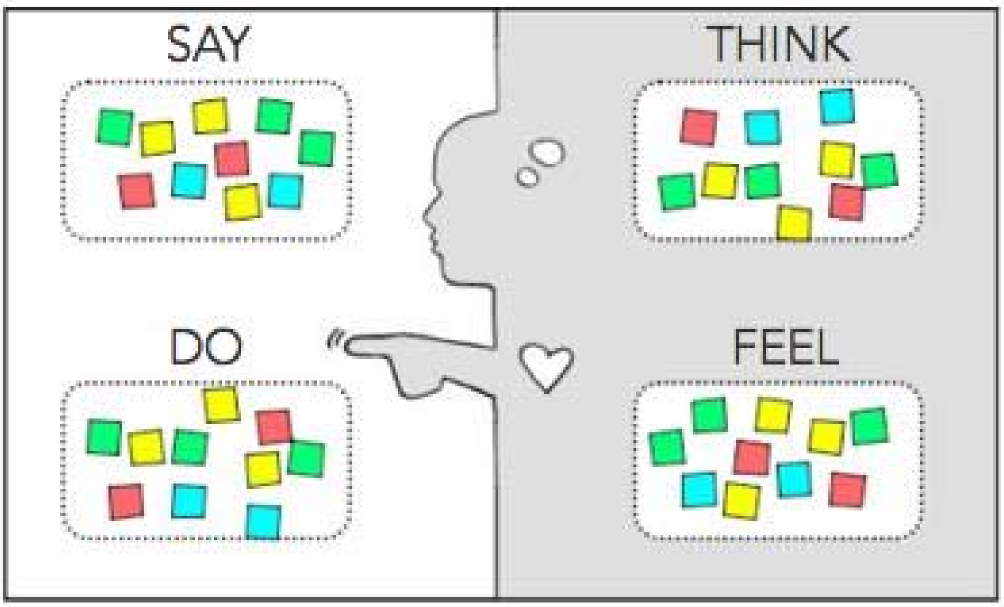
Deliverables

The document should be written as a Google, PowerPoint, or KeyNote Presentation that will be presented during your studio on October 3. Create a PDF version that you will turn in on Coursework by the deadline (you will link the PDF & a downloadable version off of your team website later in the quarter—i.e., if you use Google Slides, you will download as PowerPoint or KeyNote and put that on your site).

Unpack the data into 1 or more empathy maps by the time of your studio and present in your talk. Instructions on how to use/create an empathy map can be found here on the d.School's method card: https://dschool.stanford.edu/wp-content/themes/dschool/method-cards/empathy-map.pdf

Try to fill each section of each empathy map with at least 10-15 bullet points. The quadrants below are broken up into four components. Again, for more details on empathy maps, please refer to the d.school link above and the lecture slides.

- SAY: What are some quotes and defining words your user said?



- DO: What actions and behaviors did you notice?
- THINK: What might your user be thinking? What does this tell you about his or her beliefs?
- FEEL: What emotions might your subject be feeling?

Try to identify some initial "needs" and develop some "insights". Include these in your document.

Presentation Guidelines

The presentation grading will be broken into two components: the individual grade of the presenter for delivery and presentation and a group grade for the presentation content/quality. One person on your team will ***deliver*** a 9-minute presentation (each team member will have a chance to make a presentation at some point during 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.

Suggested Organization

- Introduction (1 slide)
  - List and introduce your team members
  - What is your problem domain (in addition to the studio theme)
- Needfinding Methodology (3-4 slides, include images)
  - Make sure you say who your participants were, why chosen, how they were recruited, and where they were interviewed
  - What did you ask?
- Interview Results (3-4 slides)
  - Discussion of results, pictures, quotes, and surprises you gleaned from your interviews
- Analysis (2-3 slides)
  - Inferences, conclusions, or questions you might have about your results
  - Empathy Map with highlighted components of what you found important or interesting
  - Initial assessment of "needs" and "insights"
- Summary (1 slide)

Grading Criteria

The presentation grading will be broken into two components: the individual grade of the presenter based on the presentation slides and delivery and a group grade for the content. The grades for each of these components are explained in more detail below.

Group Grade (GROUP NAME: ____________________________________)

___User group reach (diversity, innovativeness, appropriateness) (20 points)
___Depth of the interviews (20 points)
___Number of interviews (20 points)
___Details in unpacking (20 points)
___Identification of tensions, contradictions, surprises in the interviews (20 points)

Presenter Grade (NAME: ____________________________________)

___ Use well-designed slides. Ensure that the presentation shows appropriate preparation, and that visual aids are aesthetic, effective, properly prepared, and properly employed. Make sure that people at the back of the room can read your slides (50 points).
___ Cover the required scope within the 9 minute time period (there will be 2 extra minutes for questions/feedback). 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 (20 points).
___ Ensure the presenter makes eye contact (10 points).
___ Ensure the presenter projects their voice well (20 points).