



# Moo Moo Movers: POVs & Experience Prototypes



CS 147: Easing Life Transitions



# Moo Moo Movers



**Ada  
Zhou**



**Bryan  
Defjan**  
Presenter

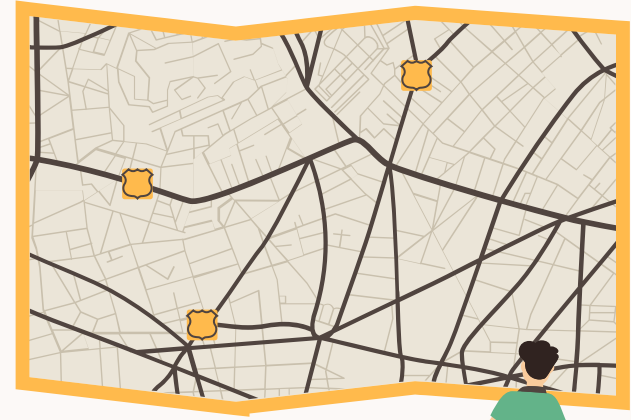


**Emily  
Redmond**



**Mhar  
Tenorio**

# Problem Domain: Emotional Aspects of Moving



# Initial POV



**We met** Harriette, a 51-year-old mother currently living in Maine who moved 12+ times as a child because of her parents.

**We were surprised to notice** that she never got used to moving despite the number of moves she made and found it emotionally draining every time.

**We wonder if this means** “leaving things behind” emotionally is harder for her than the logistics of moving because it is taxing to uproot herself once she feels grounded.

**It would be game-changing to** help her to feel like she is not building a life from scratch with each move.



**Harriette**

# Additional Needfinding





**Yvonne**



**Rohan**



**Abby**

## Yvonne

- 20, international student from Singapore who moved to London for university after living in Singapore her whole life
- First move, international
- We were interested in younger people's emotions after Morgan's interview (Assignment 1)

## Insights

- Independence of living alone is empowering
- Resolving physical aspects of moving (e.g. figuring out groceries, banks) helps with emotional transition
- The stress of moving means little headspace to commit to anything else
- With international moves, everyday objects can seem foreign again which is disorienting (e.g. detergents have different brands, figuring out which food is allergy-safe)





## Rohan

- 23, just moved from NYC to Puerto Rico for investment and career reasons
- International move
- We were interested in people who are currently moving

## Insights

- Moving changes your habits/hobbies because the activities available to you are different
- You may have to justify your decision to move to many different people, which can be tiring
- Conscious effort is needed to shift from a tourist's POV to a resident's POV to make a place feel like home



## Abby

- 24, Settled in NYC after graduating college in upstate New York
- In-state move
- We wanted to see how people who were “left behind” by movers during moves felt → Abby felt this way



## Insights

- Worried that her friends might not communicate with her as much after moving, losing their level of closeness
- Social media is crucial to feel like you're maintaining a connection after being physically separated
- Moving can be a symbol for maturing as a person. While full of triumphs, it brings with it new “adult” worries



# Revised POVs & Top 3 HMWs



# POV 1



**We met** Harriette, 51, who moved 12+ times as a child because her parents enjoyed a "hippie" nomadic lifestyle.

**We were surprised to notice** that even after moving so much as a child and not liking the lifestyle, she decided to move to Peru for a year as a teenager by herself.

**We wonder if this means** that she wants to reclaim her agency by carving her own moving experience as opposed to having the experience be defined for her.

**It would be game-changing to** have given young Harriette a way to feel ownership and a sense of self during a move as a dependent.

# POV 1



**We met** Harriette, 51, who moved 12+ times as a child because her parents enjoyed a "hippie" nomadic lifestyle.

**We were surprised to notice** that even after moving so much as a child and not liking the lifestyle, she decided to move to Peru for a year as a teenager by herself.

**We wonder if this means** that she wants to reclaim her agency by carving her own moving experience as opposed to having the experience be defined for her.

**It would be game-changing to** have given young Harriette a way to feel ownership and a sense of self during a move as a dependent.

**HMW** help teenagers safely navigate a new place?

**HMW** make moving a more collective experience for everyone in a family or group?

## POV 2



**We met** Yvonne, a 20-year-old who lived in Singapore (SG) her whole life before moving to London for university, away from her family and home for the first time.

**We were surprised to notice** she relied on physical markers (like finding groceries and furniture) to showcase and embody her emotional progress.

**We wonder if this means** she has trouble communicating and proving to herself that she's made emotional progress settling in after her move

**It would be game-changing to** make her more comfortable to fully embrace and celebrate the emotional ups and downs of moving.



## POV 2



**We met** Yvonne, a 20-year-old who lived in Singapore (SG) her whole life before moving to London for university, away from her family and home for the first time.

**We were surprised to notice** she relied on physical markers (like finding groceries and furniture) to showcase and embody her emotional progress.

**We wonder if this means** she has trouble communicating and proving to herself that she's made emotional progress settling in after her move

**It would be game-changing to** make her more comfortable to fully embrace and celebrate the emotional ups and downs of moving.

**Did not select HMW.**

## POV 3



**We met** Abby, 24, who moved to college and has recently moved back home to NYC, leaving behind the close friends she lived with over the past 4 years.

**We were surprised to notice** she gave up Snapchatting, which she felt best emulated the daily communication she used to have with her roommates.

**We wonder if this means** she was embarrassed that her frequent Snapchats made her seem more committed to the long-distance relationship than her friends.

**It would be game-changing to** facilitate a way for Abby to comfortably share her new life with a long distance friend without comparing efforts.



## POV 3



**We met** Abby, 24, who moved to college and has recently moved back home to NYC, leaving behind the close friends she lived with over the past 4 years.

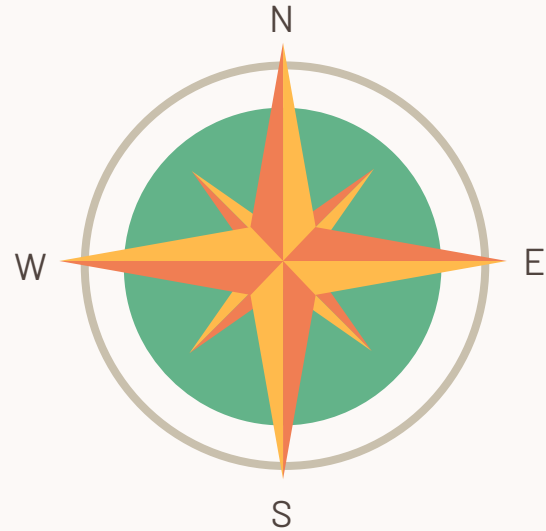
**We were surprised to notice** she gave up Snapchatting, which she felt best emulated the daily communication she used to have with her roommates.

**We wonder if this means** she was embarrassed that her frequent Snapchats made her seem more committed to the long-distance relationship than her friends.

**It would be game-changing to** facilitate a way for Abby to comfortably share her new life with a long distance friend without comparing efforts.

**HMW** help loved ones show they are thinking of each other convenient yet still meaningful?

# Solutions & Experience Prototypes



HMW help teenagers safely navigate a new place?



HMW make moving a more collective experience for everyone in a family / group?



# Brainstorming Solutions

HMW help loved ones show they are thinking of each other convenient yet still meaningful?



## Solution to 1st HMW

A community-based feed that allows young people who have recently moved to a new place to get community know-hows from locals.

### Assumption tested

Specific know-hows from community locals will make the teenager feel safer and use this information to make more informed decisions navigating their new home.

# Prototype 1: Community Know-How Feed

Created form where user imagines they are moving to a hypothetical city. They read a list of niche tips from locals on how to explore the city. They share how these tips influence their perception of the city.

## Prototype

Hello! Thank you so much for being interested in participating in our test-study. We are a team of students currently investigating solutions for people who are moving. In this prototype, we will present you with information then have you answer some questions after.

defjan@stanford.edu (not shared) [Switch account](#)

\* Required

Do you consent to participating in this interview? Any responses that we may use will be attributed to a pseudonym. You may withdraw your consent at any time by contacting us. \*

Yes.

No

First name

Form was distributed on r/SampleSize, gathering 30+ responses of age range 16-36, mix of people who have never moved, moved short and long distances.

The screenshot shows a Reddit post on the subreddit r/SampleSize. The post is titled "[Academic] How would this tool/app help you when moving to a new place? (Under 35)". It was posted by user u/Fresh-Milk-Tea 1 day ago. The post content reads: "Hello all! We are college students from the Bay Area and we are currently developing an app that aims to ease the transition for people moving to a new place. We developed a very simple prototype for what our app might be and we were wondering if we could get some feedback on our idea. The survey will take about 5 minutes. Here is the experience prototype and feedback form: <https://forms.gle/Q7mbN8ozM2RN2mCJ7> Thank you so much!". The post has 0 comments and is 76% upvoted.

Feedback was analyzed with special attention given to how users felt having received the list of information, what they felt was missing, and reasons for why certain tips stood out to them.

The screenshot shows a spreadsheet titled "CS147 Prototype (Responses)". The table has columns labeled A1 through J1. The rows contain user feedback, with some cells containing numbered lists of responses. For example, row 1 contains the question "Would you categorize yo As someone who is in th if you are someone who What else might you war Who would you trust to h Was there a s". Row 2 contains the response "Have never moved short distan Mildly interesting but I w Meh. I'd just meet people at school, wouldn't act or People in the area No". Row 3 contains the response "Have never moved their r A little lost at first (they si I haven't moved homes t Public transportation, cor Other students, someone 4. Good food". Row 4 contains the response "Have moved short distan god sounds useful local shops and restaura people I know free art suppl". Row 5 contains the response "Have moved long distan I'd appreciate it I don't think it would have Crime stats, any regular i Something like a Facobo 7 — it portan". Row 6 contains the response "Have moved long distan; I'd feel at ease. I'd still feel at ease. I'd want to know which pl My next door neighbor or Number 7, 'Th". Row 7 contains the response "Have moved short distan This would seem prett h it would probably have pl I would want to know (ps A voting system might al Because that". Row 8 contains the response "Have never moved their r I think people are being welcoming to their new neighbors by giving these in The elders maybe or son Yes, the police". Row 9 contains the response "Have moved long distan; Confused but thankfu I feel less scared to explore the places as I know n The new neighbors or n Number 8 because". Row 10 contains the response "Have moved short distan I would appreciate it bec I would feel more comfortable since I would know r From someone trusting it Number 6 and". Row 11 contains the response "Have never moved their r I will feel comfortable being given these tips. Someone who lived at th". Row 12 contains the response "Have never moved their r I will thank the one who I think this will be too ove Where i can find a place A local residence or som Number 5 cau". Row 13 contains the response "Have never moved their r helpfu since I am new to confused how far are the stores fr a local in the community the second to". Row 14 contains the response "Have moved short distan This should be a friendly You'd feel safe won't you You will greet or talk with Lady or Polico? Because to ke". Row 15 contains the response "Have never moved their r It was nice, because in r It is a good strategy for a ds disadvantages "traded friends" none". Row 16 contains the response "Have moved short distan Very thankful, there is us I would feel that this we Local markets/tea mark Locals, people who have The art supply". Row 17 contains the response "Have moved short distan I will probably be excited I think it will make choos Local cafe/s or food place landon, storeowners ne 7. As someone". Row 18 contains the response "Have moved short distan I'd be thankful, as these I would be happy to look If there are any koreanja Someone like a model at Th #3. I'd like". Row 19 contains the response "Have never moved their r I will feel welcomed by these information to help m Tips on groceries, house! My neighbours/locals Because it will". Row 20 contains the response "Have never moved their r The list is helpful I will appreciate the list. Emergency contact runt Managers Number 7 bec".

# Results Analysis

## What worked?

- Generally positive views expressing tool's helpfulness
- Received rich variety of opinions that were interesting to unpack and raised limitations we didn't foresee

## What was surprising?

Teenage users seemed more interested in logistics/physical needs (e.g. groceries, food) than niche know-hows tailored to their age group

## What didn't work?

- Anonymity of tips made users doubtful
- Users weren't satisfied with range of tips
- User expressed that law enforcement may dislike strangers posting tips on how to circumvent them

## What new findings do we have?

Users tend to look for the sources of the tips to determine their legitimacy—such as a voting system or by knowing the identities of the source.

## Solution to 2nd HMW

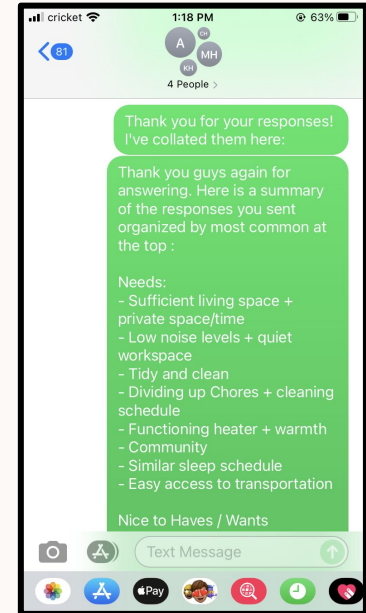
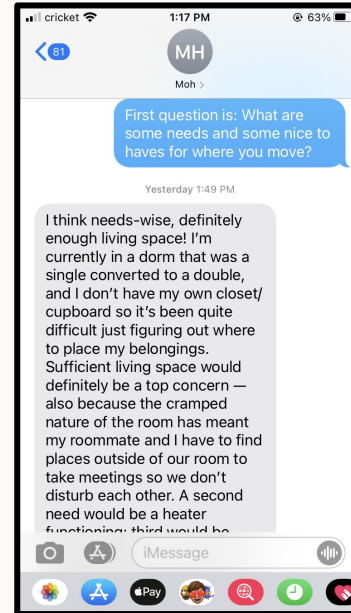
A product manager for making group decisions so that each group member's individual needs will be considered.

### Assumption tested

Expressing individual needs anonymously through a third party reduces awkwardness of bringing up sensitive points and provides a space for someone to collect their thoughts before raising them to the group. Trust in this third party makes the user certain they will be heard.

# Prototype 2: Product Manager for Group Decisions

1. Found group of four people interested in moving into an apartment together.
2. Each person gets asked these in individual chat messages:
  - a. needs/nice-to-haves for where you move
  - b. needs/nice-to-haves for living together
  - c. worries/concerns
3. The group receives a group text with a summary of everyone's responses.
4. Follow-up feedback Qs:
  - a. How it felt to individual think about each question?
  - b. Impressions reading the summary?
  - c. What to do with this information?
  - d. How does this compare to past conversations?





# Results Analysis

## What worked?

- Users noticed points they hadn't thought about but agreed with from what other users raised
- Users believed writing this down made their plans feel more concrete

## What was surprising?

- One user mentioned that anonymity could be used to aggravate someone in the group if there was an existing tension
- Responses were often long paragraphs

## What didn't work?

- Users found it hard to start a discussion after the summary was sent to the group
- Users didn't feel awkward raising their individual needs had they had a conversation in person (contrary to our belief), they simply didn't have a chance to fully converse yet

## What new findings do we have?

- Users don't feel the need to bring up their concerns, needs, or wants unless there is a mismatch/issue
- Writing down thoughts is not enough, writing has to be paired with conversation

## Solution to 3rd HMW

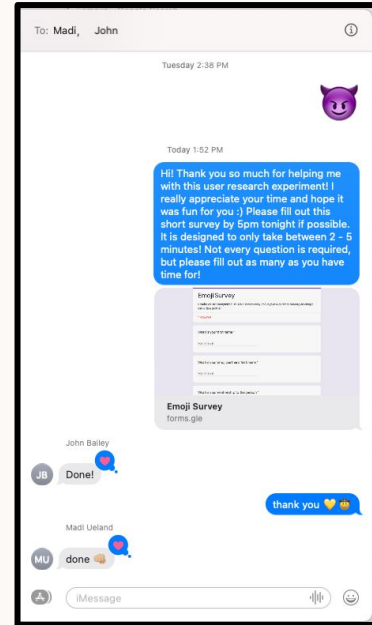
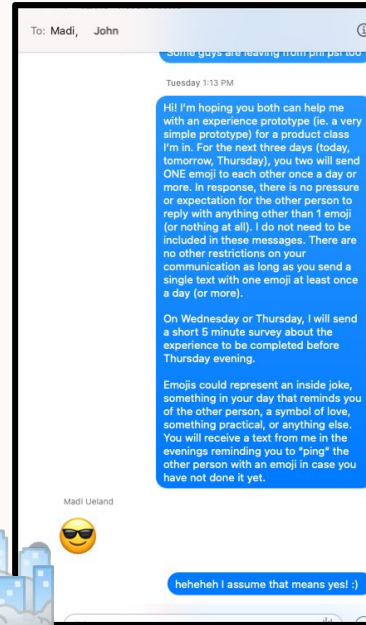
A 'nudge' messaging platform where people in long distance relationships can only send short messages to each other such that the constraint brings intentionality.

### Assumption tested

When both people have the same expectation, people will find sending a single, small token of conversation (eg. an emoji) non-overwhelming yet still emotionally substantial.

# Prototype 3: Emoji-only Text Messenger

- 3 consecutive days
- 6 pairs of people sent one emoji to each other. No other restrictions on communication
- Given daily reminders like "Show your partner you've been thinking of them with an emoji if you haven't today!"
- After 3 days, filled survey about experiences, with focus on stress and level of closeness



# Results Analysis

## What worked?

- Users didn't find it inconvenient at all
- Improved users' day!

"It was really sweet to receive the kiss emoji! Got little flutters, nice to know my bf was thinking of me"

## What was surprising?

- All users expressed lack of time/energy to keep up with loved ones in daily lives
- No user was stressed by the reminders

## What didn't work?

- Did not have as strong of an impact to the pair that was in a long-distance romantic relationship
  - One emoji isn't enough to show something meaningful

## What new findings do we have?

Even if the participant reported that the emoji was random, the recipient still reported that receiving the emoji improved their day

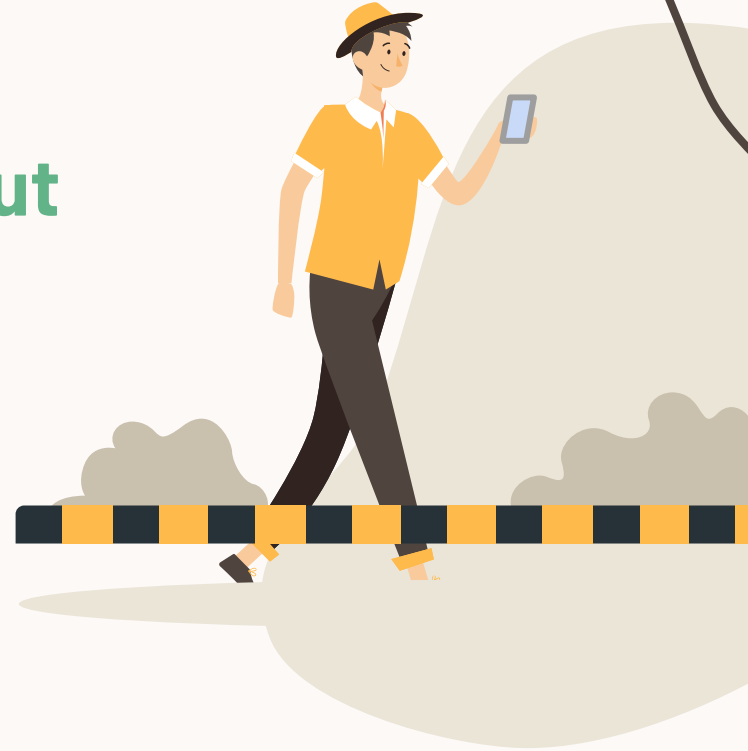
## Selected Prototype:

# Emoji-only Text Messenger



1. Room to be creative with features
2. Most novel idea out of the three
3. Fewest ethical issues
4. Assumptions were promising
5. The one that got all four of us most excited!

**How does such short-text messaging experience pan out with different kinds of relationships?**





**Thank you!**  
**Questions?**

# Appendix



HMW support those moving back in with parents after living independently?

HMW make sharing intimate details of our lives quick and easy?

HMW make reaching out to people less scary?

HMW make it easy to let friends know you miss them?

HMW make friends reach out to you?

HMW make it feel safe to express wanting to keep friendships up?

HMW make people more confident in long distance friendships ?

HMW do bond with friends without needing to be in the same physical location ?

HMW celebrate commitment?

HMW share how much we are able to communicate?

HMW make relationships not have to rely on a physical element?

HMW make it easier for people to share something vulnerable?

HMW make someone comfortable with distance from someone?

HMW make a text more meaningful?

HMW help someone who's moved show people in their past location that they care about them?

HMW make social media be a more personal tool of connection?

HMW make it easier to gauge people's capacities to communicate with friends online?

HMW make online interactions easier to initiate?

HMW connect people to loved ones they left behind in a more personal manner?

HMW make online interactions seem more reciprocated?

HMW establish that online friendships can be just as intimate as in-person ones?

HMW reimagine online friendships so they can have their own intimacy, even if it is different from physical friendships

# HMW Abby

HMW make it easier to be in tune with their emotions ?

HMW tie logistic tasks with emotional needs?

HMW make it easier to prepare logistics?

HMW increase a mover's headspace?

HMW make emotional progress take precedence?

HMW make it feel okay to not be emotionally stable during a move?

HMW make it okay to not have logistics under control during a move?

HMW make processing moving like the 5 stages of grief?

HMW help people locate basic necessities?

HMW make physical tasks when moving less emotionally daunting?

HMW help people identify what milestones are important to them?

HMW help users choose a location to move to based on their priorities?

HMW measure emotional milestones?

HMW help people keep track of the progress they've made regarding the "settling in" process?

HMW make finding places in a new location easier?

HMW help people keep track of logistical processes you have to go through after moving to a place?

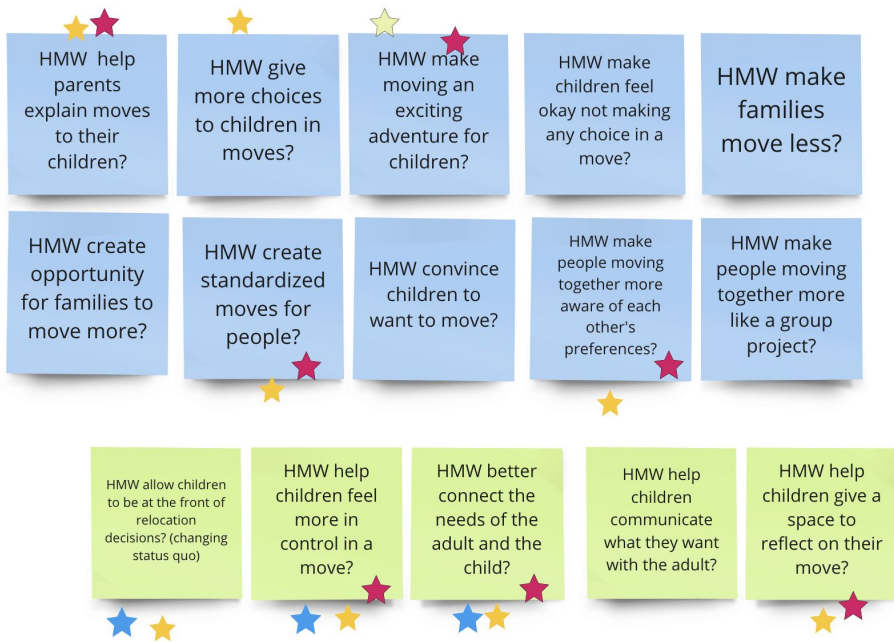
HMW give users the headspace to emotionally process moving to a new place?

HMW make it more apparent that progress goes beyond physical evidence?

HMW help people locate necessities in a new place?

HMW help people connect to other users who are in the same emotional milestone as them?

# HMW Yvonne



# HMW Harriette

# Solution Brainstorm

HMW help  
teenagers  
safely navigate  
a new place?

"anonymous" but moderated  
advice board for seniors /  
alum of local high schools or  
colleges on local safety tips  
for younger teens

have an app  
that has  
reviews from  
other  
teenagers

Yelp-  
like app

direct them to  
places where  
other  
teenagers like  
to hang out to

connect them  
with other  
teenagers  
based on their  
interests

Quora/subreddit-  
like space for  
teenagers to ask  
questions about  
the new location

local immersion/  
education. give  
them local news,  
politics, places-to-  
go, etc

local laws about adults  
interacting w/ minors,  
knowing what's legal/not,  
discrimination, laws  
concerning teenagers like  
driving, sexual interaction,  
etc??

starter kit for  
neighborhood

risk level  
scale

support  
group for  
teenagers

personalized  
map of  
locations

map of how  
places make  
someone  
feel

guide of  
community  
activities

heat map of  
where many  
teenagers  
gather

time away  
from  
parents

big  
buddy

guide of  
friendship  
groups

sub-reddit  
like forum

vocabulary  
breakdown

lifestyle  
magazine?

directory of  
high school  
events

# Solution Brainstorm

constraint  
brings  
intentionality  
!!!

share of the day,  
but then have  
monthly/weekly  
shares too that  
are denser

personal  
newsletter  
but more  
fun

Finsta that's  
marketed to  
be more text-  
based and  
intentional

close friends  
but multiple  
ones... like  
snapchat

subreddit-like  
space for  
movers to ask  
questions about  
intimate details

a tool where u can  
check in to places  
and ur friends can  
see where u've  
gone to

HMW help loved  
ones show they  
are thinking of  
each other  
convenient yet  
still meaningful?

moodring  
that your  
friends can  
see

timer that  
reminds you  
to share  
something

"Moodboard" with  
rotating pictures  
that you can give  
certain people  
access to

Modern  
version of  
Facebook  
/ MySpace  
"status"??

A platform to PING  
someone with just  
an emoji -- richer  
than it seems and  
takes the  
stakes/stress out of  
messages

watering your  
"friendship  
plant"  
progress

share of  
the day

"code red" vs  
"code orange"  
notify your  
friend of your  
state

ppt of  
new life  
updates

shared  
digital  
spaces

email  
"newsletter"  
to close  
friends

introduce  
new friends  
to old  
friends

Same idea but  
with  
recipes/photos/m  
emories of the  
place you're  
leaving

Collection board where  
family / friends can send in  
recommendations for the  
place someone is moving  
and the app collects and  
organizes it for you.

group message  
blasts (over  
text)--like how  
campaigns/cele  
brities do it

shared links,  
quotes, photo,  
location,  
sound, etc

web of new  
people +  
nicknames

shared  
photos

shared  
location

spotify friend  
activity but  
more  
personalized



# Solution Brainstorm

HMW make  
moving a more  
collective  
experience for  
everyone in a  
family / group?

a generator that  
lists a new place  
that can serve  
as  
a compromise?

democratic  
voting

"anonymous"  
family chat  
boards

space where each  
family member  
can share what  
they look for/need  
in the new place

a tool that caters to  
a certain age group abt  
what might interest them  
in a new place (for ex:  
adults are more interested  
in schools but younger ppl  
might be more interested  
in night life)

a generator that  
matches the  
compatibility of  
a new place to  
each person in  
the family?

mindmapping  
what people  
want in the  
move

group  
discussions

family  
kanban  
board

visualizing  
the  
decisions  
to be made

making an  
adventure  
story  
out of it

list of  
decisions -  
delegated  
responsibilities

simple  
kanban  
board w/  
google slides

a tool that  
lists activities  
separated by  
age group

reviews of a  
place but can  
be categorized  
by age group

family  
collaborative  
pros and  
cons

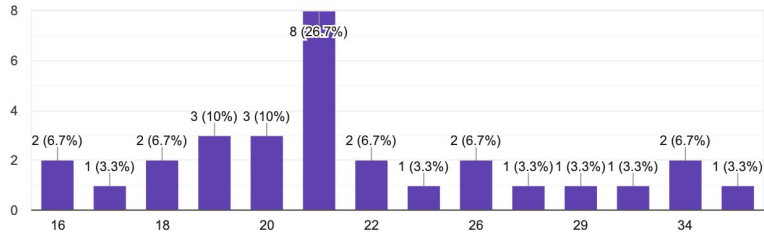
Child-friendly map  
interface of the new  
city -- emojis and  
photos rather than  
labels. Radius like  
5mi from  
home/school

# Sample Screenshots of Prototype #1

Form: <https://forms.gle/SAs54oNMP1EdHuLU8>

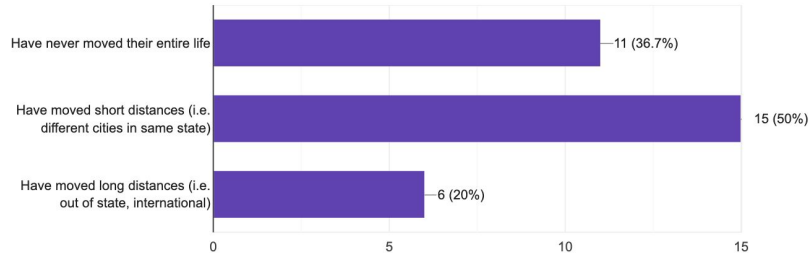
## Age

30 responses



## Would you categorize yourself as...

30 responses



If you are someone who has moved before, how would you feel if you had this tool at hand when you moved?

22 responses

You'll feel safe won't you? If not just ignore it as if you didn't see the police

It is a good strategy for a town to have this especially for people who are new to the place, like they have a first insight if the place they will be going is safe or not but just know that the tips are knowledgeable and legit

I would feel that this would be useful and it would have helped me get used to the area

I think it will make choosing places easier given that aside from the place that I'm moving into, I also need to consider what services are available in the area for convenience.

I would be happy to look forward to experiencing what were stated in these tips, with the exception of tip #7.

I will appreciate the list

It might have been much easier to adjust in a new environment.

I would feel very ease because I will not need to wonder about recreational places or where I can go if I need to

## What else might you want to know?

21 responses

Public transportation, community events, groups to join

local shops and restaurants

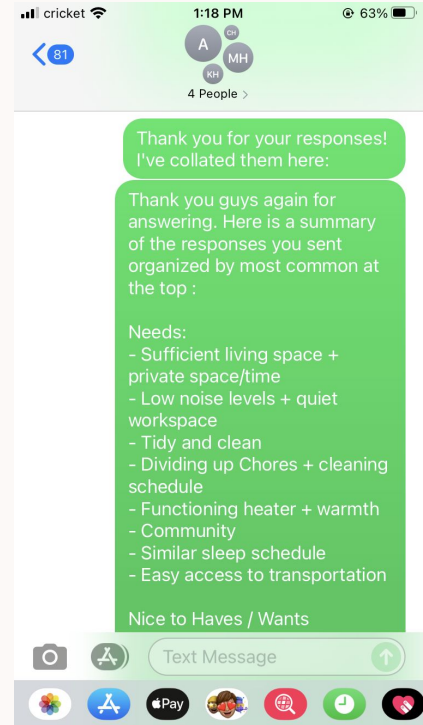
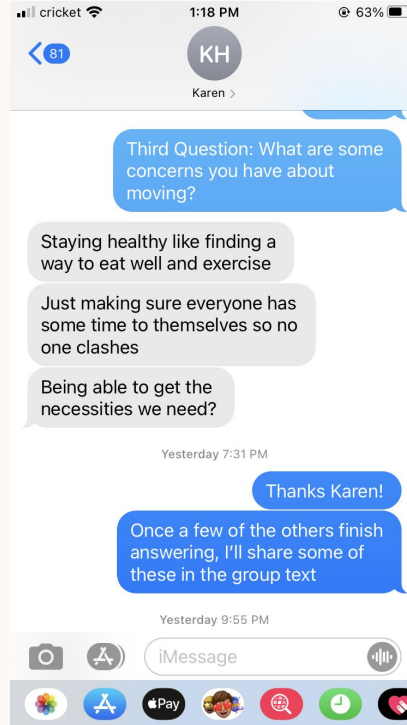
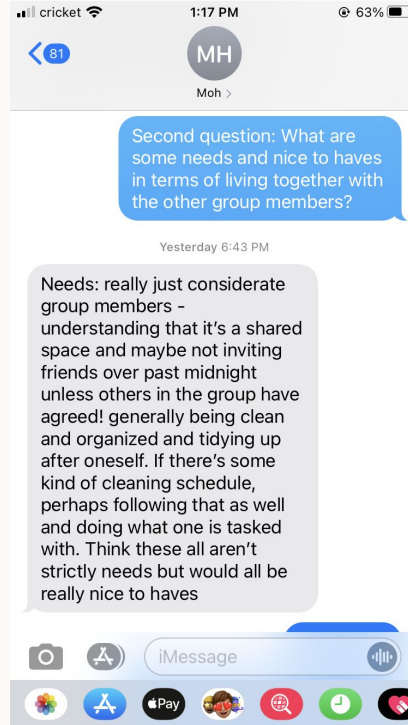
Crime stats, any regular events happen in the area

I'd want to know which places nearby provide facilities for a range of leisure pursuits like where to watch movies, where to go shopping, etc..

I would want to know tips more custom to me and my interests. For instance, I liked the tip about art supplies because I like art, but I didn't like the tips about skateboarding or walking a dog because I'm not into skateboarding and I don't have a dog.

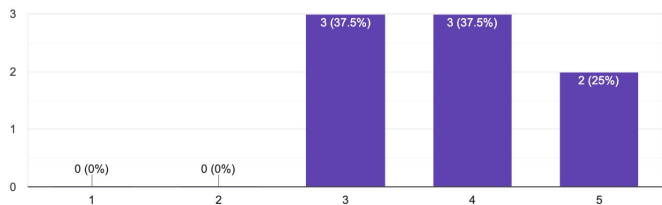
Where I can find a place to hang out without much person. Peaceful hangout.

# Sample Screenshots of Prototype #2



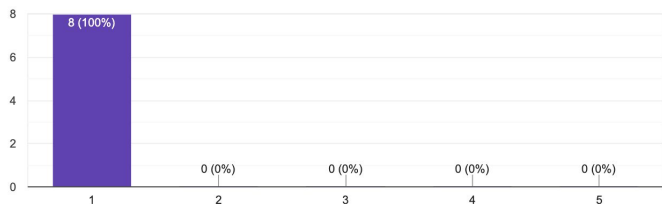
Overall, did this form of communication improve your day

8 responses



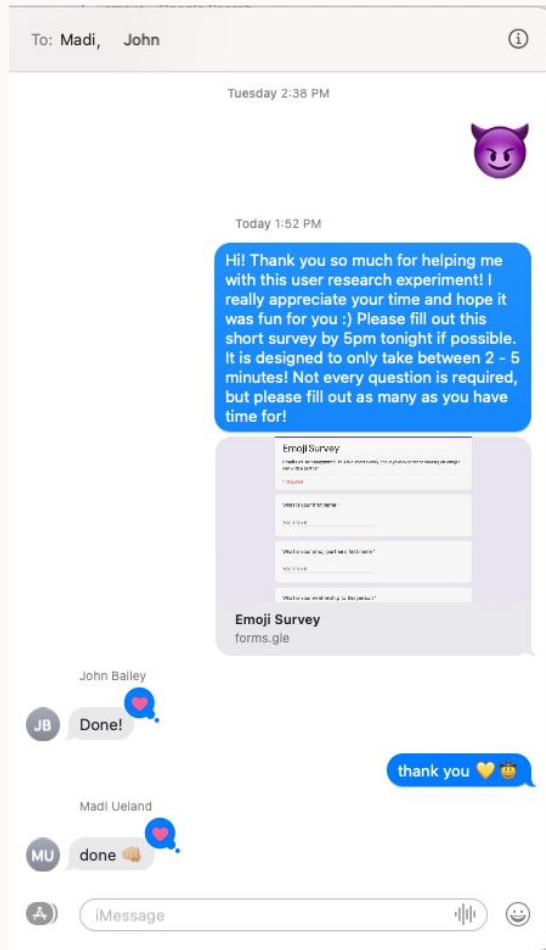
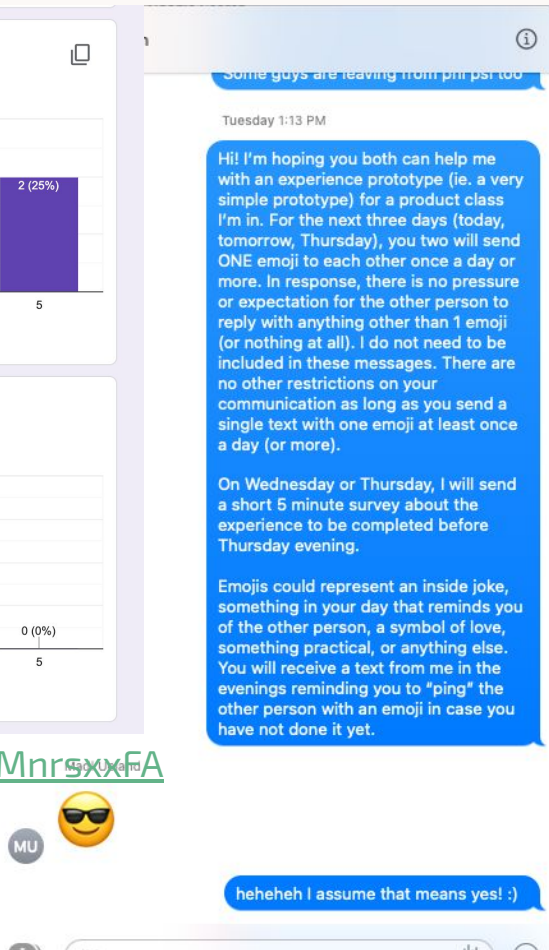
Was this process an inconvenience in your day?

8 responses



Form: <https://forms.gle/JoAmodymmMnr5xxFA>

## Sample Screenshots of Prototype #3





# THANKS!

Do you have any questions?

addyouremail@freepik.com

+91 620 421 838

yourcompany.com



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

Please, keep this slide for attribution