

Assignment #1: Needfinding

Due: At the start of your Thu/Fri studio (Oct. 5-6)

Goal

Explore a space of your choosing through needfinding interviews and structured insight synthesis to uncover the emotions, pain points, and individual journeys of your chosen population.

Assignment Overview

1. **Select a domain of interest *within your studio theme*.** Narrow the scope of your research to glean useful and related insights. For example, If your studio theme is Transportation, you might narrow to *women who use public transit or the environmental impact of commuting*. Ask yourselves: What do you find interesting about this domain? Will it keep your attention for the duration of the class? Check in with your CA if you wish for some guidance.
2. **Create an interview plan.**
 - a. WHO: How will you find interviewees? The set of interview participants must:
 - i. Provide relevant and unique perspectives on the topic. Try to get a wide pool of participants.
 - ii. Include **at most 1** Stanford student, preferably none
 - iii. Include **at most 1** domain expert as needed (not required)
 - iv. **Avoid close family** members and friends
 - v. Include **at least one** [extreme user](#). Why is this user extreme with respect to your domain? Why is their perspective important? Should their identity/behavior/situation affect the way the interview is conducted? Plan for any additional preparation needed such as reading about their community, preparing translators, etc.
 - b. WHERE: How might interviewee [context](#) matter? These interviews must be conducted in person. Try to observe people in action. If you have a total of 3 interviews, you may **use Zoom for at most one interview**, and only when there is no other way or if the participant is not in the area. **If you conduct 4+ interviews, you may use Zoom for a maximum of two interviews.** Additionally, please note that **you will need to conduct at least two more interviews in Assignment 2**, where you may use Zoom for a maximum of one additional interview unless you exceeded the limit of two in Assignment 1.
 - c. WHEN: What are the time constraints of this population? How far in-advance might you need to schedule?*
 - d. SCRIPT: Which areas of inquiry do you intend to probe? [Plan some questions](#), but be prepared to go off script by asking “why” and focusing on emotions.
 - e. APPARATUS: How will you record [what, how, and why](#) interviewees are doing what they are doing? What artifacts are relevant? What pictures will you want to take? How will you record the interview? Transcribe?

- f. ETHICS: How can you be respectful of their time and emotional energy invested? Will you offer any compensation? Update them on your project going forward?
3. **Conduct a minimum 3 interviews**, but you are encouraged to conduct more.
 - a. LENGTH: Most interviews are 40-60 minutes.
 - b. CONSENT: Have your interviewees [sign a consent form](#) (copy this document).
 - c. PROCEDURE: Aim to have at least 2 team members at each interview—one to lead the interview and one to take notes. More than 3 team members in an interview can be a bit off putting to the interviewee. Remember these [interviewing tips](#) and use the techniques practiced in Studio 1.
4. **Unpack and synthesize.** Although there are many ways to unpack, you will use [empathy maps](#) to identify surprises, contradictions, and tensions and understand their implications.
 - a. *1 map = 1 interview.* Do not combine multiple interviews into one map as this is not how it is [intended to be used](#). Due to time constraints, we are focused on capturing insights about a single interviewee, not validity across a population.
 - b. *Have a minimum of 1 great empathy map.* Although you will glean more from your interviews if you unpack with 1 map per interview conducted.
 - c. *Fill each quadrant with 10+ bullet points.* You want to go for *volume* in these maps to maximally unpack the insights from your interviews.
 - d. *Distill your key insights* (observations + inferences). Capture the key tensions, contradictions, surprises (left side of empathy map) and their corresponding implications and guesses about the user (right side of empathy map).
 - e. See the empathy map [instructions](#) and [template](#). We recommend using post-it notes on a wall or collaborating on [Miro](#) or [FigJam](#) as both are free for students.
 - f. *Optional:* If you are experienced with creating [journey maps](#) or want to give them a shot feel free to try this technique as well.

***Note: You will be asked to conduct at least 2 additional needfinding interviews in Assignment 2. Between these 2 assignments, only 1 Stanford student is permissible. As you conduct interviews for Assignment 1, reflect on which additional perspectives might be helpful and consider how you will recruit more interviewees for the following week.*

Finding Interview Participants

- **Cold calling** – Don't underestimate how far your stanford.edu email/student status will go!
- **Find people in-context** – If safe to do, recruit people at locations related to your domain. If you ask the right people respectfully, many will give you their time (train station, cafe).
- **Nextdoor.com** – Start early as there is a screening process to verify you live in the neighborhood you're posting for. If you aren't able to get through screening for this assignment, there will still be an opportunity to use Nextdoor in future assignments.
- **Social media posts** – To get past second-degree connections, you can post on social media sites and encourage people to share with relevant connections (this is known as [snowball sampling](#) – you can also ask your interviewees to refer you to their contacts).

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- **Reddit posts** – The subreddit <https://www.reddit.com/r/SampleSize/> is meant for recruiting people for research studies. This can be good for reaching a more diverse group.

CS 147 Autumn 2023 website

<https://hci.stanford.edu/courses/cs147/2023/au/>

Presentation Guidelines

One team member will present in studio. There will be 10 minutes for the presentation and an additional 5 minutes for questions and feedback.

Expected Content

1. Intro
 - a. Team members
 - b. Problem domain and why/how you chose it
2. Needfinding methodology
 - a. Participants: Why were they chosen? Why are they appropriate? How were they recruited/compensated?
 - b. Where were the interviews conducted?
 - c. Who was your “extreme user”? In what axis are they extreme?
 - d. What did you ask?
 - e. Team member roles for each interview
 - f. Apparatus – any equipment/software used (transcribing, etc.)
3. Interview results
 - a. Pictures and relevant artifacts
 - b. Key quotes and surprises
4. Analysis
 - a. At least 1 empathy map; highlight/emphasize the most interesting findings
 - b. Key insights: observations and inferences
5. Summary
 - a. Key learnings
 - b. What’s next?
6. Appendix

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.

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 October 5/6. 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 we like post-it notes on a wall the best. They work well when you are together in a room. If you really want to use an electronic tool, 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.

Examples

[Recipal](#), [FlowShow](#)

Grading Criteria

Grading is broken into 2 components: 1) a group grade for the slide content and 2) an individual grade for the presenter and their slide quality.

Group Grade (100 pts)

Participants (30)

- ___ Participant diversity – extreme/average/non-users
- ___ Appropriateness – interviewees provide relevant perspectives
- ___ Number of interviews

Methodology & execution (20)

- ___ Methodology – location, recruitment, compensation, script, apparatus, etc.
- ___ Interview execution & results – pictures & relevant artifacts, key quotes

Synthesis quality (50)

- ___ Thoroughness of the synthesis
- ___ Empathy map quality

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___ Depth of key insights

Presenter Grade (100 pts)

___ Well-designed slides; visual aids are aesthetic and effective

___ Covers required scope within 10 minutes

___ Engages with the audience and isn't reading from a script

___ Projects voice well and communicates clearly