POVs and Experience Prototypes
Due: At the start of your studio (Thur/Fri Oct. 10-11)

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 off 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.

Project Requirements

1. **Additional Interviews & Synthesis**: Finalize needfinding based off comments and feedback from your “CA and studio last week. **Interview at least 3 new people** (remember to interview in pairs or threes). 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. You can only interview **one Stanford student max.** Combine the new data with your prior data to see if some interesting themes appear in more than one interview. Again, use the **empathy map** or **journey maps** or other methods 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 studio last week and **refine** based off the additional need-finding interviews you’ve done. Select **1-3 POVs** that you find most compelling (refer to the diagram on the next page).

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**. Refer to this brainstorm selection method card 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**: Chances are, your solutions 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. Define what you want to learn by **building 3 experience prototypes**, one each for an assumption you want to test about 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 can construct this prototype out of paper, creating a low-fi conceptualization of the idea. **You should not be creating a digital interface** at this stage (i.e., you might use paper or a Google doc, but not a prototyping tool or code). This is not a working prototype, nor should it represent a complete solution (see the [prototype to test method card](http://hci.stanford.edu/courses/cs147/2019/au/index.html)). If you've seen a low-fi, paper prototype before, it should **not** be as complete as that. It is something that allows you to test a **piece** of your solution.

d. **Experience Prototype Testing**: Test each prototype with at least one person (**3 people total**). You may only test on **one Stanford student max**. 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.**
**Deliverables**
Create PDF versions of both the written report and presentation slides (details below) 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. Your CA will check the time of submission, as well as whether or not the file was modified after the submission deadline.

**Written Report Guidelines** (< 2,000 words):
1. Team name (optional) & Members Names (First Name & Last Initial of each member)
2. Problem domain (in addition to the studio theme)
3. Initial POV you had going into this testing
4. Additional needfinding results (who you interviewed & what you found out)-include pictures!
5. Three Revised POV(s) (“We met… We were amazed to realize… It would be game changing to…”); provide a sampling of the 10 HMW statements generated for each of the POVs
6. Present the selected 3 best HMW statements with the POVs they stem from
7. Present the three best solutions
8. Three Experience Prototypes
   a. Explain the assumptions you were testing with each prototype.
   b. How did you make the prototype? (include images)
   c. How did you test the prototype? (include images)
   d. What worked? What didn’t? What did you learn?
   e. Was the assumption valid? Why or why not? Any new assumptions that emerged?
9. Explain which prototype (or combination) you found was the most successful in achieving a desired solution & why it would be best to move forward for the project.
10. You can include additional images, graphs, data in an appendix if you feel like you have material that would clutter your report/presentation. However, this is supplementary to the report and the CA is not obligated to read all of it.

Examples of good written reports from previous teams:
- Meet
- AnSup
Report Grading Criteria
The report will be graded on the content that is included as well as how well it is written. The presentation is graded on how well you include the required information and how well it is presented.

Report Grade
___ Follow outline, respect length & include information requested (10 points)
___ Writing quality (15 points)
___ Details of and insights found in new needfinding work (15 points)
___ Quality, surprisingness, and form of initial and revised POVs (15 points)
___ Originality and appropriateness of 3 best HMWs (15 points)
___ Quality of experience prototypes (10 points)
___ Appropriateness of testing methods & detail of descriptions (10 points)
___ Depth of the insights from experience prototype testing & suggested solution (10 points)

Presentation Guidelines
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 following (number of slides a suggestion):
1. Introduction (1 slide)
   a. List and introduce your team members
   b. What is your problem domain (in addition to the studio theme)
2. Initial POV you had going into this testing (1 slide)
3. Additional needfinding results (2 slides)
   a. Who you interviewed & what you found out (include images)
4. Three Revised POV(s) (3 slides)
   a. (“We met.. who needs… because … It would be game changing if…”)
5. Present the three top HMW statements with the POVs they stem from (3 slides)
6. Three Experience Prototypes: (3 slides)
   a. Short description of the prototype and how it was tested (with pictures for both)
   b. Results: 1-2 bullets on each of: Things that worked, things that didn’t work, surprises, and new learnings
   c. Validity: Was the assumption valid? Why or Why Not? Any new assumptions that emerged?
   d. Solution: Which of these prototypes or a combination leads to a solution? Why?
7. Summary (what the key learnings & next steps? What would motivate others to follow you?)

Examples of good presentations from previous teams:
   Buckets
   Roots

CS 147 Autumn 2019 website
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 revised POVs, HMWs, and brainstorming of selected solutions (25 points)
___ Description of testing (detailed data, methods, appropriateness of participants) (25 points)
___ Description of experience prototypes (diversity & appropriateness) (25 points)
___ Description of the insights from the testing and the selected solution (25 points)

Presenter Grade

___ Use well-designed slides. Ensure that the presentation shows appropriate preparation, and that visual aids are aesthetic, effective, 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 12 minute time period (not including 5 minutes for questions/feedback). Practice and time your presentation in advance as we will cut you off if you go over. (20 points)
___ Ensure the presenter makes eye contact (10 points)
___ Ensure the presenter projects their voice well (20 points)