POVs and Experience Prototypes
Due: At the start of your studio (Thur/Fri Jan. 20-21)

Overview
In this assignment you will revisit the findings from your needfinding, interview more participants based on a deeper focus, and formulate points of view (POVs) for your potential users. From there, you will craft several “How Might We” (HMW) statements to frame the problem area and intended design goal. Based on the best HMW statements that frame the problem space, you will brainstorm several solutions. Using the best of these solutions, you will create and test three “experience prototypes” to further your needfinding and develop a better idea as to where to focus your project.

Note: brainstorming is a significant part of this assignment, so we highly recommend using a visual collaboration tool such as Miro, where your team can create boards and add sticky notes. You can sign up for a free Education account, which will give you and your team unlimited boards to work with. FigJam is another collaboration tool for brainstorming. It is also linked to Figma so you can do all your work (brainstorming + prototyping) in the same place.

Project Requirements
1. Additional Interviews & Synthesis: Finalize needfinding based on the comments and feedback from your CA and studio last week. Interview at least 2 new people (remember to interview in pairs). If you’ve narrowed down what you want to do (e.g., from health down to cancer recovery), interview a range of users that would be affected in that problem area. If you already interviewed 1 Stanford student for Assignment 1, you should not interview Stanford students for this round of interviews. If your first round of interviews did not include a Stanford student, you can interview 1 Stanford student for this round of interview. Combine the new data with your prior data to see if some interesting themes appear in more than one interview. Feel free to use empathy maps, or journey maps (if experienced with them) to help you synthesize—i.e., find needs and insights from all of your interview data.
2. POV Development: Refer back to the Point of View (POVs) from Week 2 studio and refine these POVs or come up with new ones based on the additional need-finding interviews you’ve done. Select 1-3 POVs that you find most compelling (refer to the assignment overview diagram on page 3). Refer to this handout to sanity-check your POVs.
3. HMW Generation: Generate 10-15 “How Might We” (HMW) statements for each of your POVs. Refer to this d.school guide on how to generate powerful HMW statements.
4. Best HMWs: From the pool of all your HMWs generated in step 3, select the 3 best HMWs. They need not come from different POVs, but we’d like to see a diversity of HMWs. Refer to this brainstorm selection method card or the ideate lecture slides for selecting ideas.
5. Brainstorm Solutions: Brainstorm with post-its on how to solve your HMW questions. Remember from the first studio—quickly put up as many ideas as possible. There are no bad ideas at this stage. Try to think of at least 10-15 solutions per each of the 3 best HMWs.
6. **Best Solutions**: Select the top 3 solutions overall—*diversity* of ideas is best at this stage. Again, refer to the brainstorm selection method card.

7. **Experience Prototyping**: Your solutions very likely make certain assumptions about your users/solution that you may not have accounted for—it could be in human behavior, trust, or interest. As a result, you will need to test the assumptions you’ve made that would potentially make a given solution effective. You’re looking for a reaction—strong or otherwise—to your concept. Note the experience prototype is still a part of the needfinding process—it’s testing your assumptions and the need with this very early stage conceptual prototype.
   a. Test your critical assumptions by building 3 experience prototypes, one for each of your top 3 solutions.
   b. Remember to define the artifacts, the roles (for actors and the customer), and the scene/environment. Define a script of what will happen.
   c. You should not be creating a digital interface at this stage (i.e., you might use a Google doc or form, but not a prototyping tool or code). Normally, you would construct prototype artifacts out of paper, but given the remote situation you can also use digital artifacts to test assumptions. This is not a working prototype, nor should it represent a complete solution (see prototype to test method card). Experience prototypes should test a particular concern or assumption about your solution, not the entire idea.
      i. For example, if you are assuming that people want to work online with strangers, you can manually create a calendar event with a Zoom link pairing strangers together as your experience prototype.
   d. **Experience Prototype Testing**: Test each prototype with at least one person (3 people total). You may only test with one Stanford student max and these should be new participants who you have not interviewed previously. Practice on yourselves first. During the test, one group member should observe and take notes, while the other members may need to play multiple roles, depending on the prototype you’ve created. **Note what you learned about your assumption.**
Assignment Overview & Suggested Timeline

**Deliverables**
Along with your presentation slides (details below), *create a PDF version* of the slides that you will turn into your Google Drive directory by the deadline. You will link the PDFs and *downloadable versions of the original files* 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.

Make sure to *create a new subdirectory titled “Assignment 2” in your team’s directory* and upload your deliverables into that folder.

CS 147 Winter 2022 website
[https://hci.stanford.edu/courses/cs147/2022/wi/](https://hci.stanford.edu/courses/cs147/2022/wi/)
**Presentation Guidelines**

One person from your team will present in studio. Please limit presentation time to 12 minutes. You'll have an additional 5 minutes afterwards for questions and feedback with studio members.

Present your prototypes and findings with the suggested structure:

1. **Introduction (1 slide)**
   - List **team name** and **introduce** your team members (first name & last initial)
   - What is your **problem** domain (in addition to the studio theme)

2. **Initial POV you had going into this testing (what you develop in Week 2's studio) (1 slide)**

3. **Additional needfinding results (2 slides)**
   - Who you interviewed & what you found out (include images)

4. **Three Revised POV(s) (3 slides)**
   - (“We met … We were surprised to notice … We wonder if this means … It would be game changing if …”)
   - In the **notes section of your slides**, provide the 10 HMW statements generated for each of the POVs

5. **Present the three top HMW statements with the POVs they stem from (3 slides)**

6. **Present the three best solutions (3 slides)**

7. **Three Experience Prototypes: (3 slides)**
   - Short **description** of each prototype, including the **assumption** you were testing, and how it was tested (with pictures for the prototype & test)
   - Results: 1-2 bullets on each of: Things that worked, things that didn’t work, surprises, and new **learnings**
   - Validity: Was the assumption valid? Why or why not? Any new assumptions that emerged?

8. **Solution:** Which of these solutions or a combination of solutions would be best to solve the problem? Why? What communities that might be interested in your solution does it leave out?

9. **Summary:** What are the key learnings & next steps?

Examples of **good presentations** from previous teams:
- **Thread**
- **Coral**

**Presentation 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 **inclusion of appropriate content**. The grades for each of these components are explained in more detail below.

**Group Grade**

___ Description of additional needfinding interviews (diversity & appropriateness of participant, insights) (25 points)
___ Description of POVs, HMWs, and brainstorming of selected solutions (25 points)
___ Description of experience prototypes (assumptions being tested, methods, diversity & appropriateness of participants) (25 points)
___ Description of the insights from the testing and the selected solution (25 points)

CS 147 Winter 2022 website
[https://hci.stanford.edu/courses/cs147/2022/wi/](https://hci.stanford.edu/courses/cs147/2022/wi/)
Presenter Grade

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

___ Cover required scope within the **12 minute time period** (not including 5 min. for Q&A).

  Practice your presentation for time in advance–we will cut you off if you go over. (20 points)

___ Ensure the presenter engages with the audience and isn’t reading from a script (10 points)

___ Ensure the presenter projects their voice well (20 points)