





Additional Needfinding, POVs, HMWs, Brainstorming & Experience Prototypes

Lisa Ing, Derrick Chen, Yinlin Zhao





01

Introduction

TEAM STORYBOARDERS



LISA ING



YINLIN ZHAO



DERRICK CHEN



Original problem domain

How do people connect with each other?





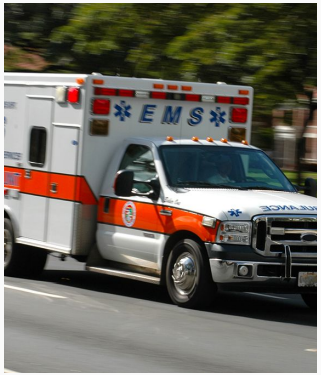
Focused problem domain

How do people maintain their relationships?

02

Additional needfinding results and key insights

A1 Recap



John Doe

27-year-old paramedic



Offlina Exper

Mom looking for a job



Zhang Wei

Retired harbor pilot

A2 INTERVIEWEES



London Bay

25-30 y/o project manager working in SF



New Sanfrana

25 y/o adult working in finance in SF



London Bay

25–30 y/o project manager working in SF

UK → Austin → Bay Area

"But I made really good friends at work along the way, and that really helped, but **it was a big investment** . And I remember like the first time I got into my apartment in Austin, **I just cried because there was just a lot** ."

INSIGHT

London finds it convenient to make **friends from work,** but due to recent moves related to her job, she's been branching out to **run clubs and hobby groups** to meet potential friends.

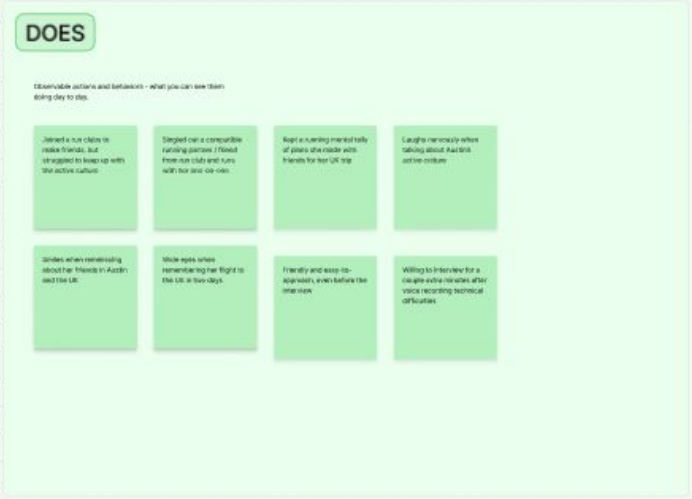
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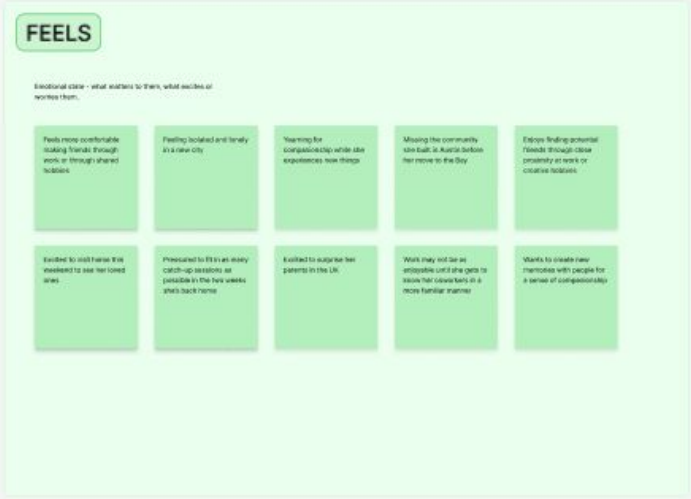
Close relationships are formed through c**lose proximity and shared experiences,** but moving to a new city means **rebuilding your community from scratch.**

London Bay


SAYS
What they tell others - direct quotes, phrases, or opinions they voice.
"I'm the type of person that has not many friends, but like the friends I do have, I have really close connections with them. So I guess because I'm so far away from my friends and family, I'm trying to build like my community here."
"So hopefully I can connect with people over food, but also try and like maybe take up a new hobby as well because that's what I kind of struggled with in Austin because it was like such a active city. Everyone was doing like run clubs and everything like that. I was a bit too scared to like kind of join them, so maybe I'll do something like more artsy around it."
"But even if it's just like they post something on their Instagram story and I like do a simply react or a like on it, I think that's still kind of like maintaining a connection with them, and sometimes that sparks up a conversation, and we're trying to arrange like a an actual call to kind of catch up, which is really nice."
"So it's nice that we're gonna meet up, but then at the same time it's just like like been been been been like you have to see all of these people in like a short amount of time, whereas like when I was in the UK before, it'd be like very casual trying to like meet up. Whereas now, I'm like trying to schedule everyone in."
"I feel like just because the time is so limited, and I think I want to catch up with them, see how they're doing. They want to see how I'm doing, I guess. Yeah, it's like so much you can squeeze in like over a dinner."
"But I made really good friends at work along the way, and that really helped, but it was a big investment. And I remember like the first time I got into my apartment in Austin, I just cried because there was just a lot. Dot no, I mean, I'm kind of getting used to it now, especially in the states and in general."
"Yeah, but it was something that I do like struggle with is like having decision fatigue. I don't know if you've heard of that, but like I'm like trying to find a place to have coffee or like have lunch, but there's like so many places that I could go to, and like all I don't know which one to go to."
"I was like, oh, it's like actually a very nice like surprise [when someone reaches out to me]. I guess it's kind of like when you when you find like a a $5 bill or $10 bill on the floor. I don't know, it's just like a little bit of happiness in your everyday."
"It's also nice to have someone that you can be like, oh, do you remember that time when we went to this?"
"So I, I think I can't remember how it happened, but we one day we managed to like ran together, and then she's been like my go-to person if I want to go on a run. So it's like she will sometimes drag me out to a run club, and I'm like, I'm only doing this for you."
"Whereas like for me, going to this like art exhibition, for example, it's just me, and I'll just have photos for myself, and I'll probably send them to like my [long-distance] boyfriend, for example, and be like, 'Hey, I went to this exhibition', but like he's not there to kind of see it as well.


THINKS
What's going through their mind - beliefs, worries, preoccupations they might not say out loud.
It's important to create shared experiences with people to develop close bonds with them
Shared cultures, hobbies, and interests are important overlaps to have with a potential friend
Keeping long-distance loved ones updated on daily life helps maintain their relationship
She should take advantage of being back home for a limited time to meet up with friends and surprise her family because it may be a while before she sees them again
Prefers a small circle of friends with deep connections over large social circles
It's convenient to take advantage of the close proximity of the workplace to become friends with select coworkers, making work more enjoyable
Experiencing new things alone can feel isolating compared to having someone to reminisce with later
Social media is a low-stakes way to keep in touch with friends and acquaintances during busy periods
I'm challenging to keep in touch with long-distance friends when life gets busy, hence our other items will take priority
Pursuing creative hobbies in her new location can help with making creative friends with those interests


DOES
Observable actions and behaviors - what you can see them doing day to day.
Joined a run club to make friends, but struggled to keep up with the active culture
Singled out a compatible running partner / friend from run club and runs with her once on over
Kept a running mental tally of plans she made with friends for her UK trip
Laughs nervously when talking about Austin's active culture
Smiles when reminiscing about her friends in Austin and the UK
Wide eyes when remembering her flight to the UK in two days
Friendly and easy-to-approach, even before the interview
Willing to interview for a couple extra minutes after voice recording technical difficulties


FEELS
Emotional state - what matters to them, what excites or worries them.
Feels more comfortable making friends through work or through shared hobbies
Feeling isolated and lonely in a new city
Yearning for companionship while she experiences new things
Missing the community she built in Austin before her move to the Bay
Enjoys finding potential friends through close proximity at work or creative hobbies
Excited to visit home this weekend to see her loved ones
Pressured to fit in as many catch-up sessions as possible in the few weeks she's back home
Excited to surprise her parents in the UK
Work may not be as enjoyable until she gets to know her coworkers in a more familiar manner
Wants to create new memories with people for a sense of companionship



New Sanfrana

25 y/o adult working in finance in SF

Utah → Bay Area

"We can plan. And if there's **anything that overlaps** (on what we're all interested in), then it's like, oh, **we should go together** ."

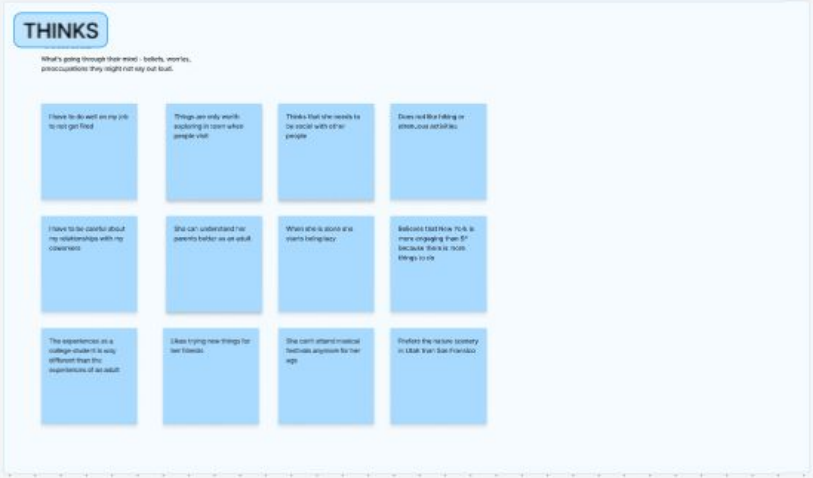
INSIGHT

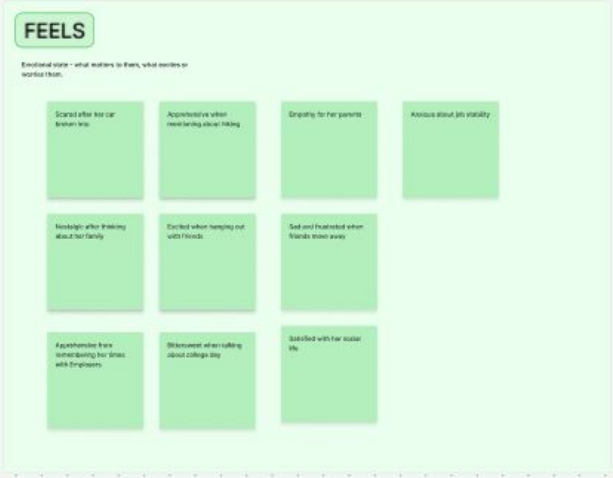
New **misses her family** back in Utah and finds it difficult to **keep up with her new grad friends** constantly moving in and out of San Francisco.

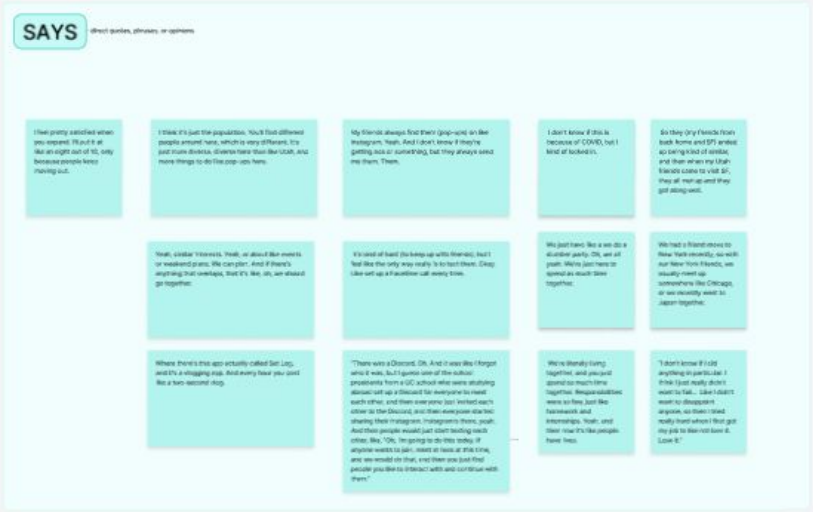
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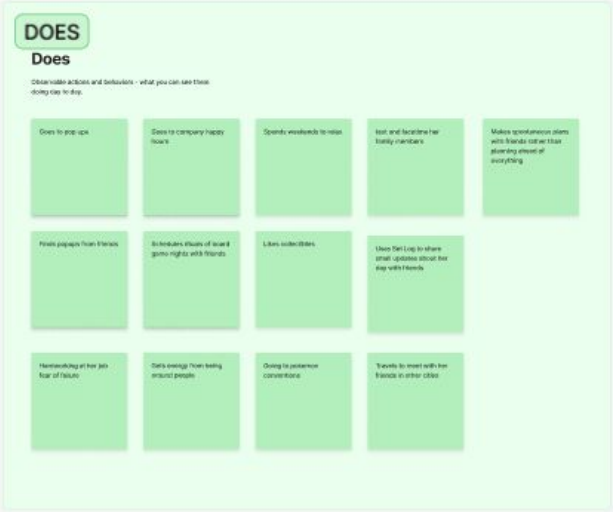
People struggle to connect due to **changing location and schedules.**

New Sanfrana











POV development

London Bay POV



We met with London Bay, a project manager who recently moved to the Bay Area for her job.

We were surprised to realize that London sources most of her friends from work, but has needed to make two big moves due to internal transfers from her job, leaving her starting from scratch after each move.

We wonder if this means that close proximity makes it easier to discover and make friends in a new area.

It would be game-changing to create opportunities for shared-experiences to encourage close proximity to potential friends.

New Sanfrana POV



We met with New Sanfrana, a 25-year old young adult working in Finance

We were surprised to realize that New feels lazy when she is by herself but feels energized with people and can do anything with them.

We wonder if this means that she needs ways to feel empowered to meet new people or her friends to plan things.

It would be game-changing to create a tool that allows for New Sanfrana to develop agency in connecting with her friends, family and new people.

Offlina Exper POV



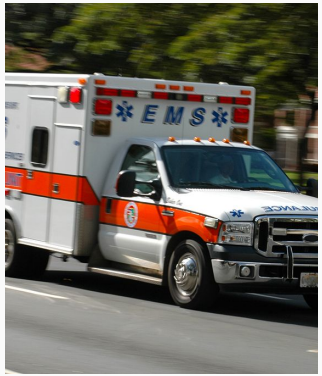
We met Offlina. She moved here from Germany and is raising kids in Palo Alto while searching for a job.

We were surprised to realize that Palo Alto's communities are very transient, and difficult to make long term connections in.

We wonder if this means it's difficult to maintain connections and form long term relationships with other people, especially those outside of Offlina's parental responsibilities.

It would be game-changing to create opportunities for parents to engage in activities where parenthood is tangential to the activity, to make room to form connections outside of parental responsibilities.

SELECTED POVs



John Doe

27-year-old paramedic



Zhang Wei

Retired harbor pilot

04

HMWs

John Doe's POV

We met with John Doe, a night shift paramedic with a crazy schedule.

We were surprised to realize that despite his work schedule and preference for Type B-esque spontaneous hangouts, he often finds himself being the one to initialize and schedule social connections with his friends.

We wonder if this means he feels the need to compensate for his work schedule by making himself more available to people, even if that means compromising how he intrinsically initiates social interaction.

It would be game-changing to reduce friction in initializing social interaction while preserving the spontaneity of hangouts.

HMW encourage people to do routine activities together?

HMW incentivize people to communicate proactively?

Zhang Wei's POV

We met with Zhang Wei, a retired harbor pilot from Tianjin, China.

We were surprised to realize that he seemed reluctant to make and maintain connections with people in Tianjin and back at home but communicated with his son in the United States regularly, frequently, and for long periods of time.

We wonder if this means Zhang Wei's fear of being a disturbance in other people's lives outweighs his desire to connect, and he does not feel as much anxiety about potentially disturbing his son due to their closeness and blood relation.

It would be game changing to remove people's fear that their outreach will be badly received without placing the burden to initially address this on either party.

HMW create unobtrusive ways for people to connect with each other?

OUR 3 TOP HMWs

HMW encourage people to do routine activities together?

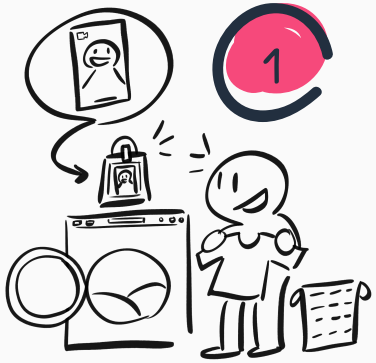
HMW incentivize people to communicate proactively?

HMW create unobtrusive ways for people to connect with each other?

05

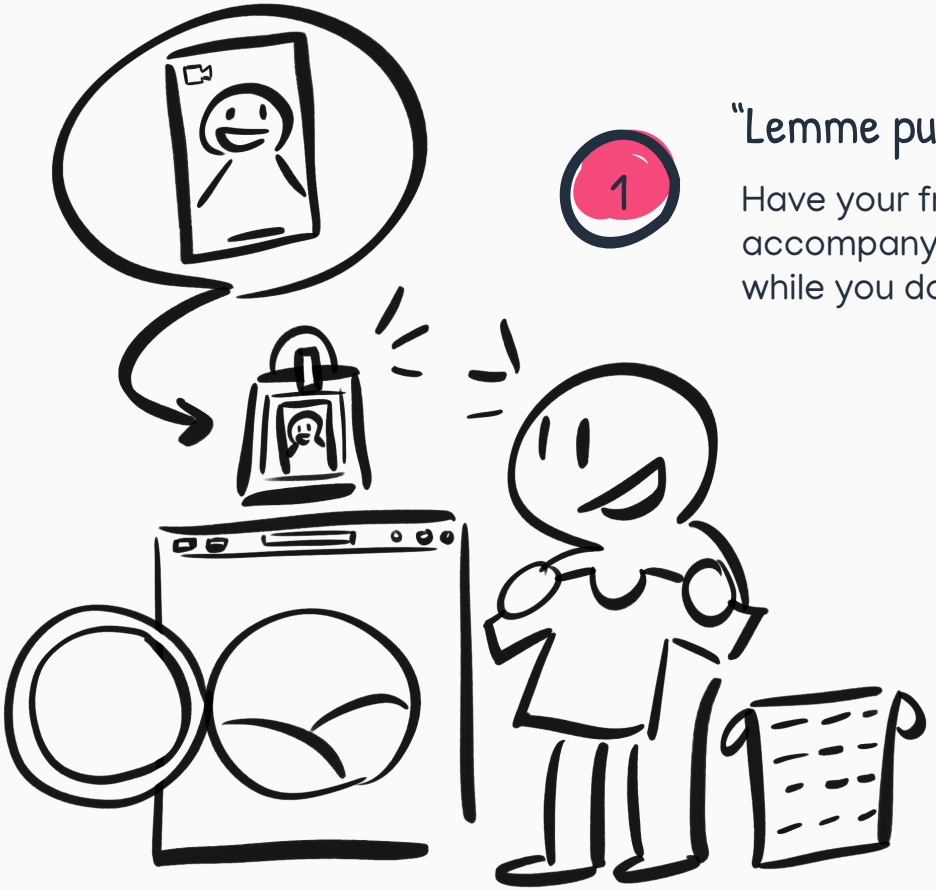
Solutions

HMW encourage people to do routine activities together?









1

"Lemme put you in my pocket"

Have your friend virtually accompany you like a lil guy while you do mundane tasks

2

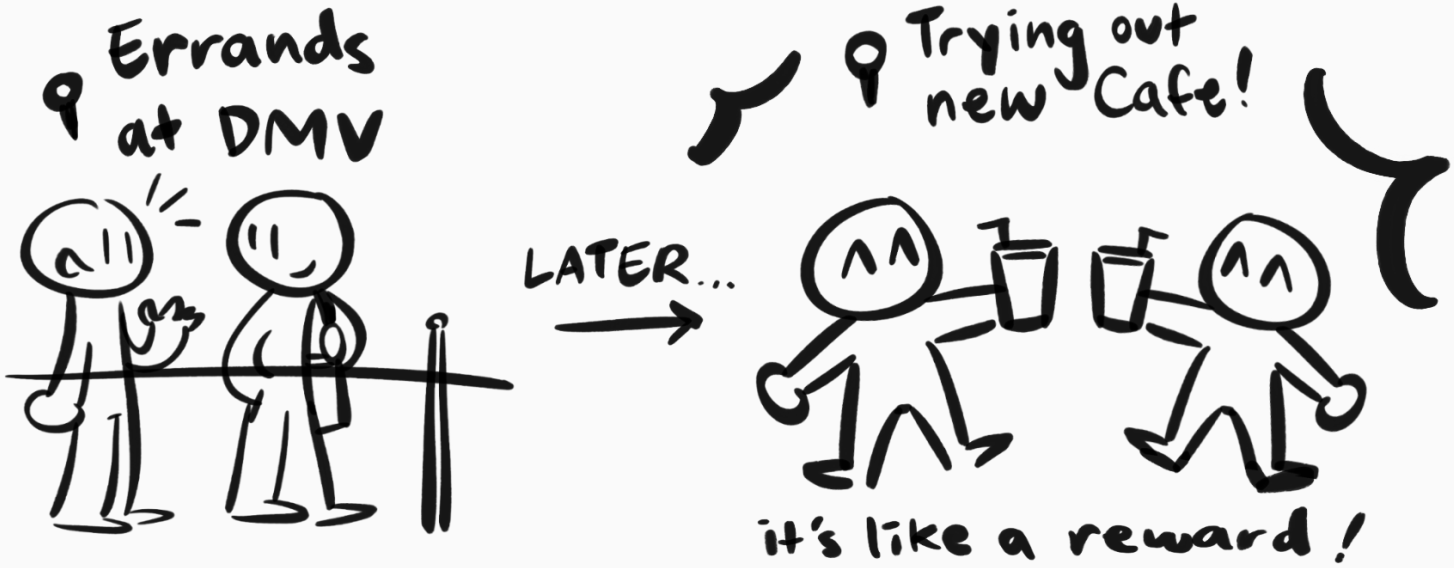
Routine syncing

Record your activities at a certain location to leave messages for them that play in an AR environment



3 List stacking

Combine mutual bucket list activities with TODO list items and do them with your friends



06

Experience Prototypes





Participants

- **Undergraduate students** that were recruited through dorm **Discord servers**
- Offered **snacks** in exchange for completing the activity.
- The **range and spontaneity** of the selected helped us get a variety of students with different habits, personalities, and backgrounds.

- 9 participants total
  - 2 people tested prototype 1
  - 2 people tested prototype 2
  - 5 people tested prototype 3



Experience Prototype 1

"Lemme put you in my pocket"

Have your friend virtually accompany you like a lil guy while you do mundane tasks

Assumption #1

People have the time and capacity to Facetime their friends



Experience Prototype 1

How we tested

Questionnaire about people's video and phone call habits, who they can reach out to, and had them spontaneously reach out to one of those people on Facetime



New learnings

People **do have the time and capacity** to have calls with their friends, but they **don't take the initiative to call** and may not enjoy the **rigidity of scheduling** a call with their friends

The impacts of grind culture makes people **reluctant to reach out to other,** despite having many contacts that are willing to pick up at anytime

Experience Prototype 1

Ethical implications of the solution

Privacy: Facetime calls in public may catch unconsenting bystanders on video call

Security: Insecure video feeds may leave video calls vulnerable to bad actors

Accessibility:

- Quality video calls depend on having to reliable Internet, which excludes those without a consistent Internet connection
- Video calls may be difficult to interpret through assistive technology for people with auditory or visual disabilities



Findings and Impact

People who want spontaneous interaction want to know who is **also** spontaneously available, otherwise they may **assume** that people aren't available or not in proximity

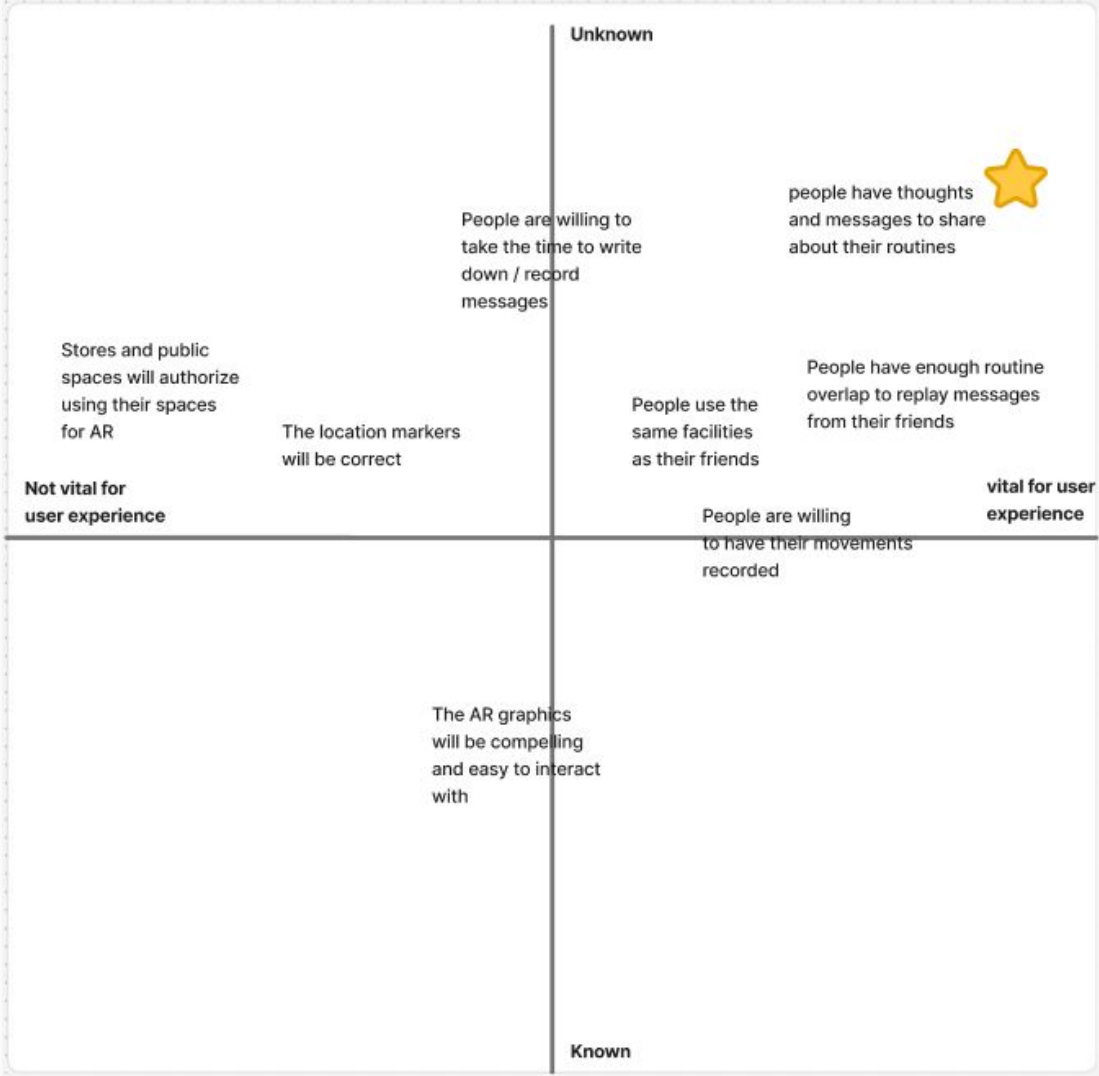
Experience Prototype 2

Routine syncing

Record your activities at a certain location to leave messages for them that play in an AR environment

Assumption #2

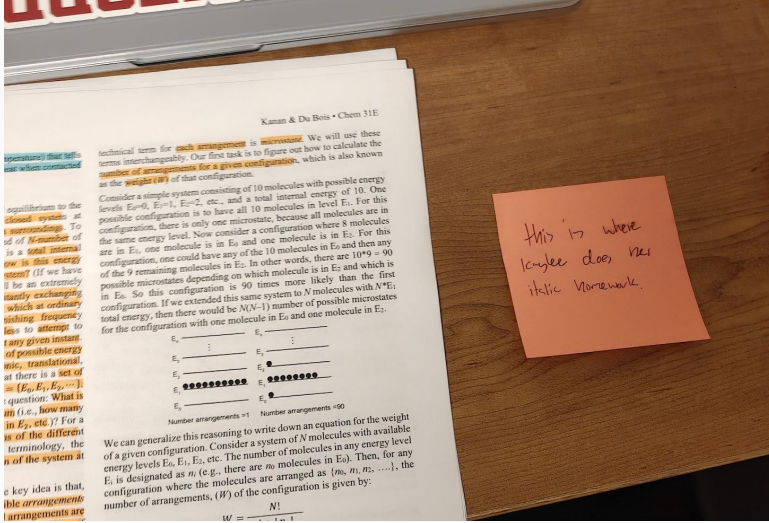
People have thoughts and messages to share about their routines



Experience Prototype 2

How we tested

We had people go to a location they routinely visit and placed sticky note messages on different areas of that location addressed to a friend

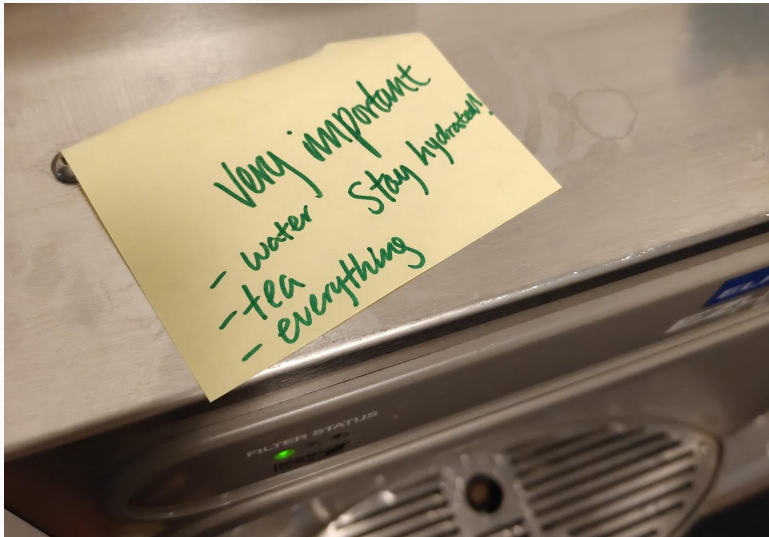


New learnings

Different demographics of people have **different types of routines they're obligated to do,** leading them to feel differently about their environment and day-to-day life

We tested on undergrad students who were more connected to their everyday environment then talking about their routines throughout the activity

We found that they identified **strongly specific memories or commentary with their environment** (specifically their college dorm)



Experience Prototype 2

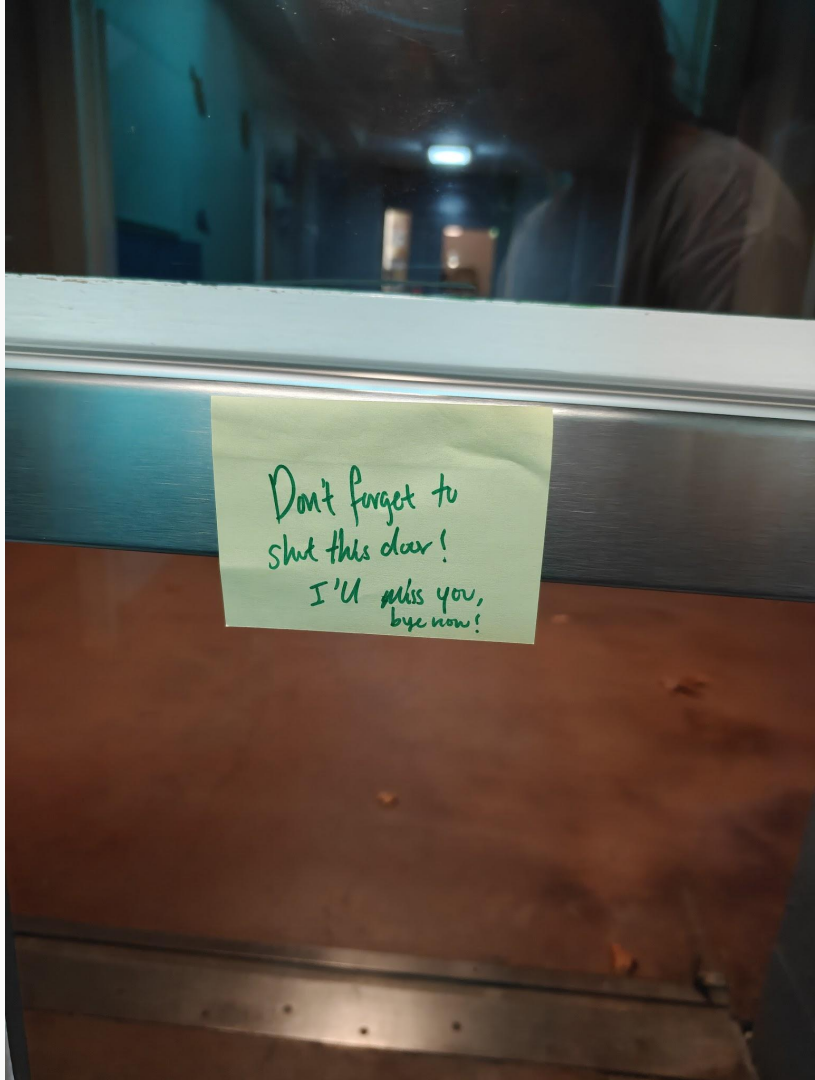
Ethical implications of the solution

Usability: The use of niche technology like AR would exclude people not familiar or comfortable with using AR

Accessibility: Once again, this would require reliable access to an internet connection

Privacy: Tracking your daily routine can pose as a security risk

Convenience: It may feel like a burden for folks with a lot already on their plate



Findings and Impact

Solution should not
center around routines
but rather about marking
past memorable
experiences

Experience Prototype 3

List stacking

Combine mutual bucket list activities with TODO list items and do them with your friends

Assumption #3

People's TODOs and interests align enough for shared activities



Experience Prototype 3

How we tested

We had people fill out a questionnaire about routines and TODOs they had that week and then had them go over a map of stores in downtown Palo Alto and Cal Ave and mark the places they were interested in visiting

New learnings

While people can have different ideas about the scope of a TODO list, we **validated that friends have enough overlapping interest for activities** to justify that they can be shared

People may sometimes view tasks as **unconventional to have company for,** such as studying



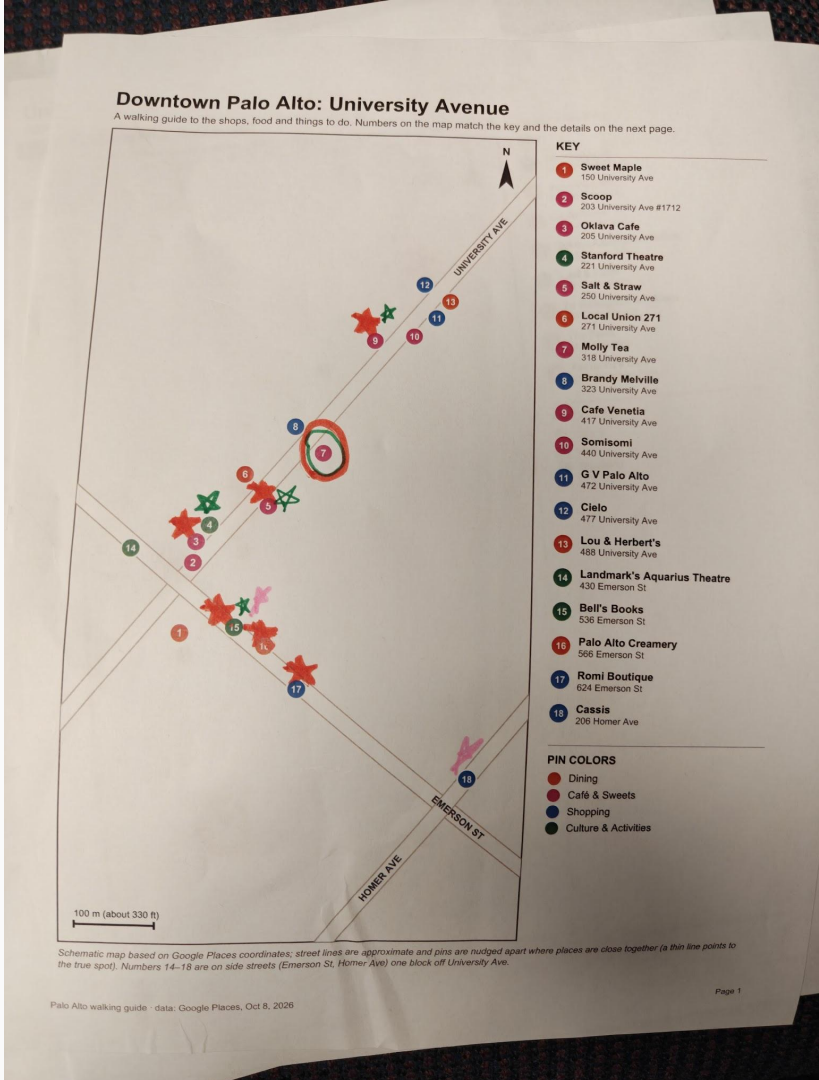
Experience Prototype 3

Ethical implications of the solution

Privacy: Tracking your upcoming whereabouts through a TODO list

User involvement: seeing your friend group make plans based on shared TODO list items that you're not available for can feel like an exclusionary experience

Accessibility: the dependence on a structured routine may exclude those with more unpredictable or sporadic routines



Findings and Impact

Letting people see other's TODO lists could broaden their view of what they can add to their own, increasing the likelihood of overlapping items and willingness to do them together

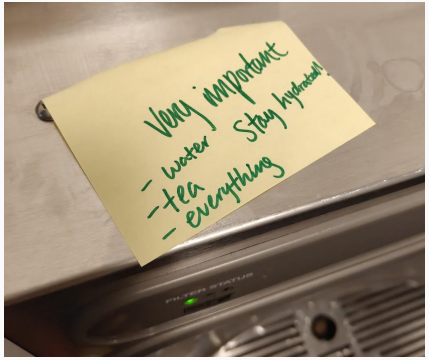
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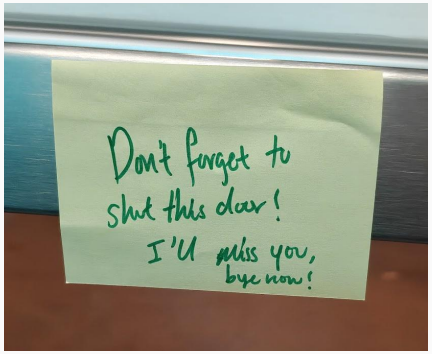
What's next?

OUR CHOSEN SOLUTION

2 Routine syncing

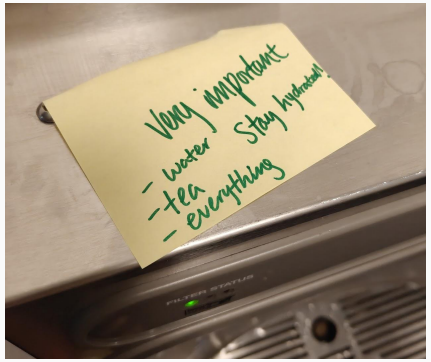


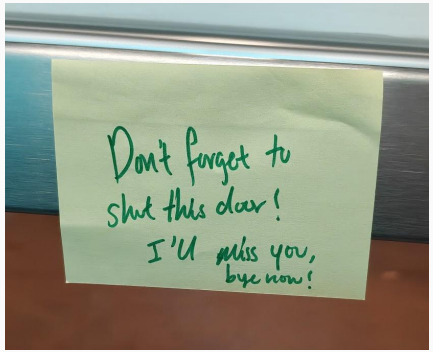




MOVING FORWARD

Solution 2





+

Insights from Solution 1

People **do have the time** and capacity to have calls with their friends, but they d**on't take the initiative** to call and may not enjoy the rigidity of scheduling a call with their friends

The impacts of grind culture makes people **reluctant to reach out** to people, despite having many contacts that are willing to pick up at anytime

Ethical implications of the solution

Usability: The use of niche technology like AR would exclude people not familiar or comfortable with using AR

Accessibility: This would require reliable access to an internet connection

Privacy: Tracking your daily routine for others to see can pose as a security risk





THANKS!



CREDITS: This presentation template was created by **Slidesgo,** including icons by **Flaticon,** infographics & images by **Freepik**

Solution illustrations by Lisa Ing



APPENDIX

Assignment Deliverables

1. Team Contract (here)
2. Additional Interviews (Interview 1, Interview 2)
3. Assumption Plotting (here)
4. Empathy Maps (here)
5. POVs (On Slides)
6. HMW Brainstorms | Solutions Brainstorm | Top 3 Solutions | Ethical Implications | Selecting Solution (here)
7. 3 Best HMWs (here (page 6))
8. Experience Prototype Documentation (here)

Solution Brainstorming



HMW..

- Encourage people to do routine activities together (like grocery shopping, laundry, errands, etc)

  Solutions:

  - The mundane equivalent of facetiming your friend and putting them in an ita bag to carry around II|
    - Assumptions:
      - People want to facetime their friends
      - People are doing activities that are convenient to be calling someone during
      - People find it fulfilling to digitally accompany friends
      - **People have the capacity and time in their schedule to be on facetime during these moments**
  - Routine syncing: like a way to record your movements / activities at a certain location (ie the things you picked up and aisles you visited at a grocery store) and could replay that live in an AR environment for your other friends II|
    - Assumptions:
      - People are willing to have their movements recorded
      - People have overlapping enough routines to be able to replay messages from your friends
      - People use the same facilities as their friends
      - **People have thoughts and messages to share about their mundane routines**
      - People are willing to take the time out of their routine to write down messages
  - Combine bucket list activities with shared TODO lists and do them with your friends (ie. Trying out a new cafe together followed by joint grocery shopping trip) III
    - Assumptions:
      - People are willing to share their TODO list and bucket lists
      - People have the time to do multiple activities together
      - People want their friends to accompany them on their errands
      - **People's TODO lists and interests align in such a way that would allow them to complete tasks together**
      - People shop at the same grocery store / use the same facilities

https://www.figma.com/board/6kznBJnmR7qOnjwaKikU6q/Untitled?node-id=0-1&t=XkPGq8PQibcP3lo2-1 <- assumptions and experience prototypes board

- Accountability buddy system II
- Gossip newsletter where you spill sneak peeks on things you need to catch people up on (your friends now have a bunch of conversation starters to use on you) I|
- TODO list matching to help you initiate shared errands and create a routine time to do them together II
- Send push notifications to respectfully bother your friends I|

- Digital newsletter of TODOs List I
- Virtual robot moving around type
- Planning out navigation to optimize linking up in real time
  - Like if you're out and looking to hang out you can set it on your phone and look at where your friends are / what they're doing to see if you can tag along
- Pokemon go but the pokestops are your houses and stuff
  - Like a raid battle but for groceries and errands
- Battle your friends |
- Parallel running errands long-distance
- Game to encourage stories? I
- Instagram reel, media journal that helps create a digital ecosystem with friends?

- Incentivize people to communicate proactively?
  - Harness the power of popup ads for good
  - Catch things as you remember them and forward it to involved parties
  - Catalogue messages for plans and put them on your calendar automatically + detect scheduling conflicts to reschedule with friend
  - Scheduling ping pong game where you ping one day and time and your friend shoots back another day and time until you agree |
  - Daily/weekly prompts that prompt you to think about specific stories with people and mayhaps reach out to them
  - Game Pigeon games that motivate you to text people back in a timely manner
  - Ecosystem journaling? Where there is a system that allows you to track how friends are feeling needing etc |
- Create non-obtrusive ways for people to connect with each other?
  - Similar to "Lets Meet Up right now" Map in find My I
  - Digital postcards
  - Friend plushie to call and hug and send warm stuff
  - Interest matcher
  - Social Network Map where you can look into how your friends are all connected
  - Digital Interactive Board – put stuff up equally images and stuff can scan it in
  - AR video of friends, they become a holograph there with you |
  - A scheduling tool that suggests free time where both parties can meet (removes friction of trying to look at your calendar and spend time trying to figure out time)
  - Sending care packages (either physical or digital) |