

# **A2: POVS, HMWS, Prototypes**

Fulfillment through social connection

# OUR TEAM



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Computer Science



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# Narrowing domain

Previously:

01

Fulfilling work

Am I becoming a more capable person each day?

02

Fulfilling mission

Am I working on something that aligns with my values?

02

Fulfilling people

Am I supported by people who understand and accept?

Now:

Strengthening friendships  
toward fulfillment

# ADDITIONAL INTERVIEWS: APPROACH

## Narrowed age category

We narrowed our age scope to fresh grads (~22-29)

## Method

We looked in service-oriented spaces where young adults commonly work, such as bike shops, cafes, nail salons

## Sought diverse perspectives

Previously, all four of our interviewees were engineers. We thus sought to find adults a) with a non-engineering background or b) without a 4-year college degree

# Interview 1: Sarah

**Background:** 27 years old, PhD student studying clinical psychology

**Location:** in-person at Verve Coffee

**Interviewers:** Jillian (interviewer), Leo (interviewer), Katherine (notetaker)

## Key findings:

- Upon moving away from NYC, she is balancing building a new network with maintaining old ties
- Small gestures like mail and check-ins matter
- Opening up moves friendships to from acquaintance to close friend



Letter sent to her by her long distance best friend

## SAY

Acts of service.. Who is putting stuff in the mail anymore? That's crazy. But it is a token of being present.

Katherine Sullivan

I feel guilty with sometimes not making time for friends back in New York. With newer people there's less expectation. Saying no to plan is easier. No expectation of shared history to compare it to.

Katherine Sullivan

## THINK

With old friends, there is a sense of obligation and fear of disappointing them because of shared history.

Jillian

# Sarah

## DO

Animated hand gestures when talking about her close long-distance friends from New York

Katherine Sullivan

## FEEL

Feels at ease when she knows her friends understand her life situation (for example, being too busy with school to talk).

Leo Sui

# Interview 2: Jenna



Jenna with her long distance friends

**Background:** 23 years old, nail technician at Dep Salon

**Location:** Zoom

**Interviewers:** Katherine (interviewer), Jillian (notetaker), Leo (notetaker)

## Key findings:

- Jenna's fixed work schedule makes making new connections and staying on top of old ones difficult
- Prefers voice calls over video with friends because they feel lower pressure
- Social media engagement keeps ties alive but feels shallow

# SAY

My coworkers are the most accessible. I do have some regular clients I see once a month, but that's really all.

haliexu

Online exchanges happen randomly... sometimes they're having trouble with their relationships or life, and I just give them a ring.

haliexu

Prefers phone calls over seeing in person because it's easier, we respect each other's schedules, and she can see my face.

haliexu

Lower frequency, connect

When I'm busy, I'll give them a ring.

haliexu

"I just hang out with my siblings at the house."

haliexu

How we connected is through sharing about ourselves to each other and build up a teamwork and good communications.

haliexu

Interact with my friends through Instagram and Facebook. There's always that near-constant connection at the moment.

haliexu

Interacted to avoid "was going far" she said that for boys to get out of our zone. So I met my other

haliexu

"I work in an environment that's more isolated, I have to stay away from the specific client for about an hour to two, then I'll see the next one on the next, and I'll go get to remember everybody that's in and out of the door, it's pressure to remember faces, professions, etc."

haliexu

It feels great to connect more deeply because I get to bond with them instead of just saying hi and bye after an hour.

haliexu

"It was kind of hard for me to start out in the real world. It's difficult."

haliexu

It's normal to have friendships over time, it's just that our old high school

haliexu

Believes in the value of having a friend group — more than just individually connecting with a bunch of people — because she loves the idea that everyone can connect with each other and learn new things

haliexu

Some friends are prioritizing their new circles at university over our friendships.

haliexu

I wish it was coordinated with how connections on social media.

haliexu

Friendship in high school "we were

haliexu

Believes and acts on social media an indicator of emotions in real life

haliexu

I wish it was coordinated with how connections on social media.

haliexu

interaction features like screenshots of a game where everyone can join at the same time

haliexu

neatly to soon parse

haliexu

# Jenna

# THINK

Thinks the biggest barrier between staying more interactive with friends is time — the lack of it, the misalignment between her schedule and those of her clients and friends

haliexu

Believes people bond over shared interests, which is often conditioned on people being from the same age group

haliexu

Believes phone calls to be the most "right and easiest" way to connect with friends

haliexu

# DO

Only discussed friendships with people her age

haliexu

Interacts with clients outside of work through social media.

Katherine Sullivan

Interestingly describes life post high school / college as "the real world"

haliexu

Checked in friends on (likes, comments) more than over and over

Katherine Sullivan

seemed to connect with friends, did any male

haliexu

Voice became less bubbly when talking about how her friends became geographically distant as they went to college

haliexu

Reacted almost immediately when asked to provide anecdotes about her friends —

haliexu

Mentioned several of her friends' names directly as opposed to keeping them anonymous.

haliexu

Spent a long time thinking about what she thinks is missing when it comes to social media interaction

haliexu

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haliexu

Voice became more high pitched when recounting the conversation topics she would have with her girlfriends

haliexu

Disconnected from peers due to her work intense schedule.

Katherine Sullivan

Excited to try new experiences with friends

haliexu

Drained emotion now and friends'

haliexu

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haliexu

# FEEL

Feels drained at the end of a work day and prefers to interact non-visually

haliexu

regrets that due to the nature of her work, she often can only pay attention to a client for a short period before moving on, constantly

haliexu

secure, comforted, safe when her girlfriends comfort her through difficult times

haliexu

Friendship is maintained through being interested in each other's lives and consistently checking in and interacting, often over social media

haliexu

# Key Insights from all interviews

Adulthood often introduces physical distance between existing friendships that redefines the nature of connection

Shared experiences drive connection, but time and logistics limit them

People value intentional moments (shared laughter, physical presence, tangible gestures) as proof of care.

# Initial Pov: Stephen

**We met:** Stephen, a 26 year old software engineer who moved to the Bay Area a few years ago.

He meets up with his friends about 5 times a week and loves playing board games and sports. Most of his friends were met through shared activities, like frisbee meetups.

He deems his circle of friends to be integral to his general well-being.

*Speaker context should be more concise*

**We wonder if this means:**

Professional fulfillment can be found through mobility and growth in flexible, short-term roles. However, deep friendships take years of shared experience and emotional investment to build. Because these bonds require so much to build, people will often prioritize and find more fulfillment in their lasting personal connections rather than professional achievements.

*Hone in more on the emotions Stephen are feeling*

**We were surprised to notice:**

Despite identifying as a lifelong introvert, Stephen is very reliant on time spent with friends for his well-being, even citing it as a key reason for not pursuing his goal of conservation and ecology.

*The introvertedness is not the surprising part, it's more the fact of holding the preservation or friends above personal dreams*

**It would be game changing if:**

Stephen could feel confident that he could form new deep, emotional friendships no matter where his career or personal life takes him.

*Go deeper to reflect Stephen's struggles*

# Revised Pov: Stephen

**We met:** Stephen, a 26 year old software engineer who moved to the Bay Area a few years ago.

**We were surprised to notice:**

Despite having a life-long interest in conservation, he's hesitant to pursue that because he would have to move away from his current social circle.

**We wonder if this means:** Stephen is hesitant to move to pursue career aspirations for possibility of needing to start over with his social life

**It would be game changing if:**

Stephen could still feel comforted and supported by his existing friends, even while pursuing new life directions and investing in new social circles.

# TOP HMW (from Stephen POV)

**We met:** Stephen, a 26 year old software engineer who moved to the Bay Area a few years ago.

**We were surprised to notice:** Despite having a life-long interest in conservation, he's hesitant to pursue that because he would have to move away from his strong, comforting current social circle.

**We wonder if this means:** Stephen is hesitant to move to pursue career aspirations for fear of needing to start over with his social life, losing current friends and the stability they provide him.

**It would be game changing if:** Stephen could still feel comforted and supported by his existing friends, even while pursuing new life directions

**HMW** reduce the dizzying internal trepidation of entering new social settings?

**HMW** allow young adults to transition a situational friendship into an emotional one?

# Initial Pov: Sarah

**We met:** Sarah, a 27 year old psychology PhD who moved to the Bay Area from New York. Her closest friends from her undergrad no longer live in her area, but she still keeps in touch with them however she can. She's been meeting new people through activities and her PhD program, and she feels like she's been making good progress getting to know them

*Speaker context should be more concise*

**We wonder if this means:** Tensions within friendships are caused by mismatched expectations. When friends are not on the same page about their emotional availability and current priorities, it makes both parties question the closeness and chemistry of the relationship.

*Make this specific to Sarah's POV and feelings*

**We were surprised to notice:**

Although Sarah feels most heard, understood, and loved by her long-time friends, she feels anxious when she has no time to stay in touch, knowing that years of shared history have created an expectation of being present

**It would be game changing if:**

Sarah could better communicate her current bandwidth and priorities and better understand those of her friends

*Better communicate and better understand how?*

# Revised Pov: Sarah

**We met:** Sarah, a 27 year old clinical psychology PhD who moved to the Bay Area this year from New York.

**We wonder if this means:** Sarah's long-term friendships feel pressuring because she feels guilty about communicating evolving expectations that come with life new priorities.

**We were surprised to notice:**

Despite being less close to her newer friends than old, she often feels less stressed with them because they don't carry shared history and expectations. However, she still feels most loved and supported by her long-time friends.

**It would be game changing if:**

Sarah and her friends could align their expectations regarding changing bandwidth and priorities, structuring their communication and frequency/mode of interaction accordingly.

# Initial Pov: Jenna

**We met:** Jenna, a 23 year old nail and beauty tech who grew up and currently resides in San Jose.

She stays in contact with her high school friends, but doesn't have much of a local social circle. Her friendly relationships within her community consist of her clients.

*Speaker context should be more concise*

**We wonder if this means:** Shared experiences bring comfort because they validate our emotions: knowing someone else feels the same joy or pain makes us feel less alone. Digital interactions like story reactions or comments turn individual experiences into shared ones.

*Make this specific to Jenna's POV and feelings*

**We were surprised to notice:**

Although social media is known for surface level interactions, Jenna uses it as her primary way of keeping in touch with old friends and forging connections with new ones due to the lack of time. Particularly, she finds that it helps her find common ground and conversation topics.

**It would be game changing if:**

Jenna could be more present in the experiences of her friends beyond brief, surface-level interactions in a way that works with her tight schedule

*What does being more present mean?*

# Revised Pov: Jenna

**We met:** Jenna, a 23 year old nail and beauty tech from San Jose who maintains her social circle mostly through social media due to a lack of synced schedules.

**We were surprised to notice:** Although she most enjoys the warmth of in-person connections, she uses social media as her primary way of keeping touch with old friends and deepening connections.

**We wonder if this means:** Jenna turns to less ideal modes of connection, such as social media, because her strict work schedule makes in-person meet ups more difficult.

**It would be game changing if:** Jenna could experience the same sense of fulfillment of in-person hangouts via digital and time-flexible modes of interaction.

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**HMW** emulate the feeling of shared laughter and joy despite physical separation?

# Final 3 Solutions from HMWs

Stephen

**HMW** reduce the dizzying internal trepidation of entering new social settings?

Jenna

**HMW** emulate the feeling of shared laughter and joy despite physical separation?

Stephen

**HMW** allow young adults to transition a situational friendship into an emotional one?

## Digital letters

A platform where senders recreate the process of sending mail (handwriting note as opposed to typing, stamping, placing paper in envelope) digitally and send digital letters to friends

## Digital pranks

Send sporadic, harmless, and personalized digital pranks that cause a fun distraction on your friend's device, e.g. changing all the icons on your friend's phone

## Friendship counselor

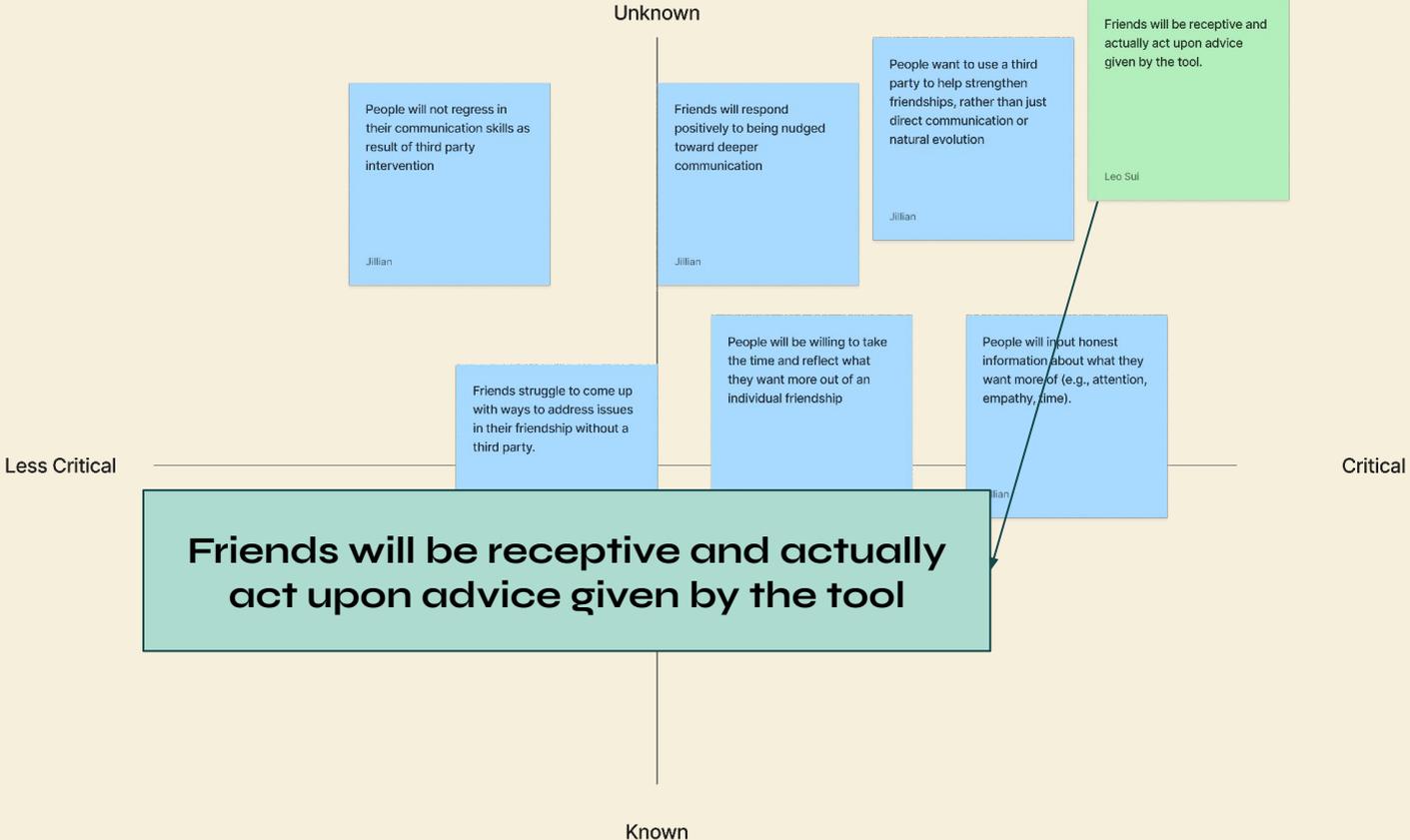
Strengthens friendships by turning what people share about their goals and needs in specific relationships into personalized, actionable suggestions to work toward those goals.

# Prototype 1: Friendship Counselor

Strengthening friendships through guided reflection and action



# Assumption Mapping



# Experience Prototype #1



## Solution

Strengthens friendships by turning what people share about their goals and needs in specific relationships into personalized, actionable suggestions to work toward those goals



## Assumption

Friends will be receptive and actually act upon advice given by the tool



## Experience Prototype

**Props:** Friendship reflection sheet for actors to fill out

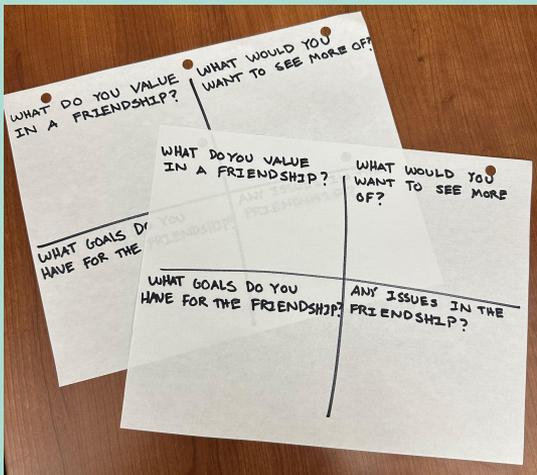
**Actors:** Two friends

**Process:** Have the two friends fill out the friendship sheet. A facilitator reviews both friends' reflections and writes 2-3 actionable suggestions for talking points or activities. Check up on them in a few days and see their progress.

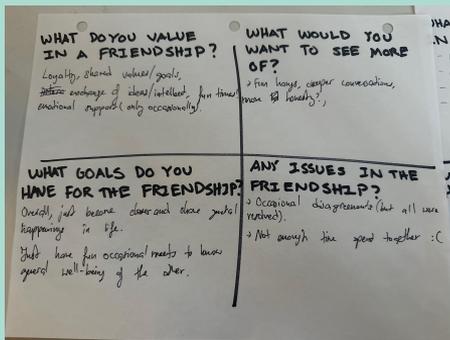
# Test Setup (n=2)



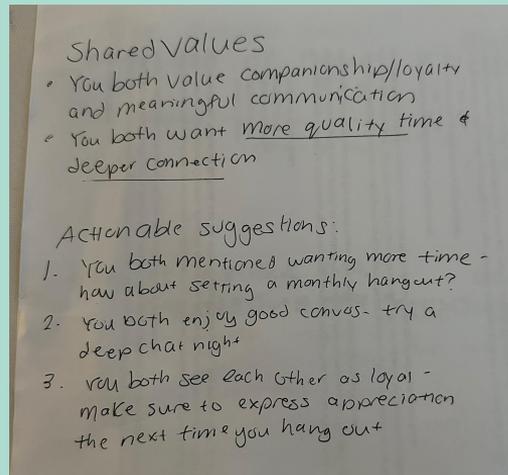
**Input:** friendship reflection sheets



Friends note down goals/thoughts RE: the friendship



**Output:** shared values and suggestions displayed



## Testing insights



### Esugen and Yuanxin

**Who:** Two Stanford friends, previously roommates

**Relevancy:** relationship has the familiarity, comfort, and minor everyday tensions that can arise from living together

### What worked?

- Friends were very happy to see their own reflections also reciprocated through the “shared goals” section
- Followed through by scheduling an activity suggestion

### What didn't work?

- Felt that the process is not very organic
- No sense of urgency to act on the suggestions

### Learnings

- Even if participants agreed with the suggestions, action still required personal motivation
- **Assumption:** proven because participants acted upon the suggestion



Prototype in action

Stephen  
**HMW** allow young adults to  
transition a situational  
friendship into an emotional  
one?

**Assumption:** proven because participants acted upon the suggestion

**Going forward:**

- Make the process more self-guided and conversational
- Introduce reminders or prompts to encourage continued reflection
- Consider a shared version where friends can co-create goals and track progress together

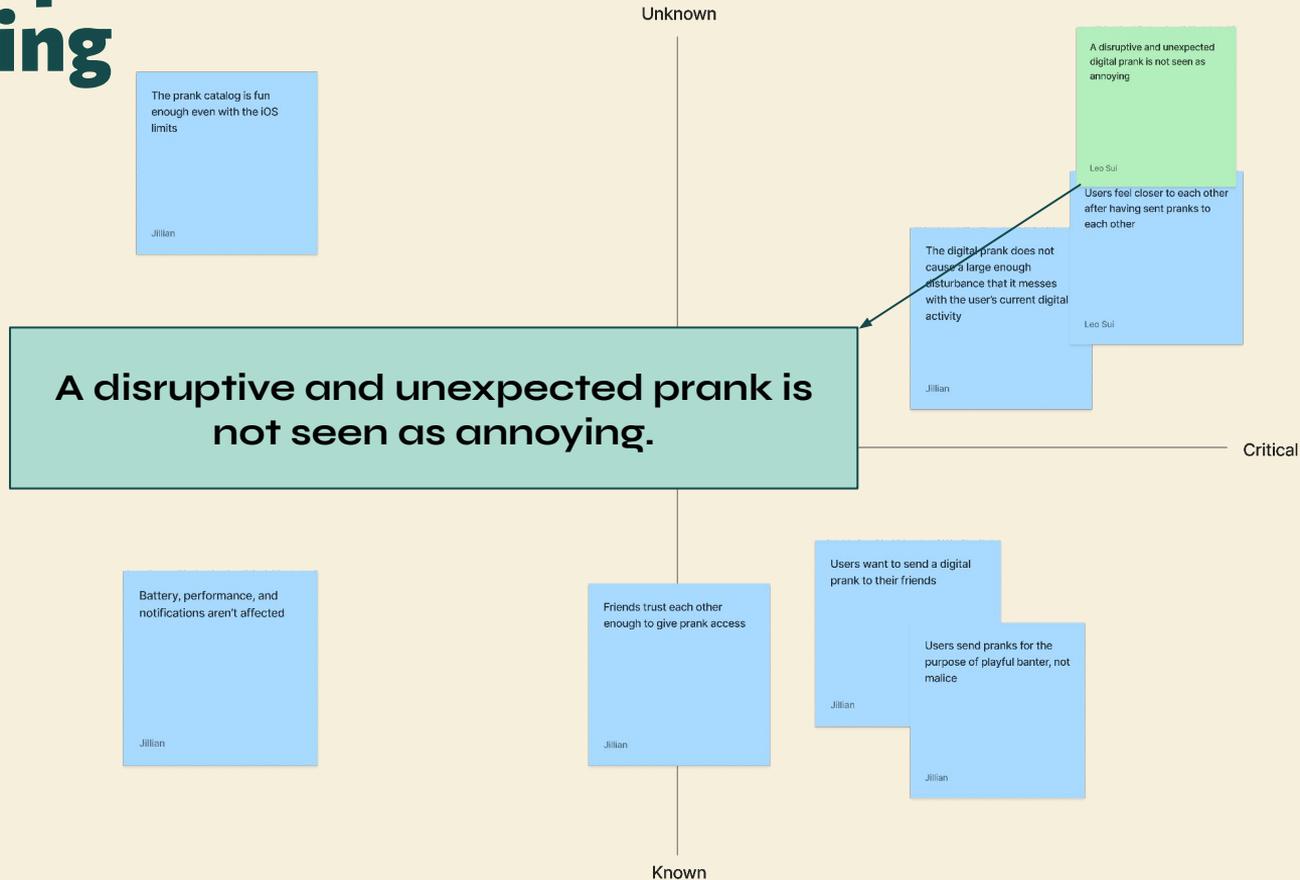
# Prototype 2: Digital Pranks

Creates playful moments between friends by sending digital pranks



# Assumption Mapping

## Prototype 2: Digital Pranks



# Experience Prototype #2



### Solution

Sporadic but harmless digital pranks that cause a fun distraction on your friend's device (i.e. changing all the icons on your friend's phone).



### Assumption

A disruptive and unexpected prank is not seen as annoying.



### Experience Prototype

**Props:** A book, as well as a hidden prank element in the book

**Actors:** Reader of the book

**Process:** The facilitator hides the prank element in the middle of the book. The actor is told to start reading the book. When they encounter the prank, the facilitator notes verbal and facial reactions (e.g. laughter, confusion, surprise).

## Test Setup (n=3)



Participant is asked to read a book



Their reading flow is interrupted by a page of goblin stickers, mimicking the surprise of an unexpected prank

## Testing insights



**Zoey (29)**

Life Coach – Mountain View, originally from China

**Relevancy:** Works closely with people's emotions and habits



**Roshen (29)**

Data Scientist – Redwood City, originally from India

**Relevancy:** His analytical profession contrasts with spontaneity



**Vanessa (27)**

Marketing Professional – San Francisco

**Relevancy:** A young professional living in a social urban setting

### What worked?

- Chuckled when seeing the prank, finding it entertaining more than annoying
- Reflected that prank would strengthen their connection with friends in the same way banter would

### What didn't work?

- Expressed concern that would find prank distracting if they were working on something urgent for high stakes

### Learnings

- Adults value pranks as relief from structured routines
- Digital pranks should be sensitive to context and timing
- **Assumption:** proven because participants consistently found the prank amusing and said it would make them feel closer to a friend. However, that may not hold for ALL pranks.

Jenna

**HMW** emulate the feeling of shared laughter and joy despite physical separation?

**Assumption:** proven because participants consistently found the prank amusing and said it would make them feel closer to a friend. However, that may not hold for ALL pranks.

**Going forward:**

- Add variety and creativity so surprises stay fresh and don't lose novelty over time.
- Include an option for the sender to choose tone or intensity (e.g., subtle vs. bold prank)
- Ensure there is clear optionality for disabling the possibility of receiving pranks

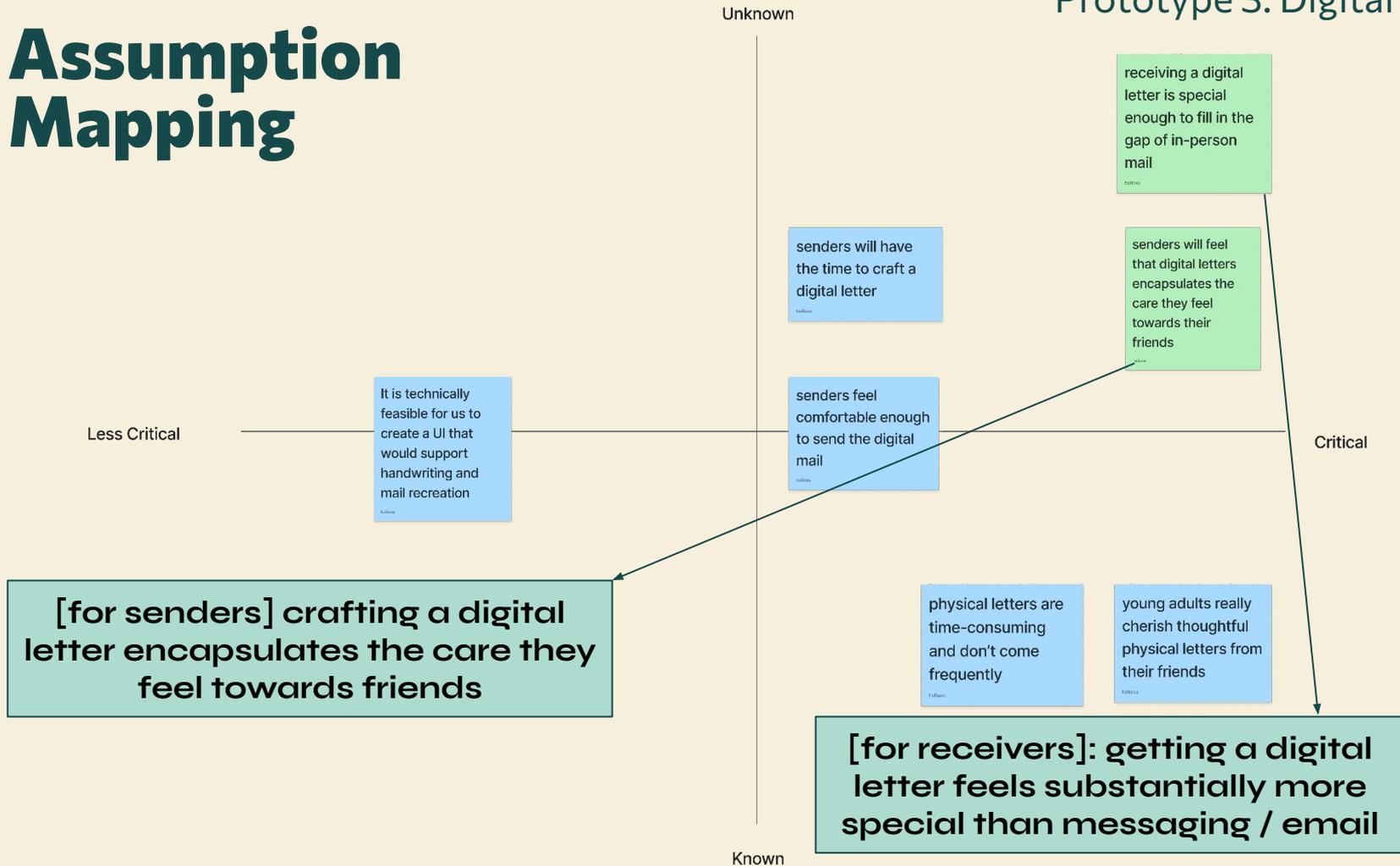
# Prototype 3: Digital Letters

Reimagines the thoughtfulness of handwritten mail in a digital format.



# Assumption Mapping

## Prototype 3: Digital Letters



# Experience Prototype #3



### Solution

A platform where senders recreate the effortful process of sending mail (handwriting message, stamping, placing paper in envelope) digitally and send digital letters to friends as a way of communicating care.



### Assumption

**Senders** feel that taking the time to craft a digital letter encapsulates the care they feel towards friends.

**Recipients** of digital letters perceive letters as substantially more special than communication via messages / email.



### Experience Prototype

**Props:** A blank digital canvas for senders to craft message

**Actors:** One sender and one receiver

**Process:** Have sender spend 5 min handwriting a digital letter to a specific friend, encouraging them to include any information or illustration they'd like to include. Then, send the letter to their friend. Debrief with both the sender about letter creation process and the receiver about feelings after receiving the letter.

## Testing insights



**Angie (25)**, MBA student at the GSB



**Caroline (24)**, friend of Angie

**Relevancy:** Busy grad students seeking more meaningful connection



**Bella (26)**, SWE in Palo Alto



**Ethan (25)**, college friend now in LA

**Relevancy:** Long-distance friends

### What worked?

- Senders felt the handwritten digital note fully communicated the care and heartfelt feeling to her friend
- Recipients felt pleasantly surprised and moved by digital letter; even wanted to reciprocate the letter

### What didn't work?

- The act of handwriting note can become time consuming, discouraging senders from participating routinely

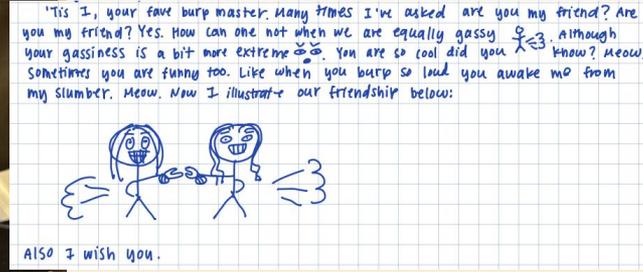
### Learnings

- Sender: "Just typing feels mechanical. I can be more creative when handwriting."
- Sender: "I'd do it more if it became a trend."
- **Assumption:** proven because senders and receivers of the letter felt that it encapsulated the care and thoughtfulness of an actual letter

## Test Setup (n = 2)

The sender spends 5 min crafting a digital letter, which is then messaged to the receiver.

We also follow up with the receiver to ask them questions about how the digital letter made them feel.



Digital letter



Receiver

Sender

Jenna

**HMW** emulate the feeling of shared laughter and joy despite physical separation?

**Assumption:** proven because senders and receivers of the letter felt that it encapsulated the care and thoughtfulness of an actual letter

**Going forward:**

- Create a quick letter mode with predesigned templates or short prompts (e.g., “3 things I appreciate about you”) to make writing faster
- Explore ways for recipients to easily respond to a letter sent to them

# Ethical Concerns (Digital Pranks)

## Target Communities

- Young adults age **22-29**
- Skewed towards the younger end of this range
- Typically **urban/suburban** of **moderate to high** socioeconomic status.

## Ethical Concerns

- Malicious usage
  - ◆ Spamming pranks
  - ◆ Hacking
  - ◆ Getting pranks at bad times
- Safety
  - ◆ Pranks getting in the way of an emergency
  - ◆ Cyber-bullying
- Potentially excludes neurodivergent individuals who find it harder to read social cues.

# Ethical Concerns (Friendship Counselor)

## Target Communities

- Young adults age **22-29**
- Want to **preserve relationships** with long-term friends
- Want to turn acquaintances into **closer friends**

## Ethical Concerns

- AI suggestions could be biased towards **western social values**
- AI suggestions could misinterpret the unique needs and qualities of **neurodivergent individuals**

# Idea Decision

We decided to proceed with the idea of sending personalized, digital letters.

## Alignment with Findings

- Users want ways to be present in their friends' lives
- It's difficult to work around distance and busy schedules
- Solution encourages meaningful digital communication at your own pace

## Feasibility and Low Risk

- Challenging, but very possible to implement in our time frame
- Minimal risk to user privacy and safety

## Differentiation Opportunities

Lots of ways to experiment and explore:

- How to make letters feel more personal
- How to incentivize sending letters regularly
- Multimodal letter-writing for accessibility

We find these all to be fascinating design problems.

# Ethical Concerns (Digital Letters)

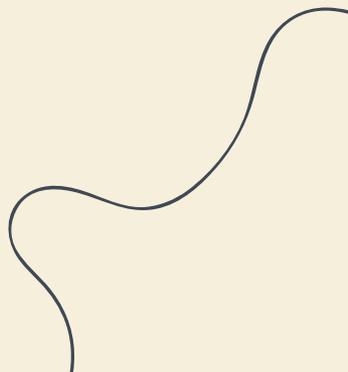
## Target Communities

- Young adults age **22-29**
- Typically **urban/suburban** of **moderate to high** socioeconomic status.

## Ethical Concerns

- Leaves out rural young adults and individuals of lower economic status.
- Handwritten aspect of the letters excludes **those reliant on voice-to-text**

**Thank you!**



# Appendix

# Sarah Empathy Map

Interview 2 (Maya)

## SAY

I definitely met a lot of people in program from spending so much time with those people during the day... I also met friends of friends from New York studying here and being connected with them... Half of my friends right now are from school & half are from the regular world.

Katherine Sullivan

Facetime and call don't replace being able to share time with those people. More to the point rather than just sitting in each other's company. No physical contact. Seeing the new sweater they bought. New hairstyle they're trying.

Leo Sul

In a perfect world if I had all the time in the world I probably would prefer Facetime. But it's harder to feel present with constant stuff to do. Split-brained when doing laundry or doing dishes and Facetime undermines quality of interaction.

Leo Sul

Everyone in the program is receptive to and wants social support. I just don't have much time to give it fully.

Leo Sul

Ideally in a friendship, we can just cooked in shared space. Just hold space, without conversation (e.g. reading side-by-side)

Leo Sul

In those in-between places, me and the other person were both tired. Had our guard down or finished a long day. We wanted to relax and to share that with someone... It's a very transparent experience where you break character and you can see where they were just posturing through a task vs. "Did you see that?"

Katherine Sullivan

I feel guilty with sometimes not making time for friends back in New York. With newer people there's less expectation. Spying no to plan in assist. No expectation of shared history to compare it to.

Katherine Sullivan

Those friendships follow the energy of their origin - we met in the context of a shared interest so we might do something related to that shared interest or another one. For example, for bookling and climbing stuff, we got chatting and ended up realizing we were both interested in the outdoor context of our neighborhood. It felt more specific... wanting to do something with somebody.

Katherine Sullivan

Acts of service... Who is putting stuff in the mail anymore? That's crazy. But it is a token of being present.

Katherine Sullivan

The friend that sent me that card. We met in college freshman year - graduated in 2020. The good parts of our friendship are that we have fun, giggle, and never take things too easily. It's easy to chat easy to feel close to her even when they're not together... She doesn't cause stress and is very understanding... Feels really easy to know. The challenges are not being in the same state for last 5 years... We miss updates and bigger transitions. We sometimes feel out of the loop... But then we chat and catch up right where we were.

Katherine Sullivan

## THINK

Communicating with friends using voice memos always intimate conversation in a schedule-friendly manner.

Leo Sul

It is easier to get closer to people who are willing to be vulnerable and open.

Leo Sul

Time with friends is for depression, a "reward" for hard work.

Leo Sul

Believes there's chemistry when you want to KEEP hanging out after the original activity.

Leo Sul

Casual friends DISTRACT you from your problems, close friends help you WORK THROUGH your problems.

Leo Sul

Small acts of service are a low effort but high reward way to show appreciation.

John

Believes opening up too much too fast can jeopardize forming a strong friendship.

Leo Sul

A sign of a close friendship is getting enjoyment just from being in each other's presence.

Leo Sul

With old friends, there is a sense of obligation and fear of disappointing them because of shared history.

John

Prefers the openness and sincerity of small-group and 1-on-1 interactions

Leo Sul

Sharing too many personal details with peers linked to her profession puts her in a vulnerable position.

Katherine Sullivan

There's no reason you can usually point to as to why you don't feel like you can befriend someone. Just a matter of vibes not aligning.

Leo Sul

## DO

Made strong eye contact with each person she was speaking to.

Katherine Sullivan

Using occurrences during the interview as examples for her statements. For example, says she often talks longer than she plans with friends, and brings up that she just talked with us for an hour instead of the planned 15.

Leo Sul

Minimal pauses in between questions and responses.

Katherine Sullivan

Eyes widened and smiled when mentioning the physical card that her friend sent to her when she moved away from NYC.

Katherine Sullivan

Use of abstract phrases i.e. "in-between moments," "shared spaces," "vibe" to describe her experiences.

Leo Sul

Spoke in a way that emulated conversations she had with her friends i.e. "and we go like, did you see that?" - conveyed excitement she felt in certain moments by including phrases and many details from those experiences.

Leo Sul

Eyes widened and smiled when mentioning the physical card that her friend sent to her when she moved away from NYC.

Katherine Sullivan

Sends 2-3 minute voice notes to friends to update them on life.

Katherine Sullivan

Goes to friends' apartments after shared activities or as a dedicated way to spend quality time together.

Katherine Sullivan

Broke eye contact after 1-2 seconds of silence following responses.

Katherine Sullivan

Animated hand gestures when talking about her close long-distance friends from New York

Katherine Sullivan

## FEEL

Pressure to spend time on long-time friends due to higher expectations.

Leo Sul

Feels connected with people, even less familiar ones, when they have experienced similar things or are in a similar innerspace.

Leo Sul

Drained when spending time with people who she doesn't fully connect with.

Katherine Sullivan

Relief for having more freedom of how much emotional/time commitment to put towards newer friends.

Leo Sul

Conflicted when busy but also wanting to give friendships full attention.

Leo Sul

Excited when exploring new activities and meeting new people.

Katherine Sullivan

Feels at ease when she knows her friends understand her life situation (for example, being too busy with school to talk).

Leo Sul

Pleasantly surprised and conflicted when friends go out of their way to be thoughtful, like sending a letter.

Leo Sul

Feels solidarity during "in-between" states, where individuals are more vulnerable and in a shared headspace.

Leo Sul

Guilt for not being able to be more present with long-distance friends going through a tough time.

Katherine Sullivan

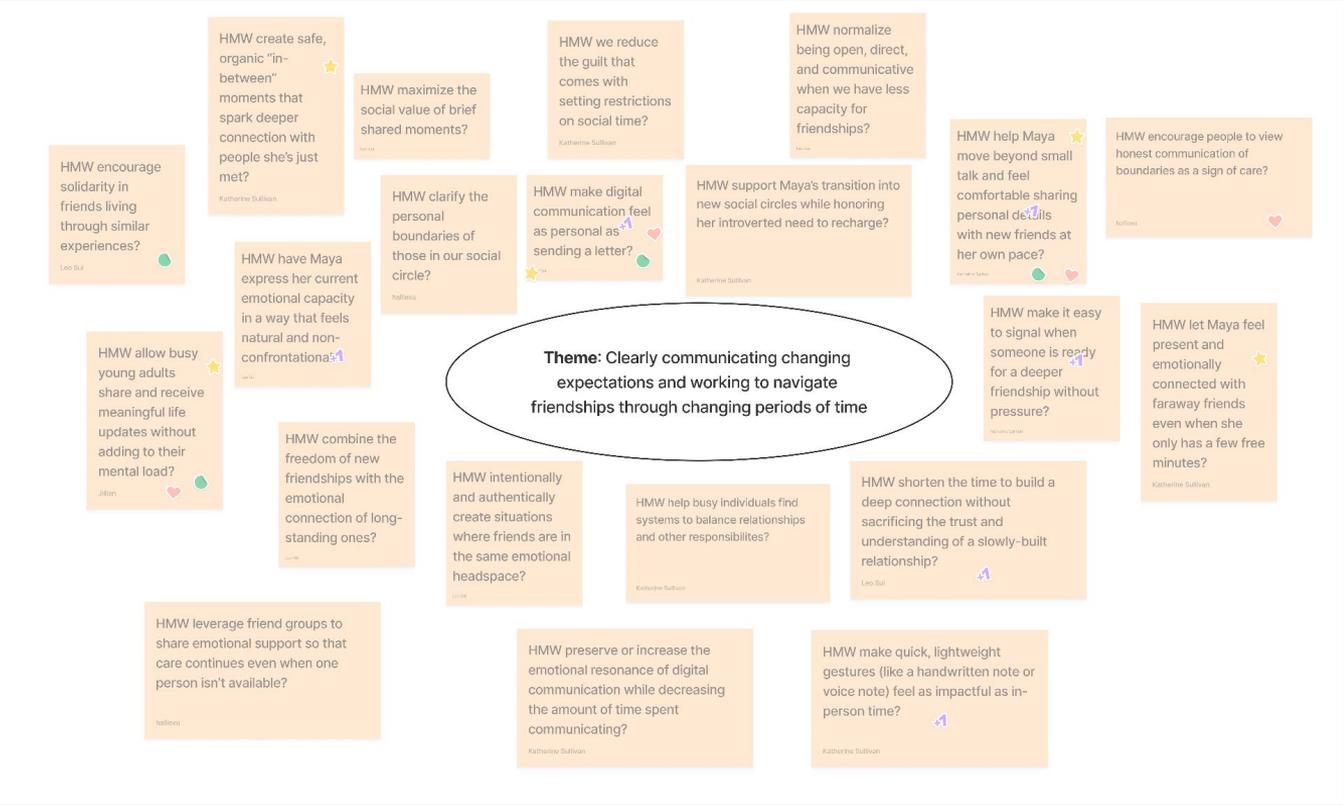
Happy in the moment but stressed afterwards when she spends more time with her friends than she should.

Leo Sul

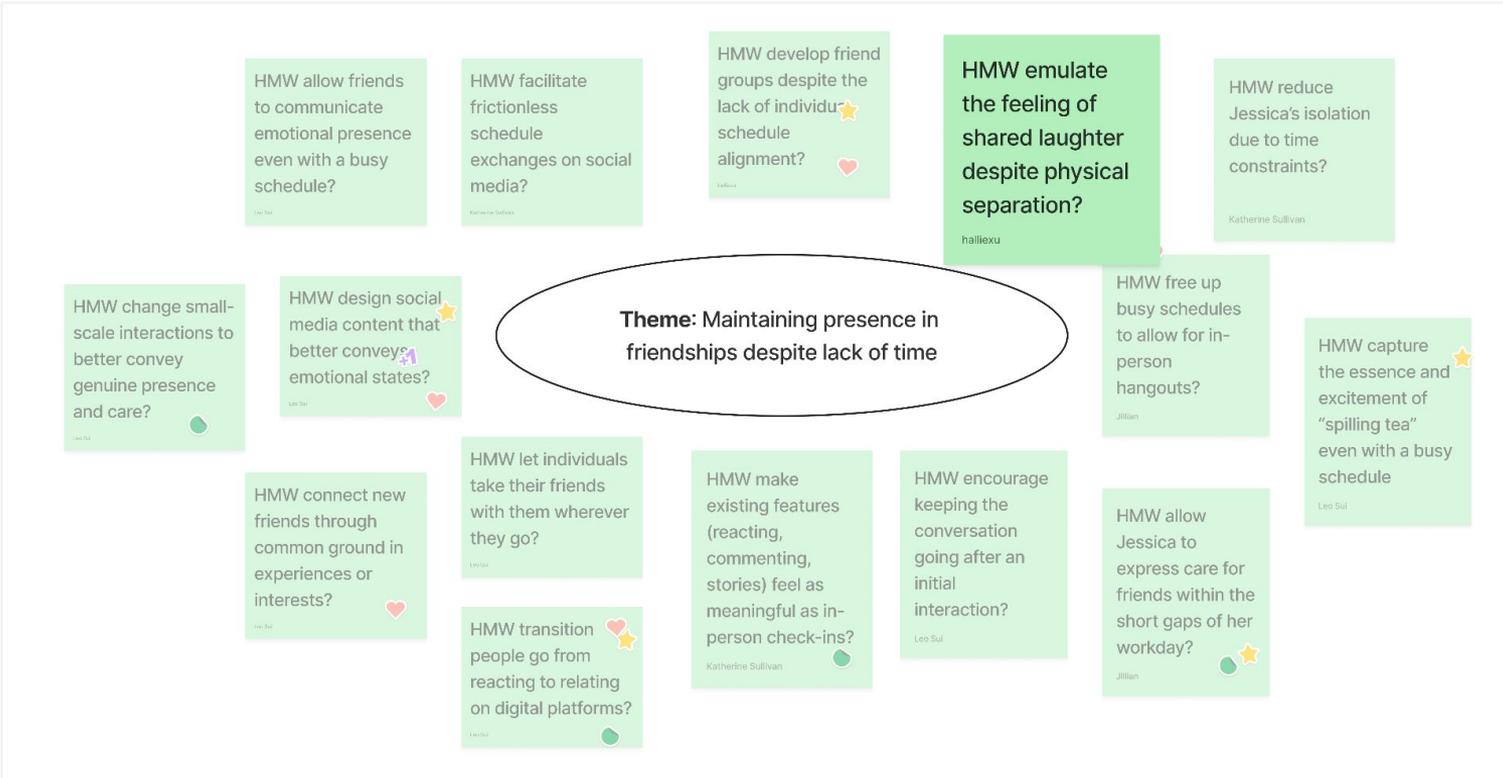
# Jenna Empathy Map



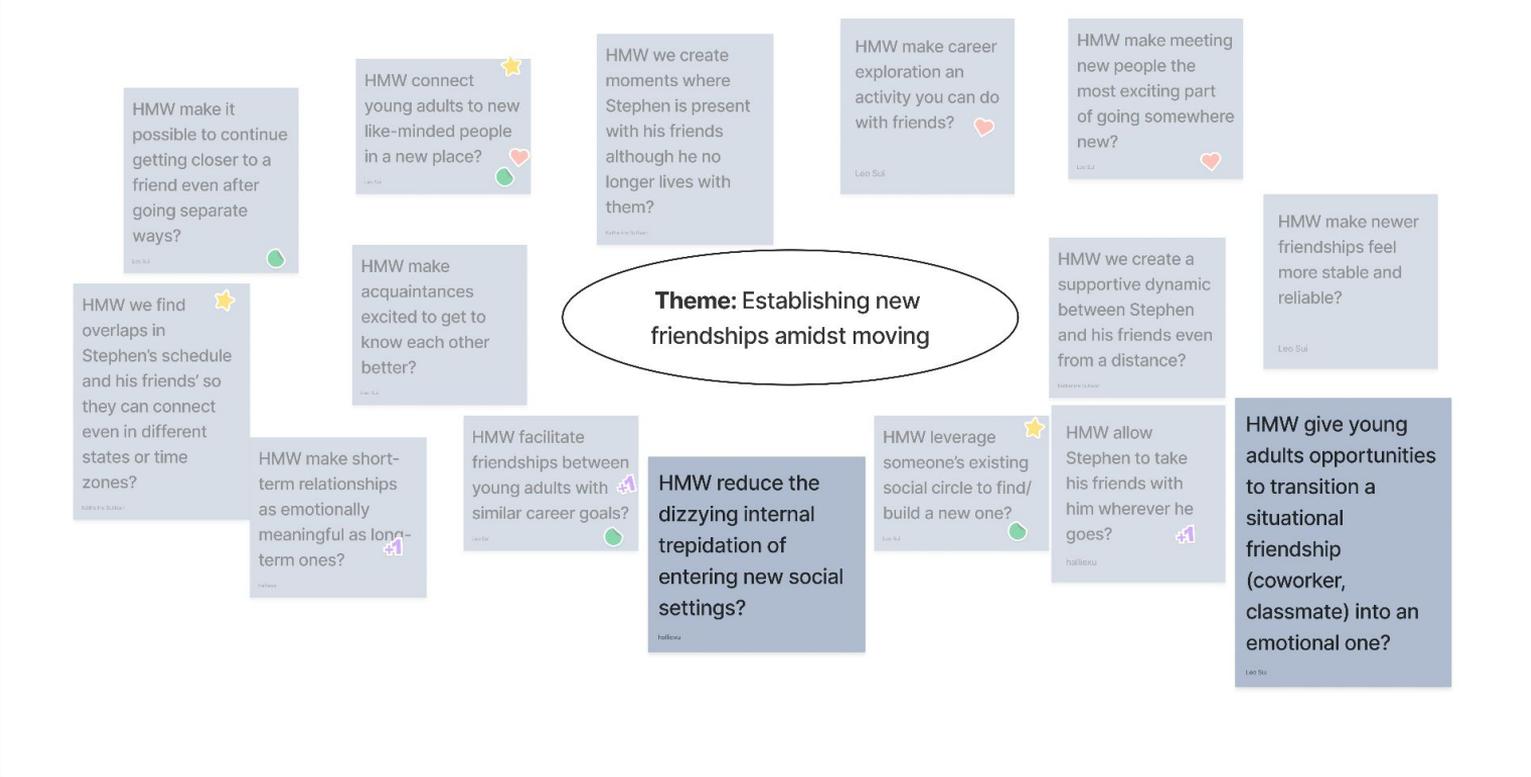
# HMWs brainstorm - Sarah POV



# HMWs brainstorm - Jenna POV



# HMWs brainstorm - Stephen POV



# POVs (Stephen, Jenna)

Dan POV

## WE MET...

**Dan, a 26 year old software engineer who moved to the Bay Area a few years ago.** He meets up with his friends about 5 times a week and loves playing board games and sports with them.

## WE WERE SURPRISED TO NOTICE...

Despite having a life long interest in conservation, he's hesitant to pursue that because he doesn't want to move away from his strong, comforting current social circle.

## WE WONDER IF THIS MEANS...

Dan fears having to start over with his social life and losing his current friends and the stability they provide him.

## IT WOULD BE GAME-CHANGING IF...

Dan could still feel comforted and supported by his existing friends, even while pursuing new life directions and investing in new social circles.

Jessica POV

## WE MET...

**Jessica, a 23 year old nail and beauty tech from San Jose** who maintains her social circle mostly through social media due to a lack of synced schedules.

## WE WERE SURPRISED TO NOTICE...

Although she most enjoys the warmth of in-person connections, she uses social media as her primary way of keeping touch with old friends and deepening connections.

## WE WONDER IF THIS MEANS...

Jessica turns to less ideal modes of connection, such as social media, because her strict work schedule makes in-person meet ups more difficult.

## IT WOULD BE GAME-CHANGING IF...

Jessica could be just as present in digital and time-flexible modes of interaction as she is in in-person hangouts.

# POVs (Sarah)

Maya POV

## WE MET...

Maya, a 27 year old clinical psychology PhD who moved to the Bay Area this year from New York. Her closest friends from her undergrad no longer live in her area, but she still keeps in touch with them however she can.

## WE WERE SURPRISED TO NOTICE...

Despite being less close to her newer friends than her long-time ones, she often feels more at ease with them because they don't carry the same pressure of expectations.

## WE WONDER IF THIS MEANS...

Maya feels guilty about communicating evolving expectations that come with life new priorities.

## IT WOULD BE GAME-CHANGING IF...

Maya could feel at ease and understood about having conversations with her friends to align on their expectations regarding changing bandwidth and priorities.

Maya POV

## WE MET...

Maya, a 27 year old clinical psychology PhD who moved to the Bay Area this year from New York. Her closest friends from her undergrad no longer live in her area, but she still keeps in touch with them however she can.

## WE WERE SURPRISED TO NOTICE...

Although Maya finds it is easiest to form close friendships with people who are willing to be open and vulnerable, she herself often worries about oversharing and accidentally overstepping boundaries.

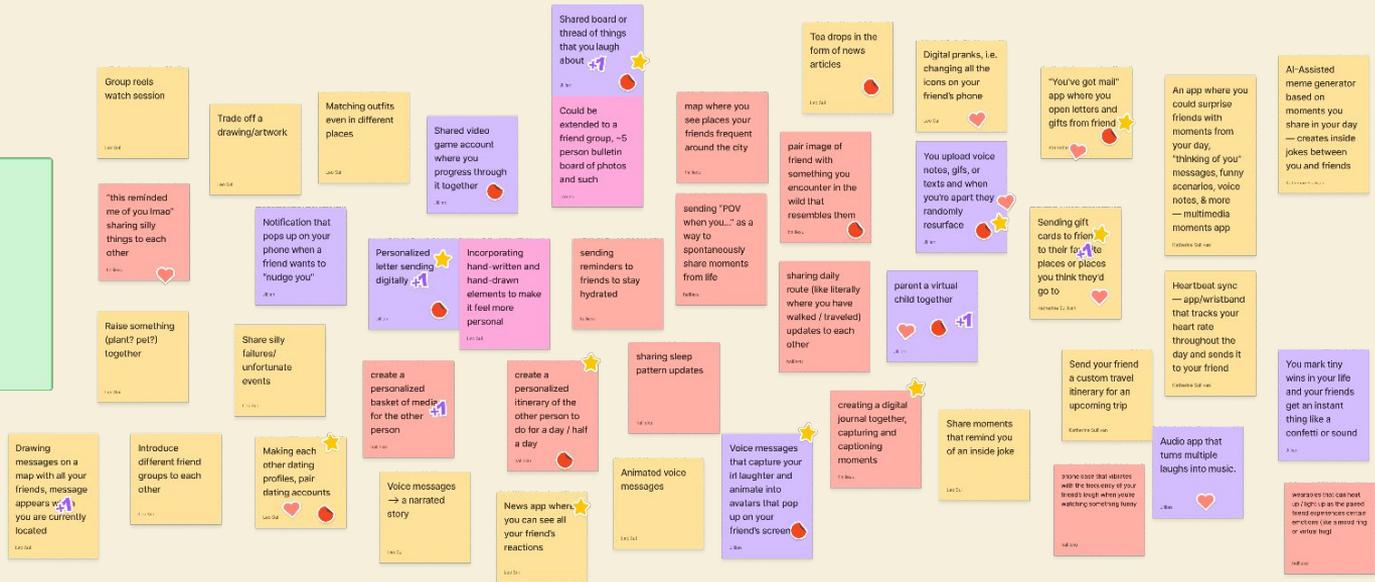
## WE WONDER IF THIS MEANS...

Emotional depth requires mutual vulnerability, but both parties hesitate to open up first. Shared emotional states create rare moments where they feel safe to do so together.

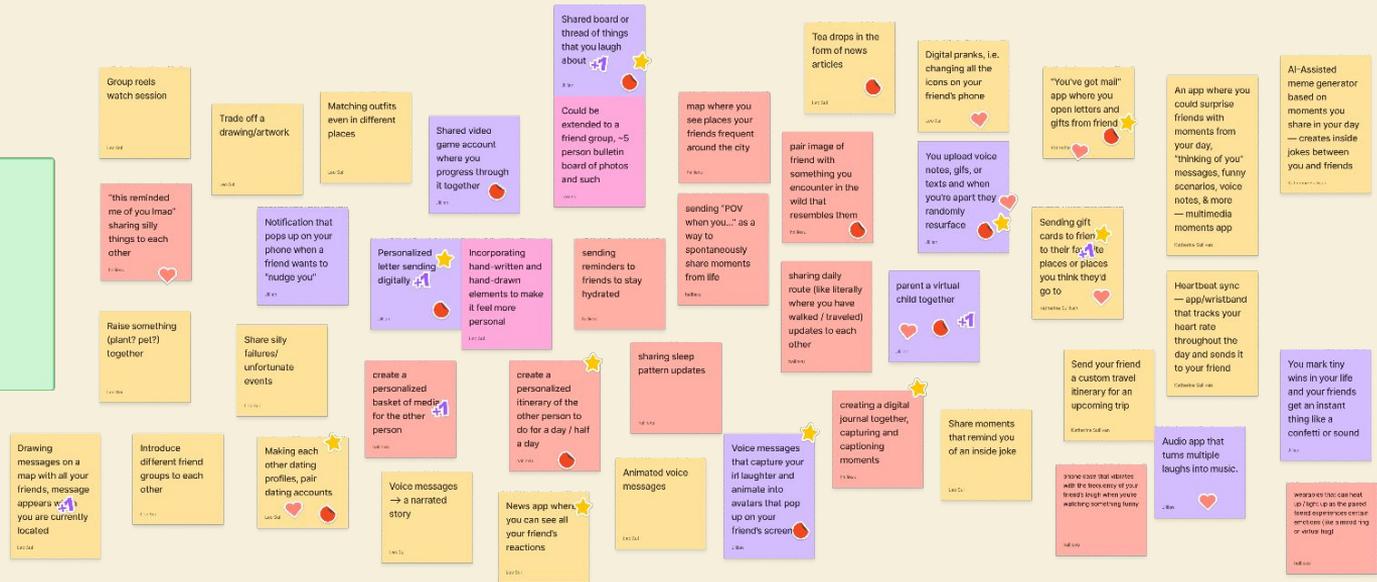
## IT WOULD BE GAME-CHANGING IF...

Maya could reliably recognize and act upon when a friend is emotionally open to vulnerability.

HMW emulate the feeling of shared laughter (i.e. positive emotional presence) despite physical separation?



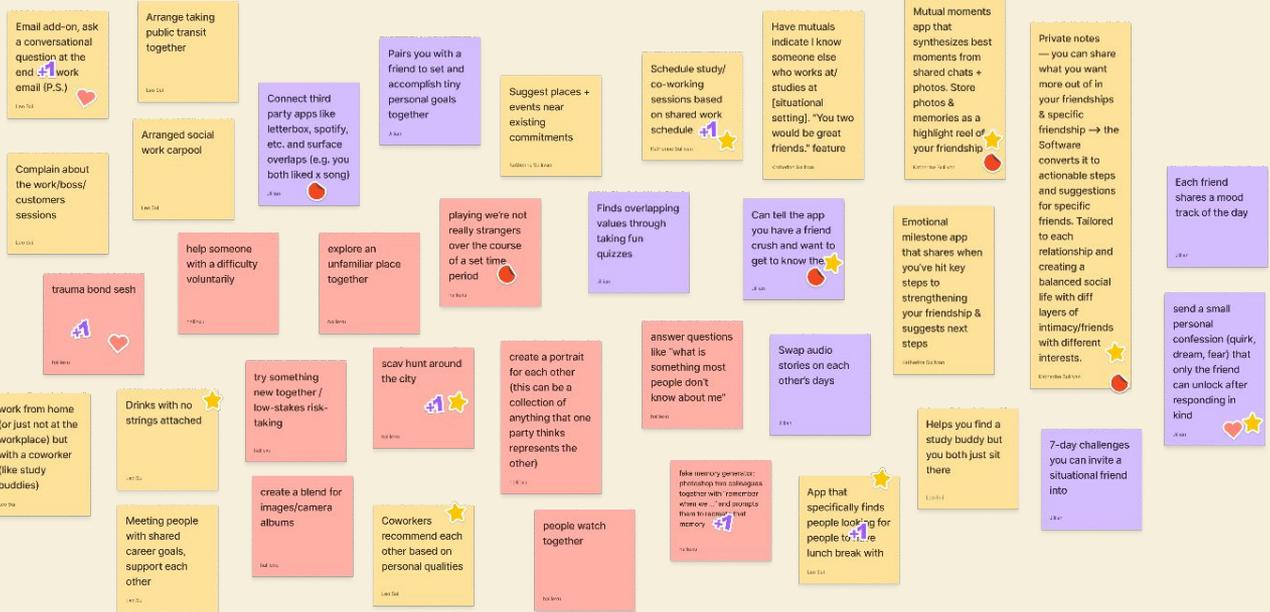
HMW emulate the feeling of shared laughter (i.e. positive emotional presence) despite physical separation?



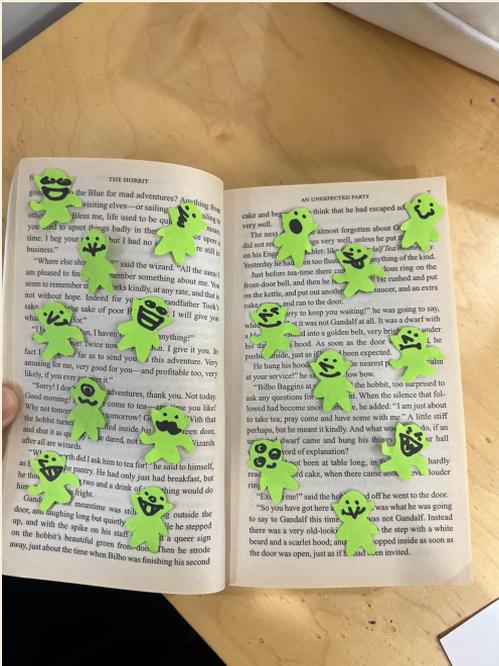
## HMW reduce the dizzying internal trepidation of entering new social settings?



HMW give young adults opportunities to transition a situational friendship (coworker, classmate) into an emotional one?



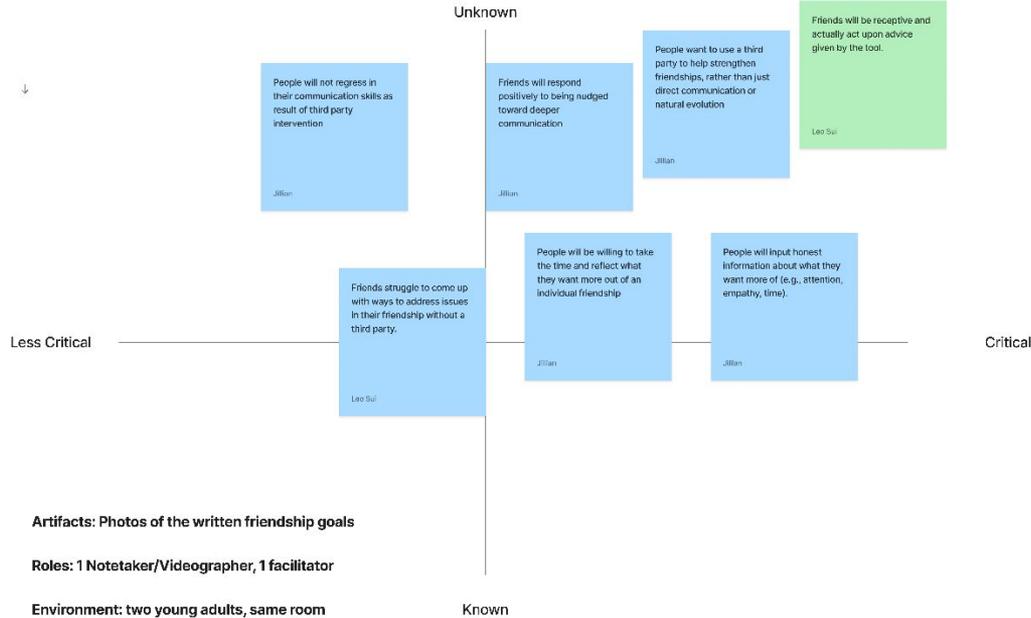
# Building the Experience Prototypes



# Building the Experience Prototypes



## Private Notes



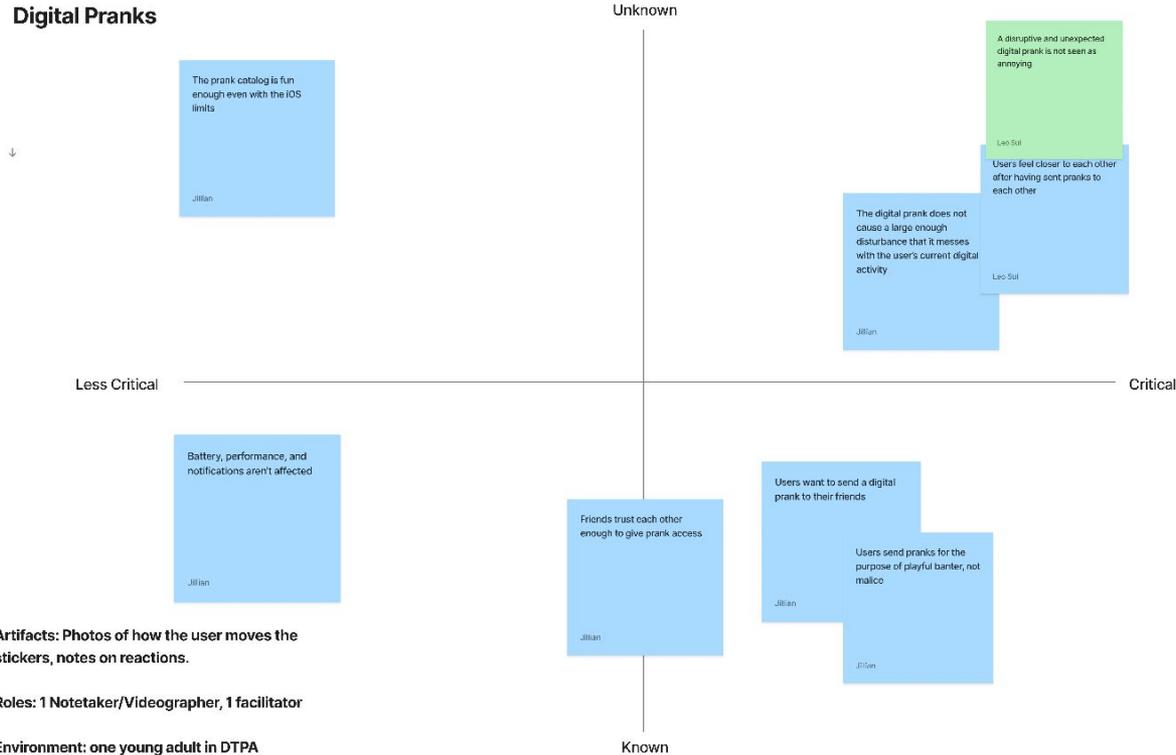
1. Find two friends. Both are given a friendship reflection sheet where each participant writes:
  - a. What they value in a friendship
  - b. Any current issues?
  - c. What you wish to see more of in your friend?
  - d. What goals do you have for the friendship?

The friends do not see what the other has written.

2. A facilitator reviews both friends' reflections and writes 2-3 actionable suggestions for talking points or activities
3. Ask them to choose one suggestion to act on in the next few days
4. Check up on them later and see their progress and thoughts

Having a facilitator draft guidance and suggestions using the same strategies the app would and seeing if users take those suggestions tests whether combining individual needs from both friends into an actionable list provides useful and appealing ideas for strengthening friendship.

## Digital Pranks



**Artifacts:** Photos of how the user moves the stickers, notes on reactions.

**Roles:** 1 Notetaker/Videographer, 1 facilitator

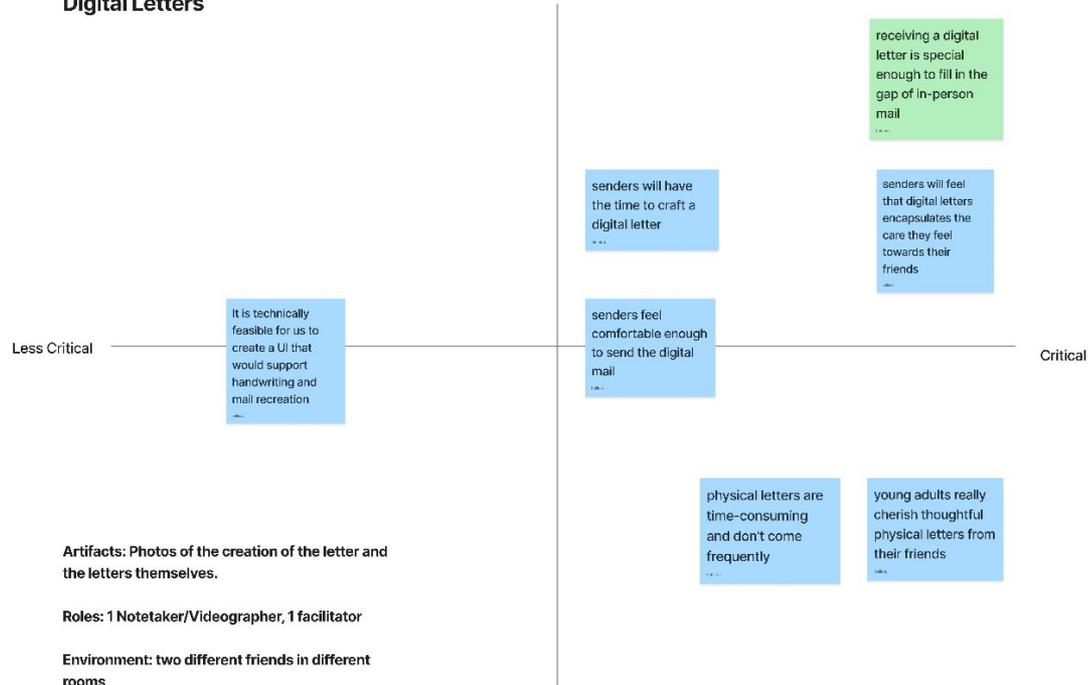
**Environment:** one young adult in DTPA

1. Give participant a book to read through. Previously, we insert a sticky note around page 3 of the book, which has a bunch of stickers on it. Don't provide any background info at this point.
2. Instruct the participant to read the book from the beginning.
3. Record
  - a. How they react when they reach the prank page (verbal and facial cues)
  - b. What they do when they reach the page - ignore it, remove it, etc.
4. Debrief questions:
  - a. Would you welcome this sort of disruption in the future?
  - b. What did you feel when you saw the post it?
  - c. Were you annoyed that it disrupted your focus?
  - d. Assuming your friend sent you this, how would it make you feel?

Having the user read the book emulates how they might use their phones, be in a state of focused entertainment. We can emulate the suddenness and surprise of the prank by having one of the pages spontaneously filled with many stickers.

Asking questions about their feelings as they saw the stickers and the process of removing them to continue reading showcases the relationship between annoyance and delight.

## Digital Letters



1. Ask participant: "You are sending a thoughtful handwritten letter to a friend. Spend a few moments draft up the contents of that letter (handwritten on iPad) and think of a specific friend you'd be okay with sending the letter to. Feel free to include anything you'd like. You will have 5 min"
2. After they are done, "now, please send this to a friend you'd like to receive your letter."
3. Debrief questions:
  - Walk me through your experience with that. Who did you address the letter to and why? How did you feel when creating this note?
  - Did the act of creating the letter feel meaningful? How would this compare with other forms of communication like messaging or physical letters?
  - How do you think your friend will feel upon receiving this letter?
  - How likely are you to routinely craft a digital letter like this?
  - How would you feel if you received a letter like this from a friend?
4. Finally, follow up and ask for contact info for the friend they sent to.

Question for receiver:

1. How did you feel when you received the letter?  
Walk me thorough how you felt.
2. How did receiving this letter feel compared to connecting with your friend in other ways, like messaging or physical letters?

First part of the procedure captures underlying emotions tied to writing a letter. We can find out how genuine and personal these letters end up being.

Second part captures how the recipient feels. We can see if the letter generates a strong emotional reaction, and how likely they are to send a letter back.

# Full Ethical Concerns (Digital Letters)

- **Target community:** Young adults aged 25–30 who are highly connected and communicate frequently through digital means.
  - Typically urban or suburban individuals with moderate to high education and income levels.
- **Excluded communities:** Rural young adults and individuals of lower socioeconomic status who engage less in digital communication.
- **Justification:** The product's purpose is to make existing digital communication more meaningful and personal for those already using it, so excluding groups with low digital engagement aligns with the intended scope.
- **Accessibility concern:** The idea of handwritten notes increases intentionality and personalization but unintentionally excludes individuals who rely on voice-to-text or other assistive technologies for communication.
- **Ethical design opportunity:** Explore alternative ways to create letters that feel highly personal while remaining accessible to users who cannot handwrite, ensuring inclusivity without losing emotional depth.

# Full Ethical Concerns (Digital Pranks)

- **Target community:** Young adults aged 25–30 who are digitally active and socially connected, with “pranking” behavior more common among the younger segment of this range.
- **Potential for misuse:**
  - Pranks could be used maliciously, such as spamming or intentionally frustrating recipients.
  - Allowing users to manipulate elements of another person’s phone introduces serious security risks, especially if accounts are hacked, giving attackers access to multiple devices.
- **Safety concerns:**
  - Pranks that interfere with device functionality could block essential phone use during emergencies.
  - Cyberbullying risks emerge if pranks are overly personal or targeted.
- **Mitigation measures:**
  - Users must have the ability to disable receiving pranks entirely.
  - Pranks should be non-disruptive and never prevent normal phone use.
- **Social sensitivity:**
  - While intended as playful banter, some may find pranks hurtful rather than funny.
  - Neurodivergent individuals may struggle to interpret these social cues and could take digital pranks too literally.
  - Ensuring pranks remain lighthearted, with clear opt-out and customization options, can help avoid misunderstandings and harm.

# Full Ethical Concerns (Friendship Counselor)

- **Target community:** Young adults aged 25–30 who want to preserve long-distance friendships or strengthen existing in-person relationships.
- **AI bias concern:** If suggestions are generated by AI, they may reflect individualistic, Western cultural values, such as encouraging direct emotional expression, thereby excluding users from collectivist cultures where indirect communication is the norm.
- **Neurodivergent inclusion issue:** AI systems may fail to understand unique communication styles and needs, potentially mislabeling users as “cold” or “detached” without considering the full relational context.

# Idea Decision

Where other ideas fell short:

## Digital Pranks

- **Fun and impactful, but risky**
- Numerous safety and security concerns
- Questionable technical feasibility

## Private Notes

- “Private” aspect has potential to obstruct instead of encourage communication.
- Infrequent usage
- Features lack depth, mostly built around LLM prompting