

CS147 - Local Community Studio

Assignment 2

Needfinding, POVs, HMWs, Experience Prototypes

Introduction

The Team

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Studio Theme

Local Community

Problem Domain

Our problem domain is navigation within the local community. Our initial needfinding revealed tensions between the way people wish to navigate and the way they ultimately end up traveling around their community. This week, we dove deeper into our investigation of these tensions.

Initial POVs

We met JunGu, a short-time visitor from Korea. We were amazed to realize that people are not always searching for the fastest route to get from point A to B. It would be game-changing to be able to suggest different routes based on the purpose of navigation.

We met Chris, a Stanford student with visual impairments who relies on predictability when navigating. We were amazed to realize that he enjoyed diverging from his usual route when walking with his friends. It would be game-changing if people could adventure around the local neighborhood with the same amount of motivation and excitement they have when exploring with friends.

We met Audrey, a long-time resident of the local community and a “super mom,” for whom carpools are “unusually important.” We were amazed to realize how necessary yet complicated it is to coordinate a carpool. It would be game-changing to help simplify and

smoothen the process of coordinating between community members to solve mutual transportation issues.

Additional Needfinding Results



We met Lena, a recent graduate who moved to Seattle 2 months ago. She described herself as a “person who only goes to places one always goes - safe bets.” However, when visitors come or she is with other people, she feels motivated to research and explore new places. For her, safety is the most important element when navigating a neighborhood.

Lena’s story reinforced our insights that people are not always searching for the fastest route and that other people can serve as motivation to explore new areas.



We also met Gondo, who just moved to LA to pursue his career in acting. He recalled how hard it was for him to settle into his new neighborhood, since he was afraid to reach out to strangers in LA.

Gondo’s story revealed how local cultural norms could be unfamiliar to a newcomer, making it harder for them to reach out to neighbors. His story reinforced the need for easier coordination amongst community members.

Revised POVs and HMWs

The three best HMW statements are presented in yellow, bold letters with the POVs they stemmed from.

POV 1

We met JunGu, a short-time visitor from Korea, exploring the area on his way to a destination. We were amazed to realize that people are not always searching for the fastest route. It would be game-changing to be able to customize routes based on one's travel goals.

Sample of POV 1's HMWs

How might we...

- Leverage knowledge of people who know the area well?
- Suggest interesting places in context?
- Filter out boring/unsafe routes entirely?
- Custom-order navigation experience like ordering Starbucks drink?
- Make interesting things come to the visitor?
- Make the process of exploring less stressful/more enjoyable?
- **Make the person explore more freely without depending on a map?**
- Leverage other senses to guide direction (other than visual map)?

POV 2

We met Lena, a newcomer to Seattle, who is afraid to stray from her routine path. We were amazed to realize she enjoyed diverging from her usual route to find a restaurant for her vegan friend. It would be game-changing to be able to motivate people to explore unfamiliar places.

Sample of POV 2's HMWs

How might we...

- Bring together people who are uncomfortable exploring new environments alone?
- **Frame the unknown as exciting instead of scary?**
- Help people discover familiar aspects of new environments?
- Make people recall good memories of adventures taken before?
- Make people challenge themselves to get out of their comfort zones?
- Make people feel safe when alone?
- Make old environments seem new and exciting?
- Make a new area not new?
- Make finding a new place a fun activity?

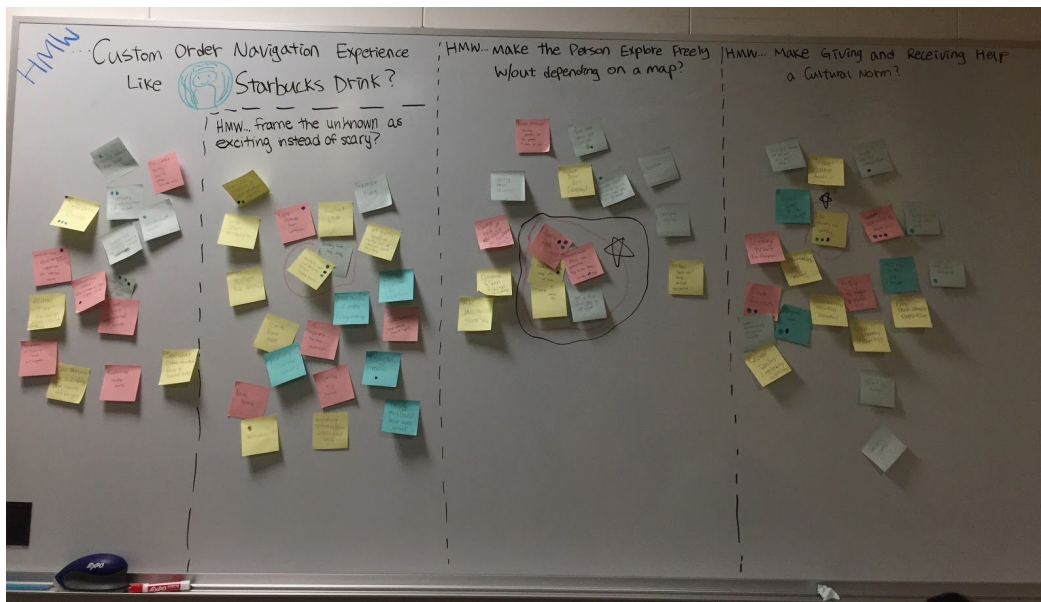
POV 3

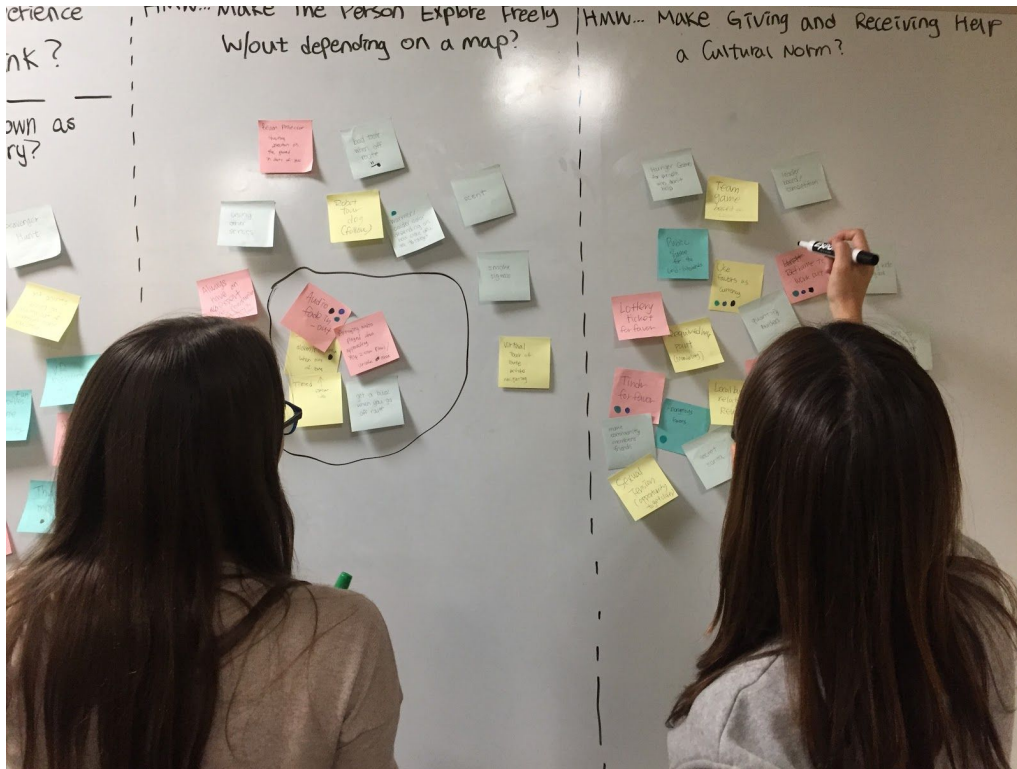
We met Audrey, a long-time resident of the local community and a “super mom,” for whom carpools are “unusually important.” We were amazed to realize how necessary yet complicated it is to coordinate carpools. It would be game-changing to simplify the process of coordinating between community members.

Sample of POV 3’s HMWs

- **Make giving and receiving help a cultural norm?**
- Easily identify people who are willing to give help?
- Entirely remove the process of coordination?
- Make carpooling/helping something that people want to do?
- Make kids responsible for their own transportation?
- Leverage free time of the community members to share the load?
- Reduce guilt of asking others for help?
- Make helping others advantageous/rewarding to the helper?
- Increase trust between strangers in the community?

Solutions





After brainstorming solutions to our top three HMWs, we used a heat mapping strategy to narrow down our top three solutions.

Top Three Solutions

- One-to-one favor exchange
- Audio fade in/out to signal to a person that he/she has diverged more than a specified radius away from intended path
- Match people new to the community with other locals from the same hometown

Experience Prototypes

Prototype 1 : Audio Signal

Assumption

People who have gone off course will go back on route upon hearing the change in audio.

Prototype Creation

[Earbuds and Phone]

The participant wore wireless earbuds, and we played music from a phone behind him. At the shopping center, we identified specific areas that the participant was not supposed to

go. Whenever the participant was about to step into one of those areas, we stopped the music.

[Exploring Scenario]

“You are a traveler exploring a new place. You want to be immersed in the environment, but also don’t want to put yourself into a dangerous situation by going to unsafe areas.”



Prototype Test

Participant:

Jesse, a Stanford Senior studying Computer Science

Location:

Stanford Shopping Center

Method:

1. Explained the supposed scenario to the participant and asked him to put himself in the prepared scenario
2. Had the participant wear one of the wireless earbuds
3. Told the participant that the stopping of music means he is approaching an unsafe area
4. Let the participant freely explore around the shopping center
5. Conducted a follow-up interview asking about the experience

Insights & Reflection

The test validated our assumption that someone who is about to go off route will go back on route upon hearing the change in audio. However, we discovered that the participant did not feel deeply immersed in his environment due to the music constantly being played. Moreover, we learned that noises from the notifications of other applications (e.g. Slack notification) distracted and confused the participant, leaving him unsure whether those noises were a cue that he had gone off route.

Prototype 2 : Hometown Matching

Assumption

Meeting someone from the same hometown provides comfort.

Prototype Creation

We used our own personal connections to find two people who have not previously met each other but who come from the same hometown. We found two people with different backgrounds and interests in order to see whether sharing a hometown was enough to build a connection.

Prototype Test

Participants:

Jazmin, a Stanford senior studying Economics

Jay, a Stanford Junior studying Computer Science

Location:

CoHo

Method:

1. Introduced two people to each other, telling them that they are both from Texas
2. Put audio recorder on the table and let them talk for 10 minutes
3. Conducted individual follow-up interviews asking about the experience



Insights & Reflection

Overall, our assumption proved not to be as valid as we originally thought. Meeting someone from the same hometown seems to be a more bonding experience when encountering someone from your hometown is rare, whereas there are many Stanford students from Texas. We also learned the topic of hometown can be a good conversation starter, but does not necessarily remain as the main topic. Additionally, we learned that when a person is in transition to a new environment, they may be more numb to the hometown connection, as there are many other changes they have to process.

Prototype 3 : One-to-One Favor Exchange

Assumption

People asking for help **will feel less stressed when making a transaction using one to one favor exchange** rather than a direct monetary transaction.

Prototype Creation

[Favor Exchange Scenario]

“You are a Stanford student who just moved into your new dorm. It’s the beginning of the quarter and you have to pick up a mattress from IKEA and come back to your dorm. You can’t drive, so you need somebody to drive a Zipcar, go to IKEA with you, and carry the mattress to your room. You’re looking for somebody on campus who will help you.”

[Slide deck of other favor-askers' profiles (mocked)]

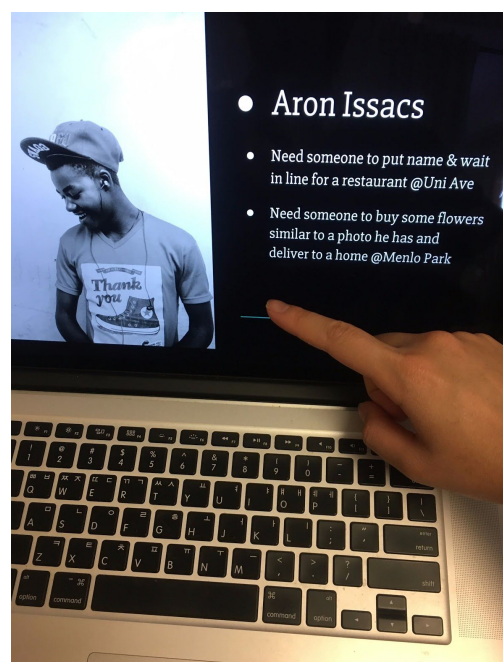
Each slide has a student's profile photo and a simple bio, and specific favors the person wants to exchange. We created three profiles.

[Slide example] *other slides in appendix



- Colin Williams
- Senior @Kairos
- Need an important document delivered from Kairos to Huang
- Need someone who would drop off UPS return package near Stanford shopping center

Prototype Test



Participant:

Claire, a Stanford Junior studying Human Biology

Location:

Starbucks on campus

Method:

1. Explained the supposed scenario to the participant and asked her to put herself in the prepared scenario
2. Asked her to walk through her thought process if she were to put a monetary value on the favor she needed done in the scenario
3. Asked her to look at the profile slides on a laptop and walk through her thought process if she were to choose a person to do a favor exchange
4. Follow-up interview on stressfulness and overall experience

Insights & Reflection

This validated our assumption that one to one favor exchange could reduce the stress of making a transaction. **Determining equivalent favors proved to be easier than assigning a monetary value to those favors.** We also learned that **people think about potential social relationships with other favor-askers** when considering whether to make transactions. Additionally, we learned that if there is no clear advantage or reason to reach out to strangers, **people prefer to ask close friends for favors.**

Most Successful Prototype

The prototype we found the most successful was the one-to-one favor exchange. This prototype confirmed our assumption that calculating the value of a favor in terms of other favors rather than assigning it a monetary value eases some of the stress associated with the process of making transactions. We also left with new assumptions that people consider social implications while pondering a transaction and that when possible, people prefer to ask close friends for favors rather than strangers.

Appendix



- Zakia Abbasi

- Sophomore @Mirrilees
 - Need someone to grocery shop @Trader Joes for a dinner
 - Need someone to participate in her interview for 40 minutes
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- Aron Issacs

- Need someone to put name & wait in line for a restaurant @Uni Ave
 - Need someone to buy some flowers similar to a photo he has and deliver to a home @Menlo Park
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