Introduction to Human Computer Interaction & Design
Assignment #2: POVs and Experience Prototypes
Due at the start of lecture on 10/24
[Assignment from James Landay of Stanford CS]
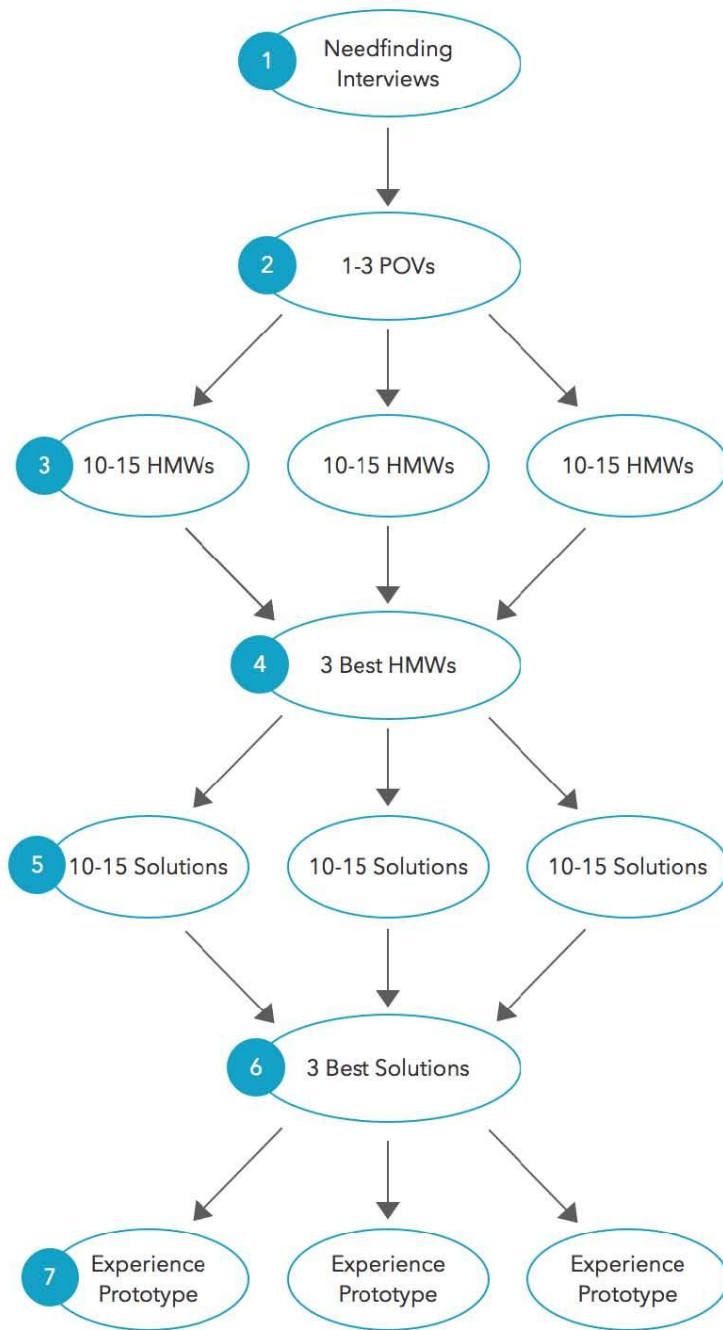
Instructor: Hao-Hua Chu
Fall Semester, 2016

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**: Finalize needfinding based off comments and feedback from your TA and studio last week. **Interview 2-5 more people**. If you've narrowed down what you want to do (e.g., health to cancer recovery), interview a range of users that would be affected in that problem area.
2. **POV Development**: Refer back to your initial Point of View (POVs) from studio last week and refine based off the additional needfinding 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. You can 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**.
5. **Brainstorm Solutions**: Brainstorm with post-its on how to solve your HMW questions. Remember from the first studio - 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 the best HMWs**.
6. **Best Solutions**: Select the **top 3 solutions overall** – diversity of ideas is best at this stage.
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 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 can construct this prototype out of paper, such as something that mirrors what you did in Studio #1 with creating a low-fidelity conceptualization of the idea. For that matter, you should not be using any kind of digital interface at this stage. This is not a working prototype, nor does it need to represent a complete solution. (see the d.school's prototype to test method card).
8. **Experience Prototype Testing**: Test each prototype with at least one person (you will do at least 3 tests in total in this assignment). Practice on yourselves a few times first. During the test, one group member should observe and take notes, while the other group members may need to play multiple roles, depending on the prototype test you've created.

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   1  │   Needfinding   │
      │   Interviews    │
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      ┌─────────────────┐
   2  │    1-3 POVs     │
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 3 │10-15 HMWs│ │10-15 HMWs│ │10-15 HMWs│
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   4  │   3 Best HMWs   │
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5 │10-15     │ │10-15     │ │10-15     │
  │Solutions │ │Solutions │ │Solutions │
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   6  │ 3 Best Solutions│
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7 │Experience│ │Experience│ │Experience│
  │Prototype │ │Prototype │ │Prototype │
  └──────────┘ └──────────┘ └──────────┘
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Deliverables
Create PDF versions of both the written report and presentation slides (details below) that you will turn in on Coursework 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.

Written Report Guidelines (< 1,750 words):
1. Team name (optional) & Members Names (First Name & Last Initial of each)
2. Problem domain (in addition to the studio theme)
3. Initial POV you had going into this assignment from the last studio
4. Additional needfinding results (who you interviewed & what you found out) -pictures!
5. 1-3 Revised POV(s) ("We met... we were surprised to realize ... It would be game changing if..."); provide a sample of the 10-15 HMW statements generated for each of the POVs
6. Present the selected 3 best HMW statements with the POVs they stem from
7. Three Experience Prototypes:
    a. Explain the assumptions you were making 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?
8. Explain which prototype you found was the most successful in achieving a desired solution.

Presentation Guidelines
Please limit **presentation time to 9 minutes**, with 2 additional minutes for questions and feedback with studio members. Present your prototypes and findings with the following:
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 assignment from the last studio (1 slide)
3. Additional needfinding results (2 slides)
    a. Who you interviewed & what you found out
4. 1-3 Revised POV(s) (1-3 slides)
    a. ("We met... we were surprised to realize ... 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?

Report Grading Criteria
The report will be graded on the content that is included as well as how well it is written and presented.

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

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   **(GROUP NAME: _____)**
___ Description of new needfinding, revised POVs, HMWs, & brainstorming of selected solutions (25 points)
___ Description of experience prototypes (diversity, innovativeness, appropriateness) (25 points)
___ Description of testing (detailed data, methods, appropriateness of participants) (25 points)
___ Description of the insights from the testing (25 points)

Presenter Grade   **(NAME: _____)**
___ 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 **9 minute time period** (not including 2 minutes for questions/feedback). Practice and time your presentation in advance as we will cut you off if you go over. You will be unable to gain points for uncovered material (20 points)
___ Ensure the presenter makes eye contact (10 points)
___ Ensure the presenter projects their voice well (20 points)