Assignment #1: Needfinding

Due: At the start of your Thur/Fri studio (Jan. 13-14)

Overview

In this assignment you will plan, develop, and execute the first needfinding round for your quarter-long team project. You will present your **interview plan** (methodology), **data** gathered from your initial interviews, and the **key insights** and inferences you have made. You will capture this analysis in one or more **empathy maps** that you will share in the studio next week.

Project Requirements

1. 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 "housing insecurity" in the "systemic justice theme"), you can focus on that (ask your CA for guidance if unsure). The interviewees should be end users and can include up to one domain expert, as needed. The interviews can vary from short interviews, e.g., 20 minutes to long interviews, e.g., 60 minutes. Given that our first 2 weeks are virtual, these interviews will most likely take place over Zoom unless you have **safe** access to your interviewees.

2. Shape your plan
   a. Determine what your **domain of interest** is (*describe* it as well as you can & *include pictures* in the final report that help to illustrate it).
   b. *Who* will you interview, *why* did you choose them, *where* and *when* will the interview take place, and did you offer any *incentive/payment*?
   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."**
   d. Pick **at least one** extreme user and be deliberate about your choice. Why is this user extreme? Why is their perspective important? Should their identity/behavior/situation affect the way the interview is conducted?
   e. In considering extreme users, plan for any additional preparation you may need to do, such as reading about the community they come from, preparing translators, or accounting for more time given other limitations.

3. Get out and interview
   a. Interview **no more than one Stanford student** - try to get participants from off campus and also avoid interviewing close family members!
   b. You should get your interviewees to sign a consent form ensuring their confidentiality (copy the document and modify to use it).
   c. You should aim to have **at least two people from your team at each interview**: one to lead the interview, and one to take notes.
   d. Make an extra effort to observe and interview at least some **people in action** in the context of your problem domain: whether that's 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.

      e.   Note - If you have trouble accessing the users you want to reach, **let your CAs know as soon as possible** so that we can try to help (if you wait too long, we can't help you!).

      f.   Remember these [interviewing tips](#) on the types of things to look for and how to ask. Get stories! Use the techniques you practiced in studio #1!

      g.   Remember, your **questions are just a guide** to get you comfortable starting. **Veer** & **pull** strings to get to interesting stories and emotions.

4. 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! We recommend you have at **least one empathy map** for your most interesting interview. The interviews will be processed further during studio. 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. **Optional**: if you are experienced with creating [journey maps](#) and feel more comfortable with that technique, you can do so in place of empathy maps. In addition, you can create more than one empathy or journey map.

Finding Interview Participants

- Cold calling
  - Don't underestimate how far your stanford.edu email/student status will get you!
- **If it's safe to do so where you live**, recruit people at locations related to your domain of interest or go to a public place (e.g., coffee shops in a downtown area.)
  - If you ask respectfully and use your judgement, many people you approach will be willing to give you their time.
- Nextdoor.com
  - **Get started with this early** because there is a screening process to verify you actually live in the neighborhood you're posting for.
  - If you aren't able to get through screening by this assignment's deadline, there will still be an opportunity to use it for next week's.
- Social media posts
  - To get past second-degree connections, you can post on Facebook or other social media sites and encourage people to share with relevant connections (this is known as [snowball sampling](#)! -- you can also ask earlier participants if they can pass your ad on to others they know).
- Reddit posts
  - The subreddit https://www.reddit.com/r/SampleSize/ is dedicated to recruiting people for research studies or polls. This can be a good way to reach a more diverse group of people.

Deliverables

Make sure to create a new subdirectory titled "Assignment 1" in your team's Google Drive directory (link provided by your CA) and upload your deliverables into that folder **by the start of your Thur/Fri studio**. Your CA will check the time of submission/modification.

CS 147 Winter 2022 website
https://hci.stanford.edu/courses/cs147/2022/wi/

1. **Presentation (Individual)**
   The presentation should be made as a Google Slides, PowerPoint, or KeyNote Presentation that will be *presented* by **one member** of your team during your studio on January 13/14. In addition, *create a PDF version* of the slides, and upload both versions into your team's Google Drive directory by the deadline: the **start of your Thur/Fri studio** (note: 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).

2. **Interviewee consent forms**
   Make sure to *combine your consent forms as a PDF and upload it to the drive*. **Do not** put consent forms in slides as we would like to maintain participants' anonymity.

3. **Empathy maps**
   Unpack the data into empathy maps by the time of your studio. Come prepared to share with others. Instructions on how to fill out an empathy map can be found here. An empathy map template is here.

   You can use whatever tool you like to create empathy maps, but one tool that we've found works well for visual collaboration is Miro. You can sign up for a free Education account, which will give you and your team unlimited boards to work with. Miro also has templates that you can adapt into empathy maps, such as this one, but any layout with four quadrants will do.

   Try to fill each section of the empathy map with *at least 10-15 bullet points.* The quadrants below are broken up into four components. Again, for more detail on empathy maps, please refer to the 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?
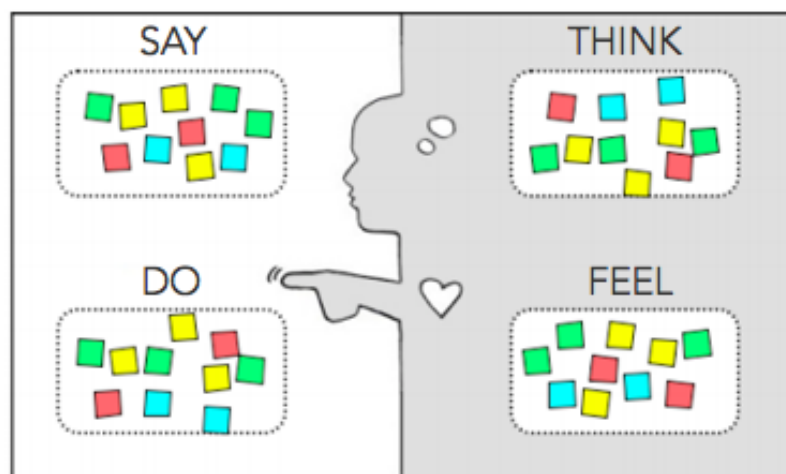
Try to identify some **initial "needs"** and **develop some "insights"**. Include these in your presentation.

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Presentation Guidelines

The presentation grading will be broken into two components: the **individual grade of the presenter** (a **single person** on your team) for delivery and presentation, and a **group grade for the presentation content/quality of work**. **One person** on your team will deliver a **10-minute presentation** (each team member will have a chance to make a presentation at some point during the quarter).

Approach the presentation as telling a **story** rather than showing everything you have worked on!

Note that you should *use images liberally* and keep the text on the slides relatively **brief** (and **use large fonts** – no less than 20 pt). Here are two good examples from a prior class: Example 1 and Example 2.

Suggested Organization
- Introduction (1-2 slides)
  - List and **introduce** your team members (also verbally introduce everyone)
  - Your problem **domain** (in addition to the studio theme)
- Needfinding Methodology (2-3 slides, include images)
  - Make sure you say *who* your participants were, *why* chosen, *how* they were recruited/compensated, and *where* they were interviewed (***include images***)
  - **What** did you ask?
  - How did you select an "extreme user"? In what axis are they extreme?
  - If applicable, share any ways your team worked to accommodate interviewees.
- Interview Results (3-4 slides)
  - Discussion of results, **pictures**, **quotes**, and **surprises** you gleaned from your interviews (include images).
- Analysis (3-4 slides)
  - At least 1 **empathy map** with **highlighted** components of what you found **important**/interesting. **Optional:** if you are experienced with creating empathy maps or want a challenge, you can present a synthesized empathy map for all your interviews.
  - Discuss **tensions, contradictions, surprises** in the interview. Make sure to include your **extreme user(s)** in the analysis: what insights did you gain from them?
  - Inferences, conclusions, or **questions** you might have about your results
  - 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

  ___ User group reach (diversity - extreme users/average users/non-users, innovativeness, appropriateness) (20 points).

  ___Depth of the interviews (20 points).

  ___Number of interviews (20 points).

  ___Details in unpacking using chosen methodology (20 points).

  ___Showed tensions, contradictions, surprises, & inferences from the interviews (20 points).

Presenter Grade

  ___ Use well-designed slides. Ensure that the presentation shows appropriate preparation, and that visual aids are aesthetic, effective, properly prepared, and properly employed (50 points).

  ___ Cover the required scope within the 10 minute time period (there will be 5 extra minutes for questions/feedback). Practice and time your presentation 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).