

# Preserving the Past

Love Unbottled

By: Evy, Jenny, Tracy, Lucia



# Our Team



**Evy Shen**

Symbolic Systems  
Sophomore



**Jenny Duan**

Symbolic Systems  
Sophomore



**Tracy Wei**

Symbolic Systems / Design  
Sophomore

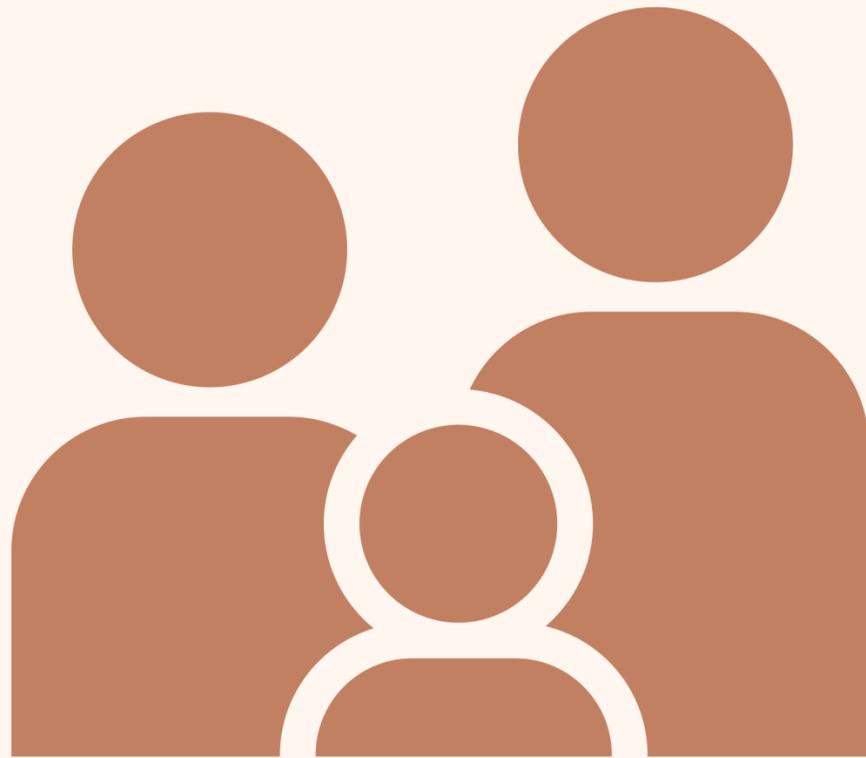


**Lucia Langaney**

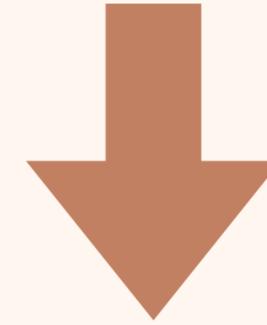
Computer Science  
Sophomore

# Domain Selection

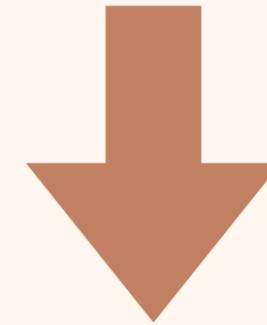
*Refined*



**Preserving the Past**



**Long Distance Relationships**



**Facilitating Connection Over  
Conversations**

# Initial POV

## **We met...**

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## **It would be game-changing to...**

help long-distance grandparents become more active in their grandchildren's lives.

# Additional Interviews



**Dr. Song\***

a father of 2 kids living in the  
US whose parents and  
siblings live in South Korea

via Zoom



**Chris\***

North Carolina Student  
whose grandma lives in  
Connecticut

in-person at UPenn



**Kayla\***

Maryland Student whose  
best friend moved to  
Alabama

in-person at UPenn

# Our Previous Participants

## Regular Users



**Patty\***

Married mother with two toddlers and family on the East Coast



**Justin\***

Hardware store employee with in-laws in Hong Kong



**Claire\***

High school junior who recently closed the gap in her long-distance relationship



**Janice\***

Grandmother of young grandchildren, Stanford employee

## Extreme Users



**Brian\***

Online college student living in Stanford couples housing



**Kevin\***

Stanford undergraduate who recently broke up with his long-distance international relationship

# Learnings

- “I don’t urge my children to make conversation with my parents.” – Dr. Song acts as the **intermediary** between the kids and parents
  - “I am familiar with both Korean and US culture. My parents are only familiar with Korean culture. My kids are only familiar with US culture.”
- “My thought is when I use video call, I might have to be more emotional with my parents. I intentionally avoid using video call with my parents.”



**Dr. Song\***

a father of 2 kids living in the US whose parents and siblings live in South Korea

# Learnings

- There is a **knowledge barrier** between him and his grandma, as they are unable to call, send photos, or other key communication methods
  - “She'll be able to do it, but she'll forget. So it doesn't stick for very long and then that frustrates her. And socially, she doesn't use it very often.”
- Is afraid that grandma won't remember him because of the distance and she's experiencing memory loss
  - “And so when I'm at school, it's it feels easier to not communicate with her because I'm scared that I'm gonna call her one day and she's not gonna remember who I am.”



**Chris\***

North Carolina Student  
whose grandma lives in  
Connecticut

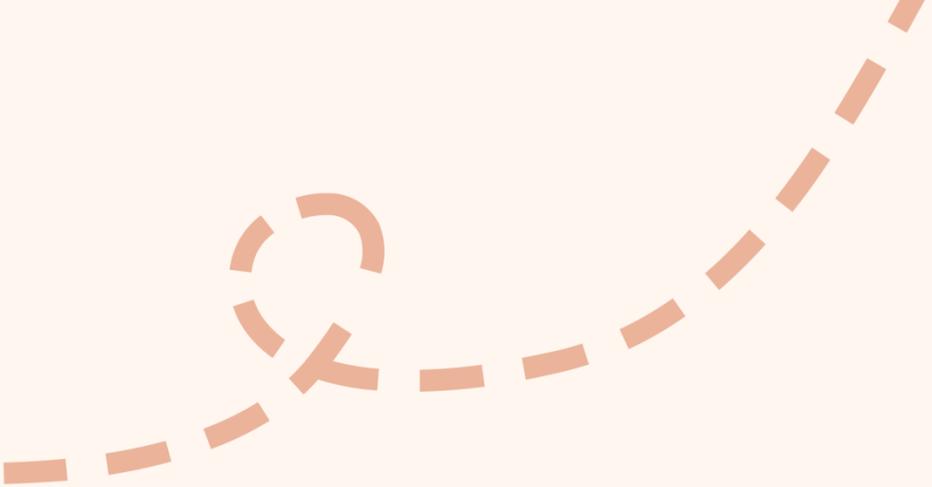
# Learnings

- Trust and care are essential to friendship, even if communication is infrequent
  - “And then, like maybe go without talking and then a week where the day where we talk for like at least an hour. So it's kind of like up and down was always at baseline level of life... I'm hoping that as we continue to have this long distance friendship that we can, like, get better at communicating and maintaining”
- Seeing **snippets of each others day** is a valuable way to connect
  - Shared Snapchat story of moments from their everyday lives facilitates connection

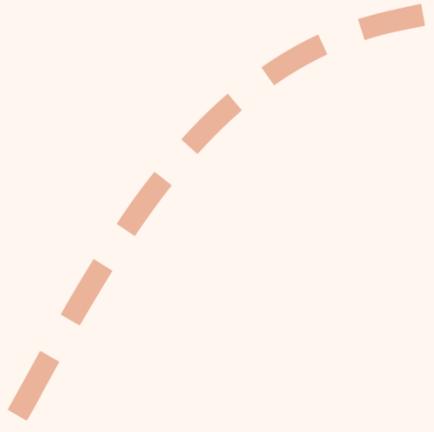


**Kayla\***

Maryland Student whose best friend moved to Alabama



**POVs  
&  
HMW**s





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# HMW

*How might we...*

**make life updates and trivial topics  
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**It would be game-changing to** remove the cultural barrier between his children and their grandparents.



# HMW

*How might we...*

**create opportunities for parents to support shared storytelling and bonding between children and their grandparents?**



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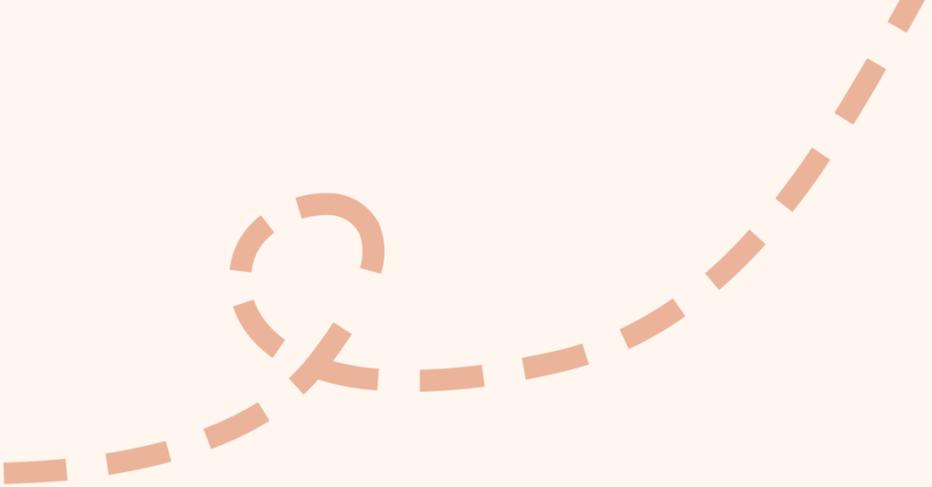
**It would be game-changing to** facilitate convenient and engaging ways for family members to feel connected to their children.



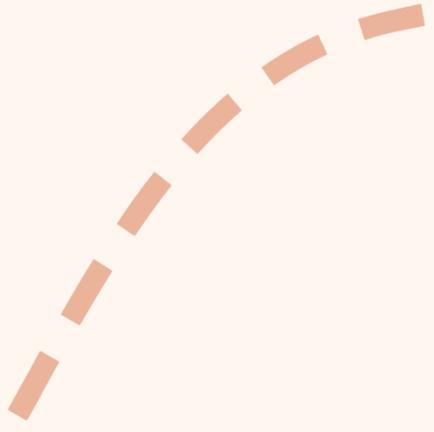
# HMW

*How might we...*

**make children interested in connecting  
with their long-distance relatives?**

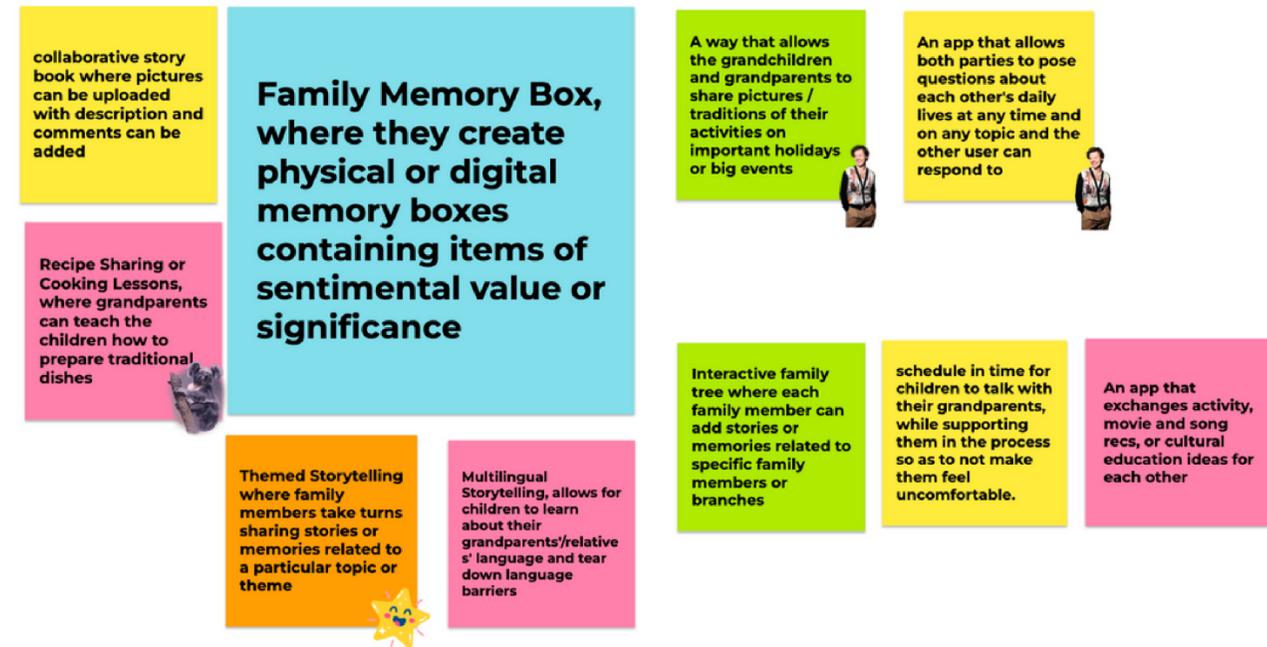


# **Solutions & Assumptions**



# Brainstorming Solutions

HMW create opportunities for Dr. Song to support shared storytelling or memory between his children and their grandparents?

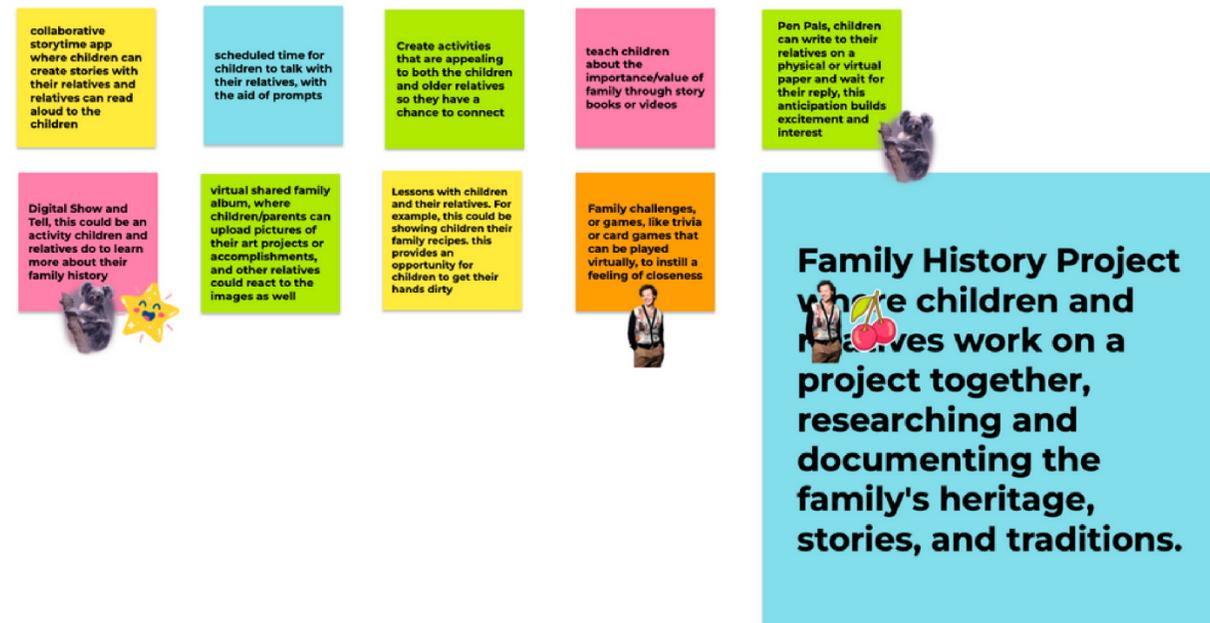


HMW make life updates and trivial topics more exciting

Jenny's favorites Tracy's favorites Evy's favorites Lucia's Favorites



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1.

# Message in a Bottle

**The idea:** Users add updates to a message in a bottle, prerecord voice messages to send daily updates and open at a specified time

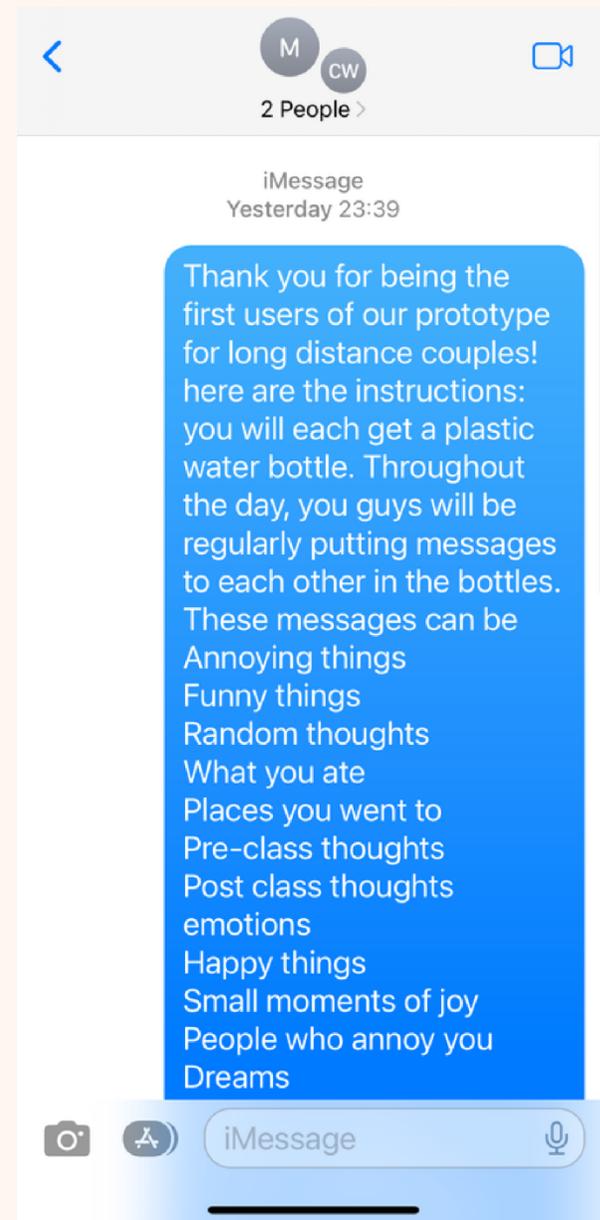


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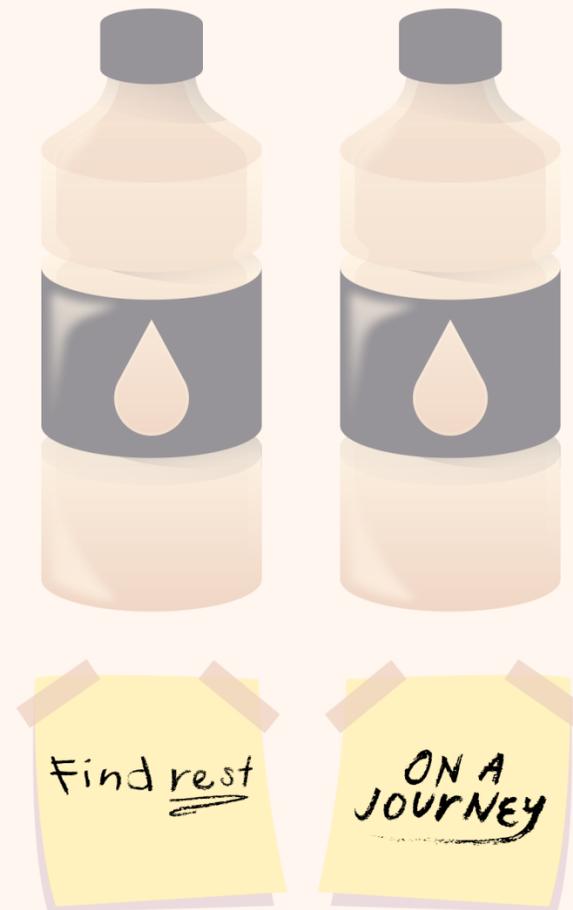
## Assumptions

- Receiving and recording mundane moments brings value to the sender and receiver
- It is not a burden to record your mundane moments
- People want to take time to go through a curated recap of another's day
- Waiting to open messages creates anticipation and excitement
- People are willing to wait to share their vulnerable or challenging moments.

# 1. Experience Prototype



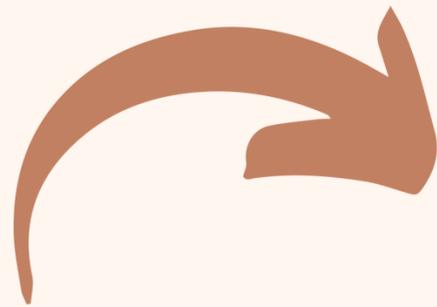
**Maxine & Cody (gf/bf, both Stanford undergrads) given 2 empty bottles**



**Had them fill their bottles with updates / random thoughts throughout the day**



**They exchanged their bottles at the end of the day and open each other's messages**



a day's worth of little notes



exchanging notes



reading each other's messages



conversations

**Recruited through mutual friends**  
**Environment of Exchange: Ng Study Room**

# Results

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## Things that worked...

- Both were happy to share things they otherwise would've forgotten
- Recording wasn't inconvenient
- Felt excited to share later
- More efficient updating; could ask clarification on things that piqued their interest

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- Updates aren't detailed
- Would rather just receive updates in real time
- Couple was not long-distance -> couple didn't have many communication problems

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## Learnings

- People want their updates to be a balance of efficient, detailed, and interesting
- Mundane moments and random thoughts are interesting for both the receiver and sender

# 2.

## Family Memory Box

**The idea:** Relatives create physical or digital memory boxes containing items of sentimental value or significance and take turns sharing why they entered a certain item.



# 2.

## Assumptions

- Having a dedicated space for memories enhances the emotional connection to those memories
- People have moments of significance tied to objects, pictures, or videos

## 2. Experience Prototype



**child and grandparent  
talk about what memories  
are important to their  
family**



**they put objects associated  
with those memories into a  
box, or other form of  
compilation**

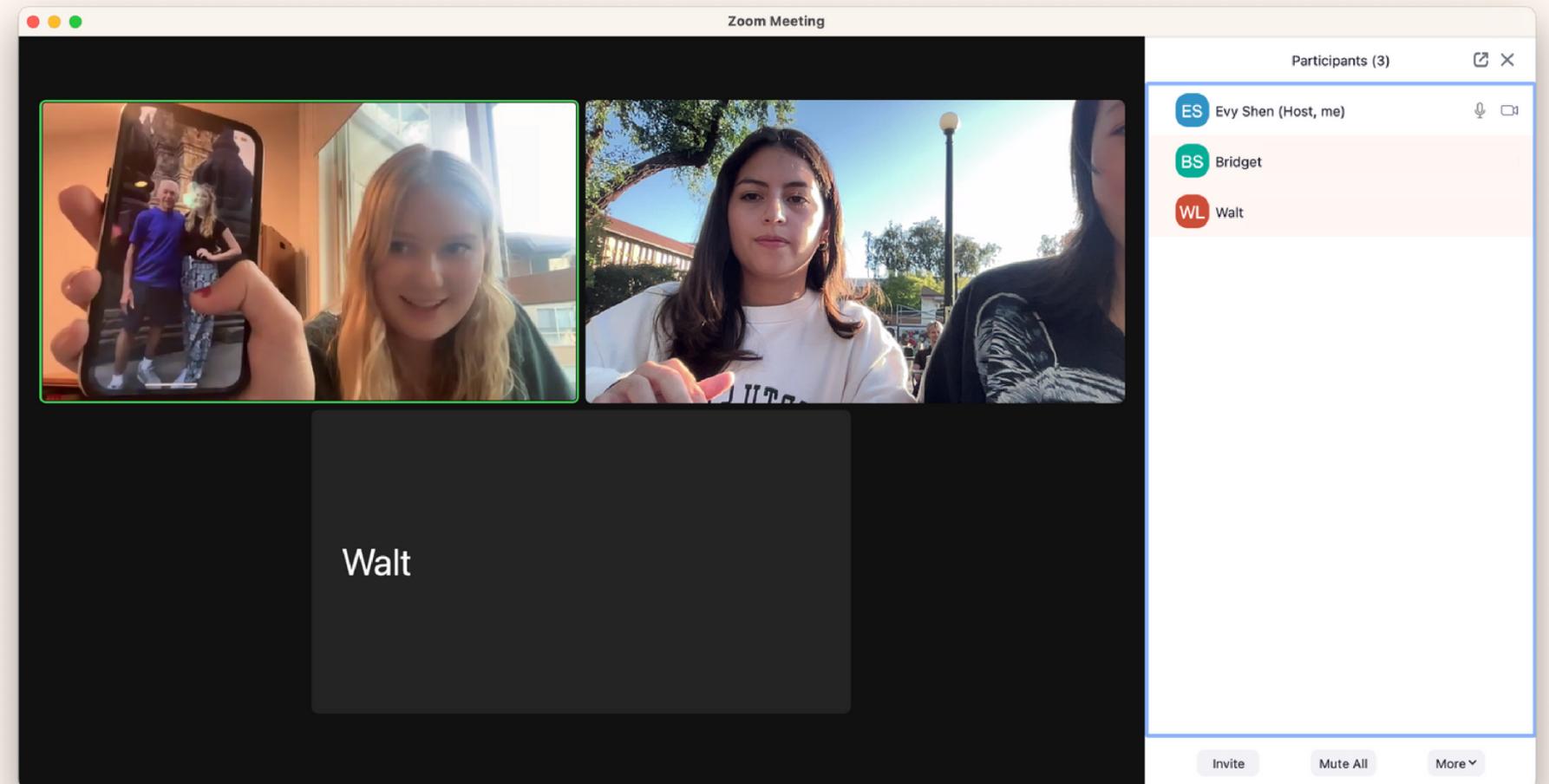


**they go through the  
collection together with  
another family member**

👤 **Participants:**

Bridget - Stanford undergrad  
Bridget grandfather - lives in  
Palm Springs

🏠 **Environment:** Zoom due to  
long distance



Sharing Memories Together

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- Had connection issues with older relative
- Some significant things do not have physical manifestations. Some only exist in memory.

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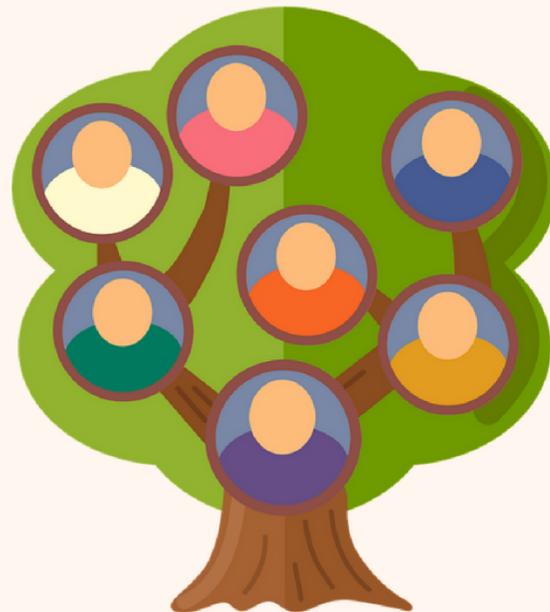
## Learnings

- This prototype was not effective for relatives who are already very close
- Older relatives feel a greater sense of nostalgia than the younger relatives because they have more time in their day to reflect

# 3.

## Family History Project

**The idea:** Children and relatives work on a project together, researching and documenting the family's heritage, stories, and traditions.



# 3.

## Assumptions

- Children and younger family members have an interest in their family's heritage and history.
- Children have the capacity to research and document their family history.
- Children and their relatives will have engaging conversations or interactions upon going through the process of document their family history.

# 3. Experience Prototype



Participants are given:

- **a notetaking paper with prompts**
- **voice memo app**

They go through the prompts on the paper together and take notes/voice record their answers.

## 👤 **Participants:**

- Lisa - Stanford undergrad
- Lisa's grandmother - lives in the Bay Area

🏠 **Environment:** Lisa's grandmother's house

What is an interesting part of your family history?

What traditions do we celebrate as a family?

Can you describe one of your childhood memories



\*faces blurred for privacy of participants

# Results

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## Learnings

- Working together on recording family history deepens bonds between family members.
- This interaction is usually one-way, with the older generation talking while the younger generation listens.

# What's next?

- We plan to move forward with the **messages in a bottle** idea, but revised.
- **Ethical Implications**
  - People may intend their messages in their bottle to only be seen by the receiver, but it may be leaked if there are problems with data security.
- **Who does this serve?**
  - This solution serves people in relationships (friends, family, romantic partners)
- **Who does this leave out?**
  - This solution may leave out people who do not have access to the internet or digital devices would be excluded.



**Thank you!**

# Appendix

## ALL HMW Statements:

- Patty:
  - make it convenient for family members to communicate with their children?
  - make children interested in connecting with their long-distance family members?
  - eliminate possible language and technology barriers?
  - deal with time zone differences if we want to facilitate real-time interactions?
  - create engaging activities that will make children interested in connecting with their long-distance relatives?
  - leverage technology to provide tools that simplify communication?
  - promote regular and meaningful interactions between families living in different time zones?
  - create a sense of consistency in long-distance family interactions to help children feel more secure?
  - make it easier for older relatives to share their heritage and wisdom?
  - encourage families to capture and share their memories to foster a sense of shared identity and heritage?
- Dr. Song:
  - create opportunities for his children to learn about their cultural background?
  - explore the potential fears or apprehensions Dr. Song might have about his children losing touch with their cultural roots?
  - encourage Dr. Song's children to actively engage in conversations with their grandparents?
  - address any hesitations that his children might have about interacting with their grandparents from a different cultural background?
  - enable Dr. Song's children to communicate easily with their grandparents despite the linguistic barriers?
  - explore the perspective of the grandparents and how they feel about the perceived barriers in communicating with their grandchildren?
  - identify common ground or topics that both Dr. Song's children and their grandparents can engage in, regardless of their cultural differences?
  - increase Dr. Song's children's interest in their cultural background?
  - provide resources or support for Dr. Song in his role as an intermediary, ensuring he feels valued and not overwhelmed?
  - create opportunities for shared storytelling or memory sharing between Dr. Song's children and their grandparent
- Kevin:
  - facilitate easy updating?
  - make conversation centered around deeper topics easier to transition into?
  - address the challenge of time zones and differing schedules?
  - create uninterrupted quality time for couples?
  - remove the need for trivial updates?
  - incorporate emotional check-ins for couples to better understand each other's emotional well-being?
  - assist couples in reflecting on the quality of their interactions and encouraging them to deepen their connection?
  - capture moments and experiences in real time?
  - make life updates and trivial topics more exciting?
  - help couples accommodate each other's love languages?

# Appendix

## POVs Brainstorm

### Kevin

We met Kevin, a Stanford student undergrad who recently broke up with his long distance girlfriend of 2 years from overseas from overseas.

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It would be game-changing to shift their conversation priorities to meaningful topics that preserve their connection instead of trivial updates.

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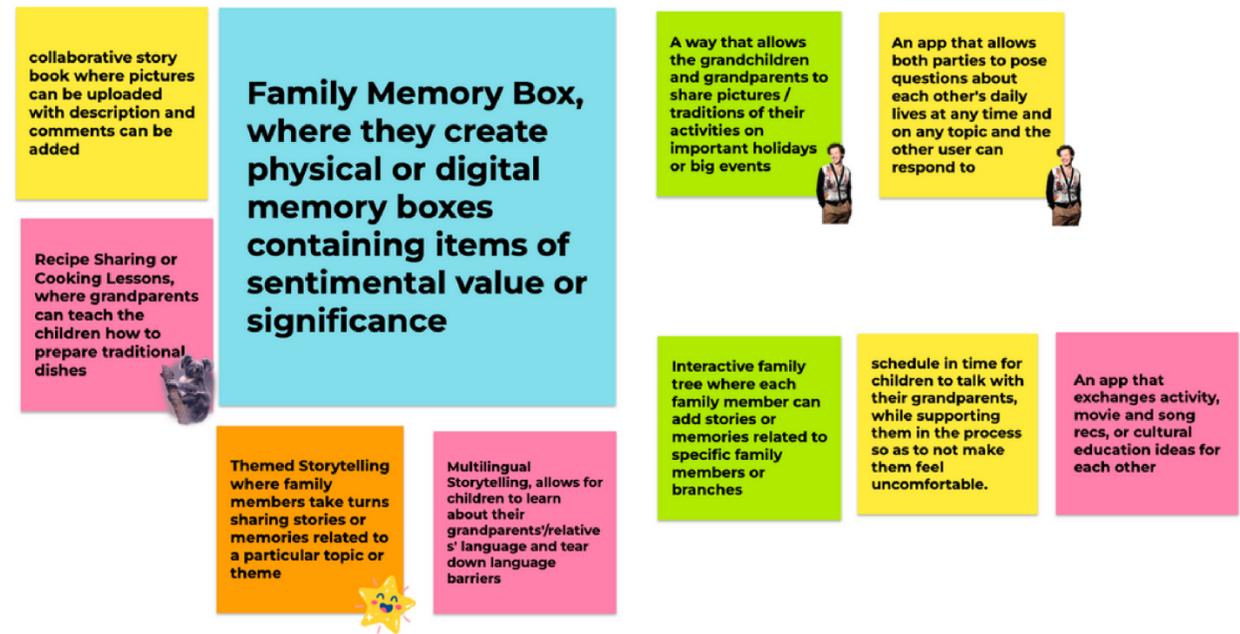
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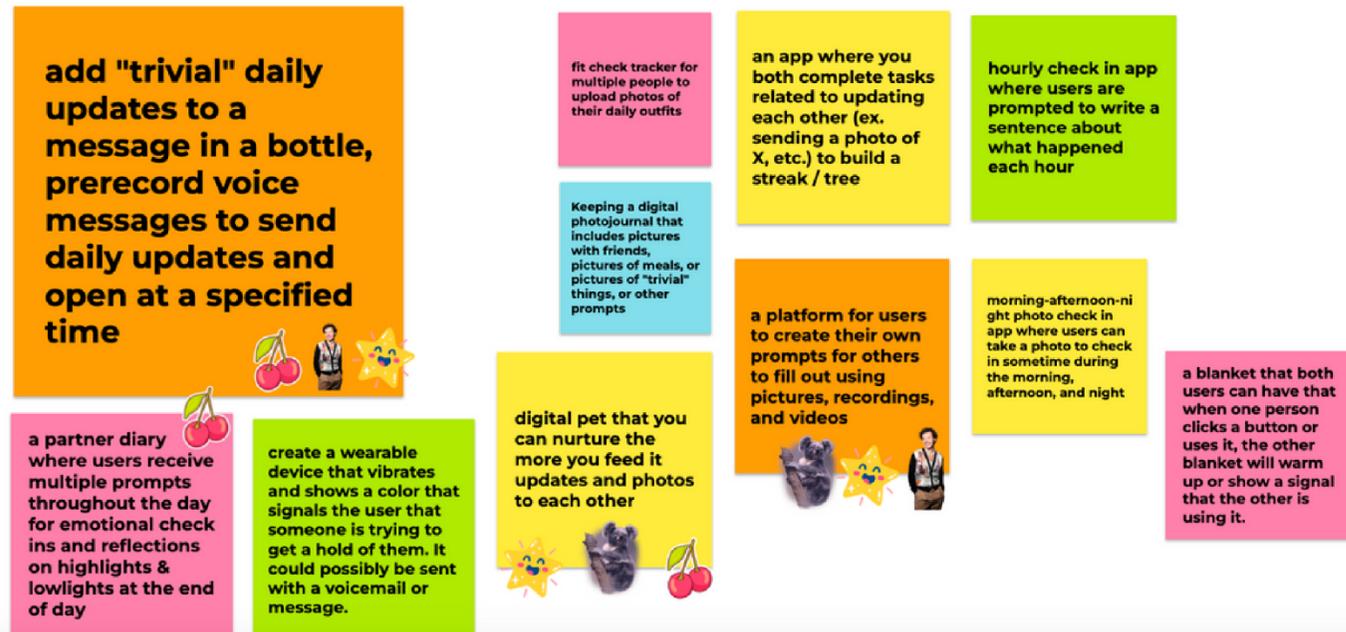
## Solution Brainstorm

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HMW make life updates and trivial topics more exciting

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