Additional Needfinding, POVs, HMWs, Brainstorming & Experience Prototypes

Due: Start of Thu/Fri studio (Oct 12-13)

Goals
Focus the scope of your needfinding and uncover deeper insights. Take these insights and refine the problems discovered by crafting “Point of View” statements. Brainstorm solutions using “How Might We” statements. De-risk ideas with experience prototypes.

Assignment Overview
1. **Conduct at least 2 additional interviews.** With feedback from your CA and studio, further narrow the scope of your needfinding and expand on your insights within that problem area. You may interview a maximum of 1 Stanford student total between both Assignments 1 and 2. Have your interviewees sign a consent form (copy this document) before you begin the interview.

As in A1, Zoom interviews are only allowed when there is no other way or if the participant is not in the area. If you already hit the limit of 2 Zoom interviews in A1, you may **not** conduct any additional Zoom interviews. If you conducted 1 Zoom interview in A1, you **may conduct 1 additional Zoom interview for A2.**

2. **Optional: Unpack your additional interviews.** While it isn’t required, we strongly encourage unpacking your interviews with empathy maps to synthesize your learnings.

3. **Craft 2-3 compelling POVs.** You can refine the POVs you created during Studio 2 or come up with new ones based on your additional needfinding interviews. Refer to this [handout](#) to sanity-check the quality of your POVs.

4. **Generate at least 10 HMWs for each of your POVs.** Refer to this [d.school guide](#) on how to generate powerful HMW statements and this [handout](#) to sanity-check their quality.

5. **Select the best 3 HMWs.** They don’t have to come from different POVs, but we’d like to see a diverse set. We recommend sending your selected HMWs to your CA for feedback to ensure a solid brainstorm!

6. **Brainstorm at least 10-15 solutions for each HMW.** For each HMW, set a 5-10 minute timer and have each team member individually come up with as many ideas as possible during that period. There are no bad ideas at this stage. Then come together and look at all the ideas. If you aren’t able to brainstorm with sticky notes on a wall, we recommend using [Miro](#) or [FigJam](#) to collaborate digitally.

7. **Select your top 3 solutions overall.** Diversity of ideas is best at this stage. Refer to page 33 of the [d.school guide](#) for 3 different methods of idea selection that you can try: 1) post-it voting, 2) four categories, and 3) bingo selection or try the methods Prof. Landay outlined in Lecture 4-Ideate. You should aim for novelty—pick solutions that don’t already exist!
8. **Test your solutions with 3 experience prototypes.** You likely make critical assumptions about your user experience that could make or break each solution. You will use experience prototypes ([video tutorial](https://hci.stanford.edu/courses/cs147/2023/au/)) to test these assumptions. For your top 3 solutions:
   a. Identify the critical assumption about the user experience that will make or break the idea. This is what you will test, NOT the entire solution.
   b. Devise an experience prototype. Define the artifacts, roles, and environment. Create a script. Do NOT create a digital interface at this stage. You might use a Google doc or form, but not a prototyping tool or code. See page 37 of the [d.school guide](https://hci.stanford.edu/courses/cs147/2023/au/) for more details.
   c. Test each experience prototype with at least 1 person. Participants should have no prior familiarity with your project and should fall within your intended user base. Some diversity among participants is encouraged to capture different perspectives within your user base. Be sure to take pictures of your setup!
   d. After testing the prototype, note what worked/didn’t work, what you learned, and discuss what this means for your solution going forward.
Suggested Timeline
This assignment is dense! Start as soon as possible to complete all steps in a manageable timeframe. Below is a recommended timeline.

2+ needfinding interviews
narrowing the scope

2-3 POV statements

10+ HMWs
for 1st POV

10+ HMWs
for 2nd POV

10+ HMWs
for 3rd POV

3 best HMWs
Send to CA for feedback before brainstorm!

10+ solutions
for 1st HMW

10+ solutions
for 2nd HMW

10+ solutions
for 3rd HMW

3 best solutions
selected from across the 30+ solutions ideated

Experience prototype
for 1st solution

Experience prototype
for 2nd solution

Experience prototype
for 3rd solution

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 12 minutes for the presentation and an additional 5 minutes for questions and feedback.

Expected Content
1. Intro
   a. Team name and member names
   b. Original and more focused problem domain
2. Additional needfinding results
   a. About the interviewees
   b. Additional learnings
3. POV development
   a. Initial POVs from studio 2
   b. Revised & selected POVs
4. HMWs
   a. In the slide notes, provide the 10+ HMWs generated for each POV
   b. Present the 3 top HMWs with their corresponding POVs on the slides
5. Solutions
   a. Present 3 best solutions
   b. In appendix, include screenshots of your brainstorms
6. Experience prototypes
   a. Critical assumptions being tested
   b. Prototype description, pictures of the setup
   c. Participants: Who are they? How were they recruited? Why are they relevant?
   d. Results: What worked/didn't work? New learnings? Was the assumption valid?

7. What's next?
   a. Which solution (or combination) will move forward?
   b. What are the ethical implications of this solution?
   c. Who does it serve? Who might it leave out?
8. Appendix

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Deliverables
Upload deliverables to a subdirectory titled “Assignment 2” in your team’s Google Drive folder.

1. **Presentation**
   Google Slides deck presented by 1 team member during studio.

2. **Interviewee consent forms**
   Combined into a single PDF.

3. **Brainstorm images**
   Helpful for your CA in grading your work. Please name your brainstorm images with their corresponding How Might We’s.

Examples
[Dishcovery, StoreaTime, Thread, Coral]

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)**
*Additional needfinding (20)*
   - Appropriateness of additional needfinding participants
   - Unpacking additional insights and key learnings

*Define & ideate (30)*
   - Point-of-Views sufficiently capture unique perspectives
   - How Might We’s are of the right level to frame brainstorms
   - Full brainstorms were conducted; proposed solutions are novel and complete

*Experience prototypes (50)*
   - Critical assumptions, methods, and participants
   - Results and their implications
   - Rationale for selected solution and ethics discussion

**Presenter Grade (100 pts)**
   - Well-designed slides; visual aids are aesthetic and effective
   - Covers required scope within 12 minutes
   - Engages with the audience and isn’t reading from a script
   - Projects voice well and communicates clearly