

FOURTH QUARTILE

Designing for an Active and Purposeful Retirement Lifestyle

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CS 147 • F23 • Stanford University

INTRO – TEAM



Name: Adam Barry
Year: Junior
Major: Computer Science (HCI)



Name: Amy Chang
Year: Junior
Major: Computer Science (HCI)



Name: Ethan Hellman
Year: Senior
Major: Computer Science (AI)



Name: Brendan McLoughlin
Year: Senior
Major: Computer Science (HCI)

Problem Domain



How can we encourage citizens of a retirement age to stay *actively engaged* with both their community and environment?

Bill

80 year old U.S. Army Veteran and former Mechanical Engineer. Enjoys photography and walking his dog.



Anita

74 year-old AARP regional leader and front-desk assistant (and social *linchpin*) of Sequoia Homes Retirement Center in SF.



POV Development 🎨

Mary-Lue, Robin, and Marie

Mary-Lue

- We met: Mary-Lue Timpson, an 80-year-old retired school teacher who now volunteers at the front desk of the Senior Center in Palo Alto.
- We were surprised to learn: that Mary-Lue Timpson considers herself separate from the other seniors, verbally distinguishing herself by saying, “I’m not the usual type of person who comes in here.”
- We wonder if this means: she derives a meaningful sense of purpose from “having a role.”
- It would be game-changing if we: could deliver a similar sense of purpose through responsibility to more people.

Mary-Lue

- We met: Mary-Lue Timpson, an 80-year-old retired school teacher who now volunteers at the front desk of the Senior Center in Palo Alto.
- We were surprised to learn: that Mary-Lue Timpson considers herself separate from the other seniors, verbally distinguishing herself by saying, “I’m not the usual type of person who comes in here.”
- We wonder if this means: **she considers herself different from other seniors because of her clear role in the community which gives her a greater sense of purpose.**
- It would be game-changing if we: could deliver a similar sense of purpose through responsibility to more people.



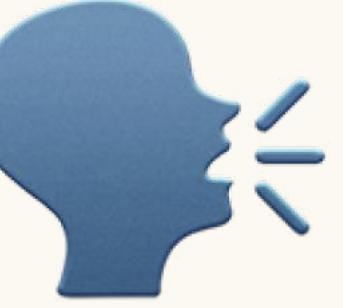
**How might we: expand opportunities for
senior citizens to get involved and feel
purposeful within their local community?**

Robin

- We met: Robin an inactive and 62-year-old woman with no friends who recently experienced multiple `losses during COVID
- We were surprised to learn: she feels content despite her loneliness because her main form of social interaction is with her pets (a turtle, a possum, and a dog)
- We wonder if this means: Non-human social interaction helps prevent loneliness in elderly adults
- It would be game-changing if we: could help elderly people who lost their loved ones cope with loneliness via non-human social interaction

Robin

- We met: Robin an inactive and 62-year-old woman with no friends who recently experienced multiple losses during COVID
- We were surprised to learn: Robin makes little to no effort to seek out human interaction. Instead she spends her days caring for her pets and seems content in doing so.
- We wonder if this means: Non-human social interaction is preferable to new human connections for those who have experienced loss.
- It would be game-changing if we: could connect elderly people who have or may soon experience loss with non-human companions.›



**How might we: ensure every senior always
has someone... or something... to talk to
whenever they need?**

Marie

- We met: Marie: a 76-year-old former Stanford researcher who lives a very physically and socially active retirement lifestyle
- We were surprised to learn: that all of her friends also have active and social lifestyles
- We wonder if this means: her friend group serves as a community that keeps her accountable and motivated to stay active and healthy
- It would be game-changing if we: could ensure that all retirees have supportive communities that facilitate and encourage healthy lifestyles

Robin

- We met: Robin an inactive and 62-year-old woman with no friends who recently experienced multiple losses during COVID
- We were surprised to learn: though Robin knew the importance of being active, she refused to even entertain the idea of joining nearby senior activity classes
- We wonder if this means: Robin feels unwelcome in existing senior activity communities.
- It would be game-changing if we: could create low stakes environments for seniors to enter supportive communities that facilitate and encourage healthy lifestyles.



**How might we: encourage elderly people to
play a sport that is geared towards those
with less physical mobility?**

Fourth Quartile

Interviews Presentation

02:30

Fourth Quartile

Share

IDEAS

HMWs

NARROW DOWN TO 3

ML

- How might we: expand the opportunities for the elderly in the community volunteering space? 🏗️🐱
- How might we: create new avenues for senior citizens to feel needed by their community? 🏗️🐱
- How might we: expand opportunities for senior citizens to get involved with their local community to create purpose in their community?

M

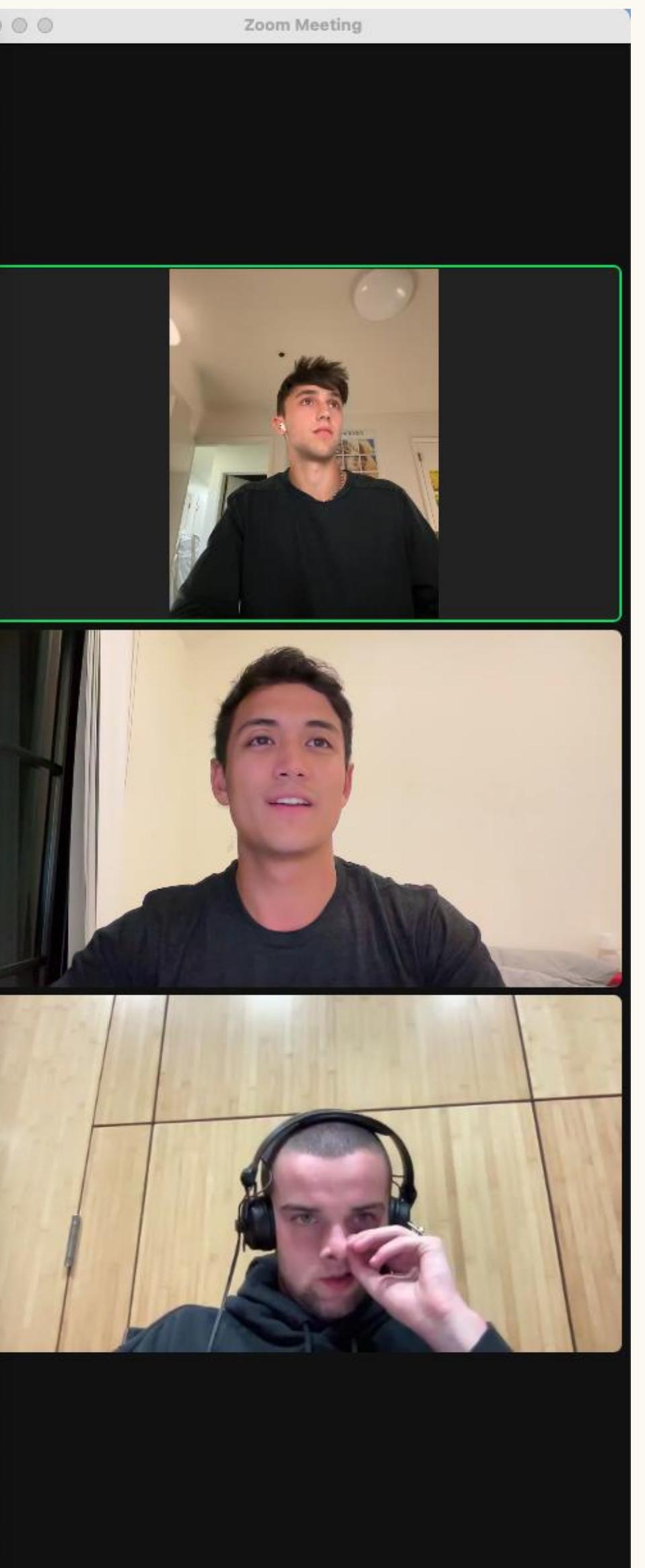
- How might we: make communal physical activity more appealing to those less socially inclined? 🏃‍♀️
- How might we: learn a team sport that is geared towards elderly people with less physical mobility and greater physical risk? 🏀
- How might we: make fitness groups more accessible and inviting for elderly people? 🏗️🐱

R

- How might we: help elderly people learn about opportunities in their area like joining social clubs, planning trips, or signing up for daily activities to add structure to their day? 🏃‍♀️
- How might we: ensure every senior always has someone... or something... to talk to whenever they need? 🏗️🐱
- How might we: ensure that young people are aware of the full consequences of their choices early in life? 🎯
- How might we: make young people choose hobbies and jobs that result in long term active lifestyles in retirement? 🏗️🐱

leverage habits to introduce new experiences
"Habitual Enough"
"She goes to great lengths just to have company"

How might we ensure every senior always has someone... or something... to talk to whenever they need? 🏗️🐱



Fourth Quartile Interviews Presentation

Solutions

10 FOR EACH HMW

How might we: ensure every senior always has someone... or something... to talk to whenever they need? 🧑🧑🧑

How might we: expand opportunities for senior citizens to get involved with their local community to create purpose in their community?

How might we: learn a team sport that is geared towards elderly people with less physical mobility and greater physical risk? ⚽

Potential Experience Prototype: Core assumption = how competitive are older people?

05:00 + 1 min Acoustic ambient New vote

Zoom Meeting

Solutions

Gardening, children's sports, and book clubs

Create a platform whereby elderly citizens can follow a local sports team (get involved with community and stay active).



Adam Barry

A platform to help advertise and engage services that seniors can provide through leveraging their existing hobbies and skills



Ethan Hellman

A platform where senior ctzns can join book clubs local to their communities, keep up reading with their group members, and meeting up



Brendan McLaughlin

Experience Prototypes





Experience Prototype #1

Community Gardening

		Known	Unknown	
				Not Vital for the user experience
		<p>Elderly have their own gardening tools</p> <p>Gardening is easy / a straight-forward activity</p> <p>Elderly like to spend time with one another</p>	<p>community would recognize and appreciate the value in elderly gardening</p> <p>Elderly care about what types of plants they are planting</p>	<p>Organizing / Coordinating collective gardening would require minimal oversight</p> <p>gardening can be an effective tool to create community</p>
			<p>Elderly have time to spare to engage in activity</p>	<p>Elderly would garden outside of their own gardens</p> <p>public would be ok with elderly helping with gardening</p> <p>Elderly would be imbued with a sense of purpose by helping to maintain the local community gardens</p> <p>Elderly would feel safe and comfortable gardening in public</p>

User Experiences



Critical assumption tested

- People feel comfortable gardening in public.

Participant

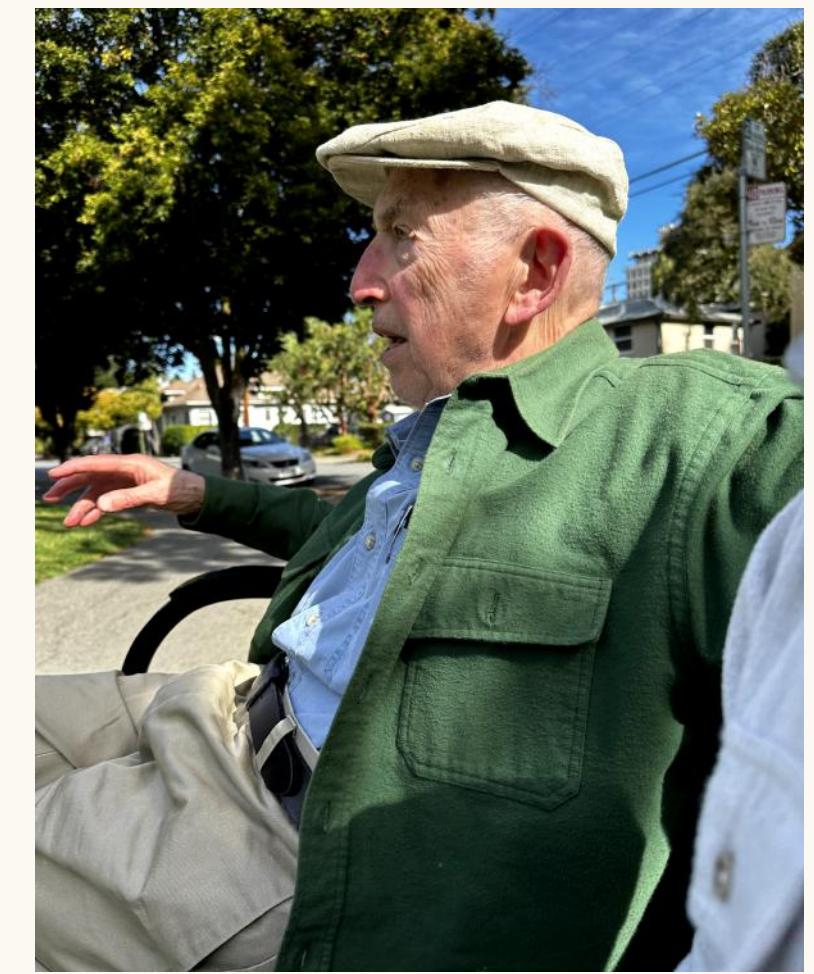
- 4 strangers at the park.
- Diversity in sex, age (25 - 96!), and experience with gardening.

Experience prototype

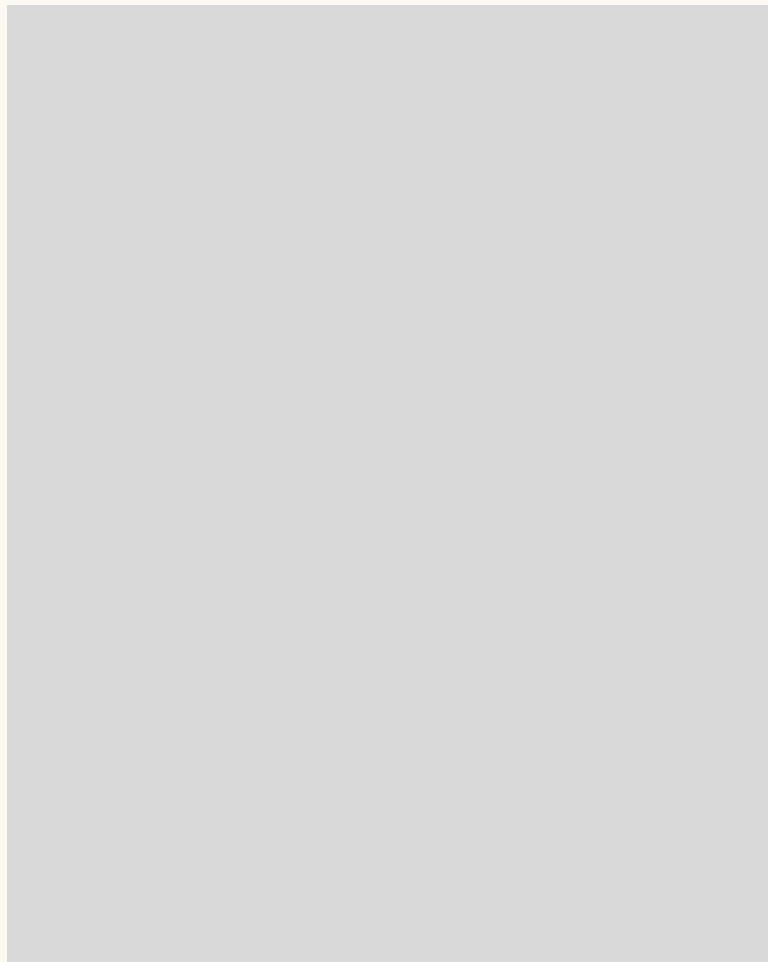
- Gave participants a free plant and a spade and told them that they could plant it wherever they wanted.



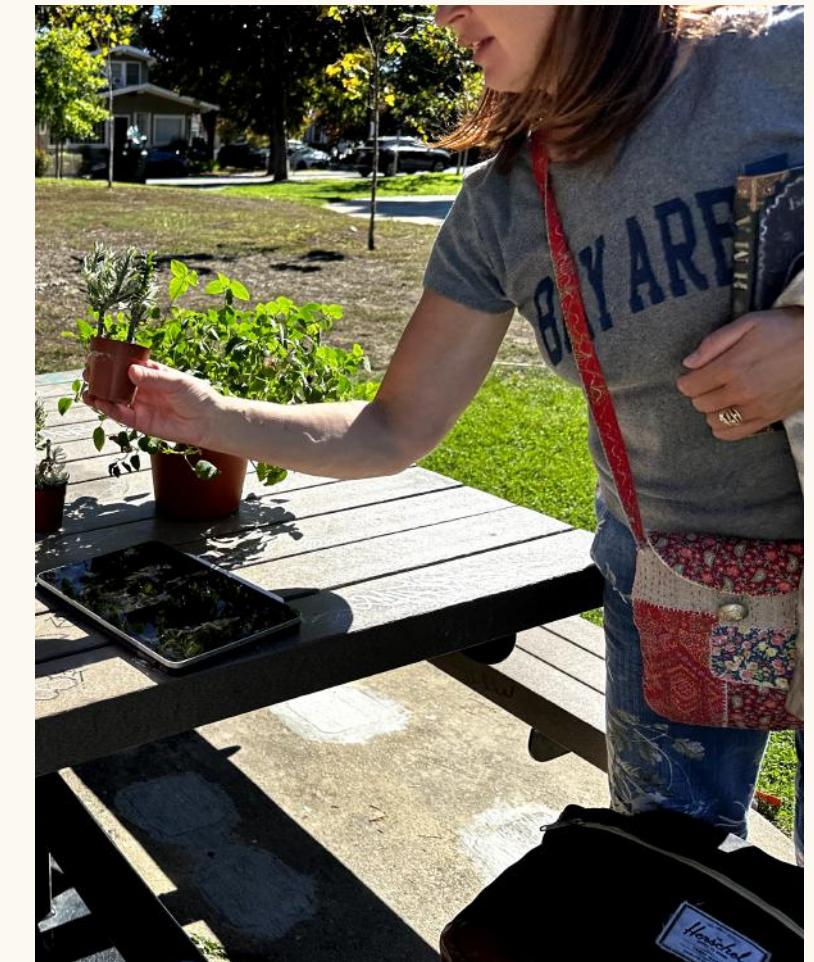
Leo



Roy



Thomas



Kamilla

Results



What Worked?

- Users responded positively to the idea of gardening, one planted.
- Elucidated a sense of community and responsibility... “I will come back every day and water it!”
- Highlighted service as a means of fulfillment.
- Heard many stories!

What Didn't Work?

- Participants hesitant to plant in public, concerned about permission.
- Appeared as frivolous activity given no one would take care thereafter.
- Wanted clarity on connection to coursework.
- Some did not feel “qualified” to garden.



Experience Prototype #2

Local Youth Sports Teams

		Unknown		
	Not Vital for the user experience			
			Known	
Elderly citizens will have opportunities to get involved more directly in the organisation of the sports games	Elderly citizens would be willing to wake up early for sports games	Elderly citizens will continue to travel to games in adverse weather conditions	Elderly citizens care for other children's sports teams outside of their grandchildren	Elderly citizens are actually interested in sports
Adam Barry	Adam Barry	Adam Barry	Adam Barry	Adam Barry
Kids will be comfortable playing in front of a larger crowd	There will be sufficient support from parents and coaches to allow the elderly to attend	Elderly citizens will have the means (time, money) to be able to attend these games	Elderly citizens will feel more involved in community by attending these sports games	Elderly citizens will have enough technological competence to use our platform to find out when and where games are
Adam Barry	Adam Barry	Adam Barry	Adam Barry	Adam Barry
There will be enough sporting events on for the elderly citizens to attend			Attending these games will actually help keep them active	Elderly citizens take an active interest in their local community
Adam Barry			Adam Barry	Adam Barry

User Experience



Critical assumption tested

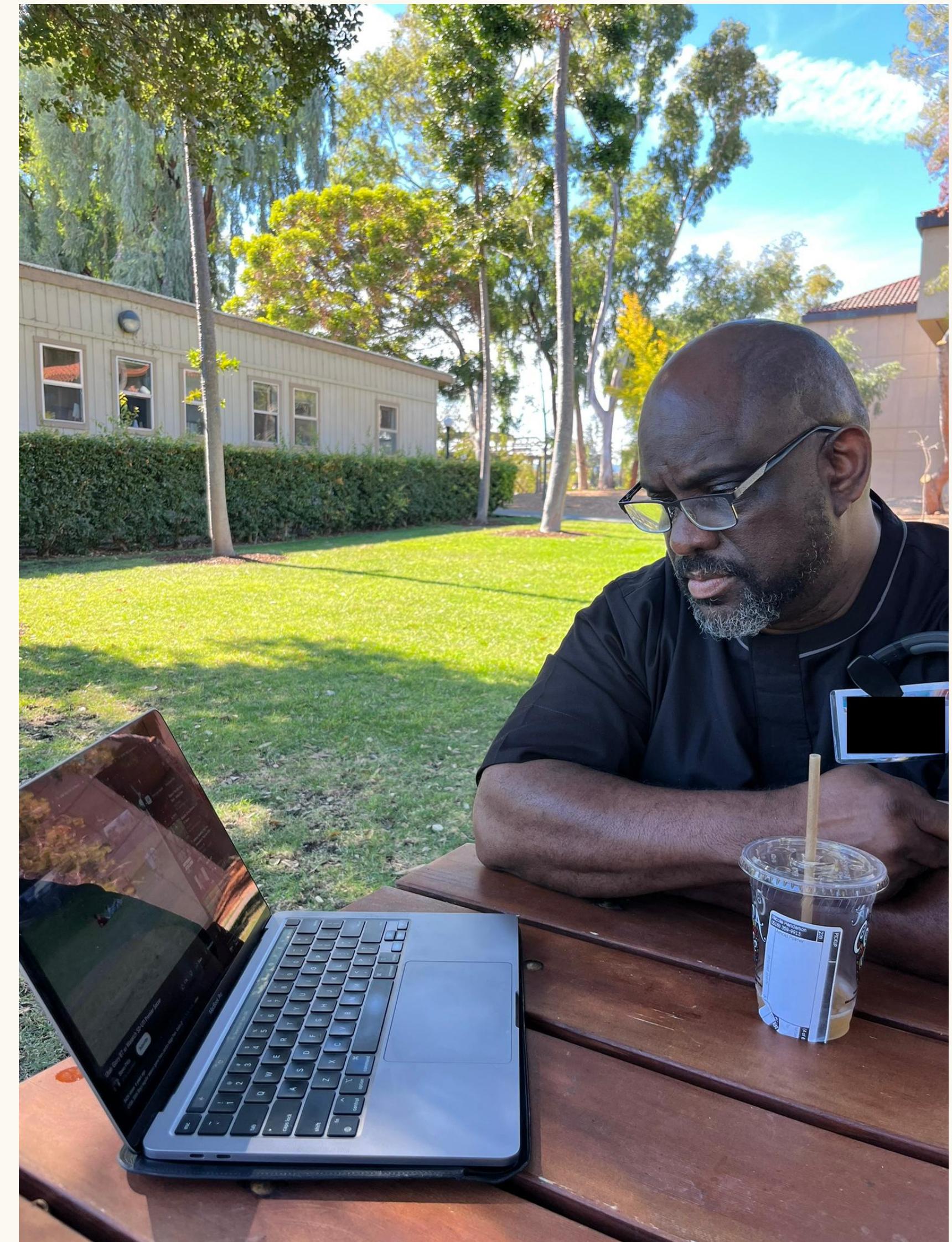
- elderly citizens are interested in sports

Participant

- a retired male who was previously an educator, assistant superintendent of a high school, and a track coach

Experience prototype

- we showed the man a YouTube video of a youth soccer team playing a match against another team to see how he would engage with both the sport and the level at which it was played at



Results



What Worked?

- User responded well to the video
- Would gladly follow a local youth sports team
- While an educator, highlighted groups attempting to create a community that would attend and support local high school teams

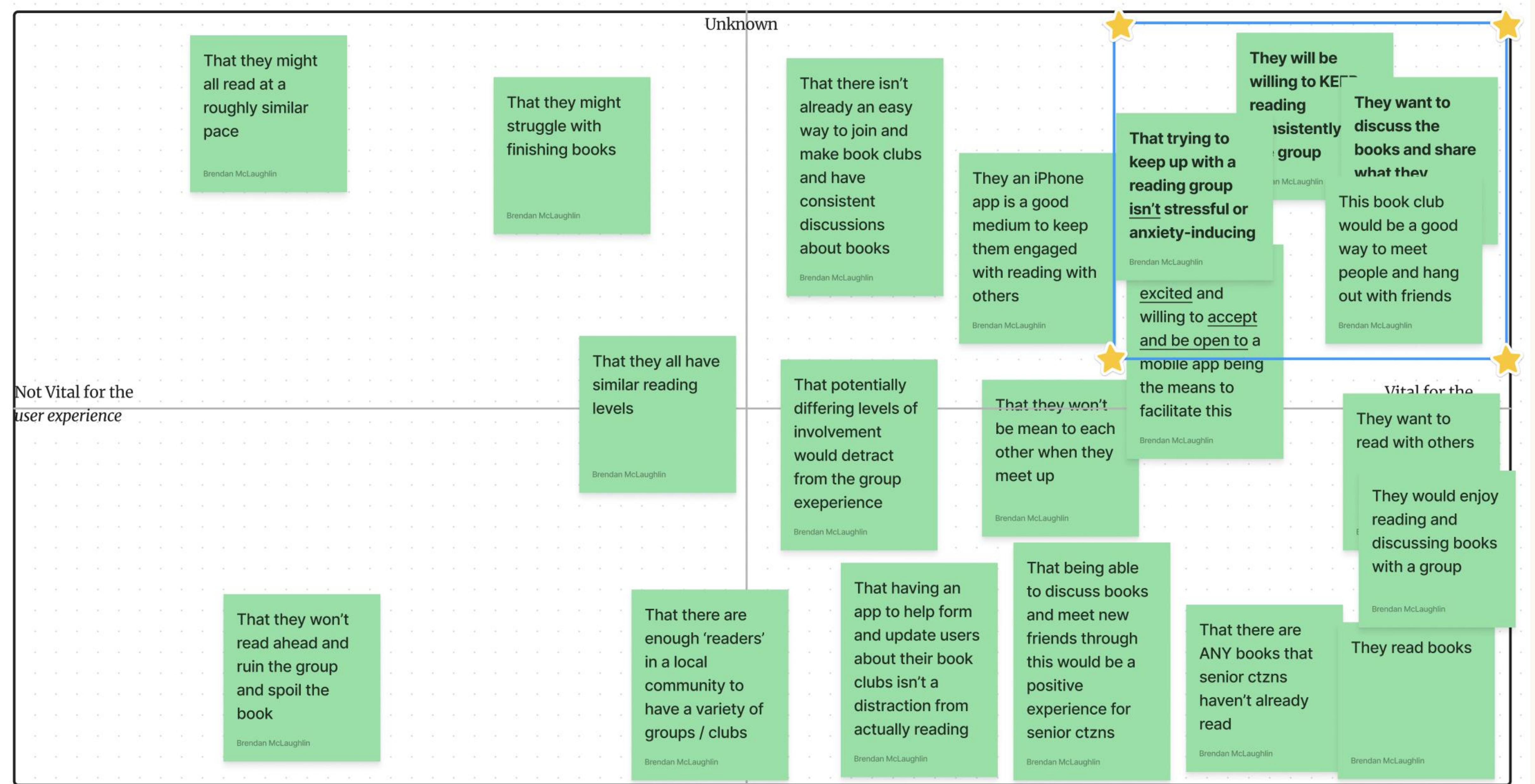
What Didn't Work?

- User wouldn't necessarily get involved with the management or organisation of a team
- Involvement would be support only



Experience Prototype #3

Book Clubs



User Experience



Critical assumptions tested

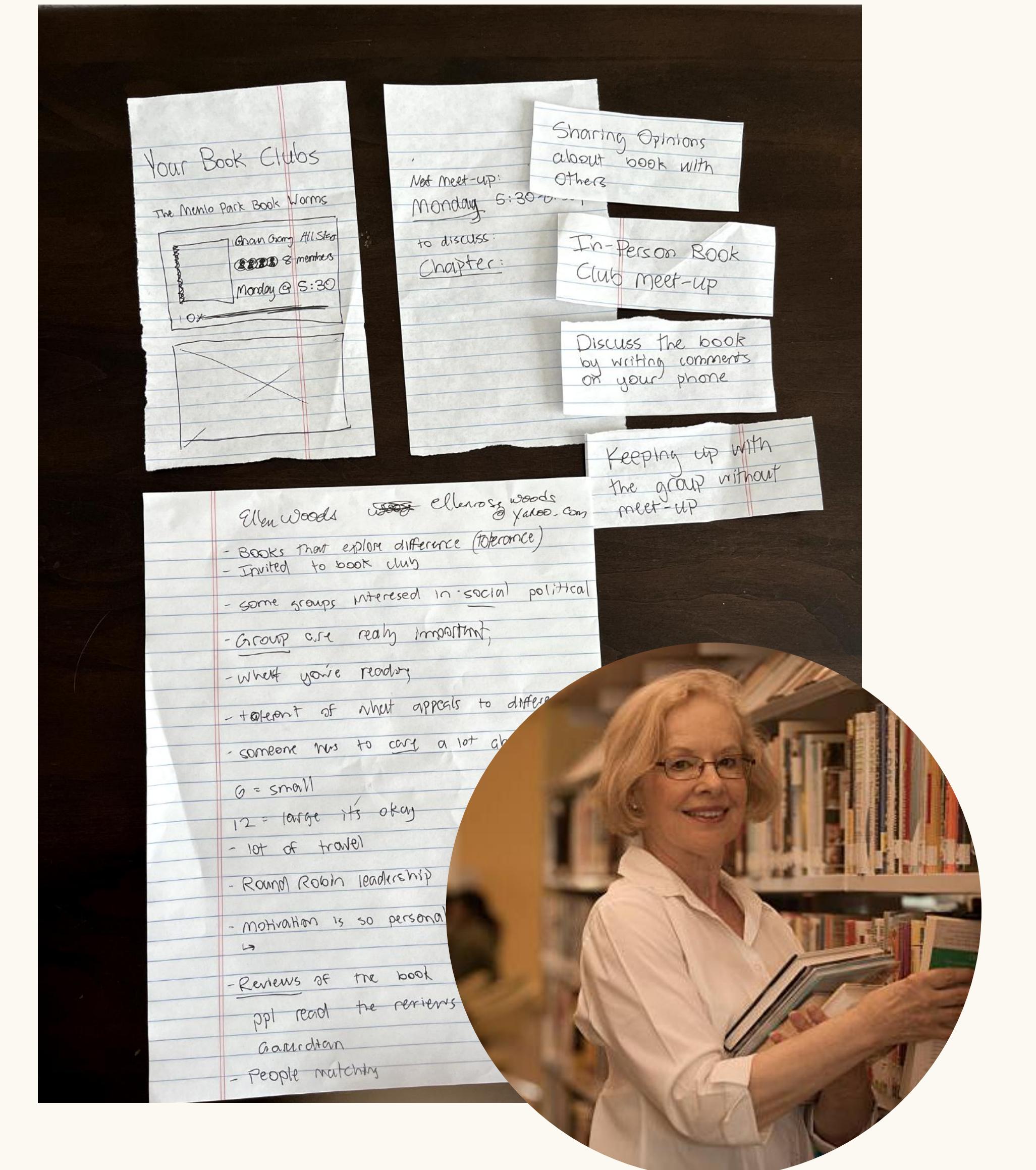
- Elderly adults are excited about discussing the books with peers
- Need for mobile app?

Participant

- A recently retired Stanford Associate Vice Provost who is involved in multiple book clubs

Experience prototype

- Approach elderly adult in library and ask what book they're reading
- Fill in paper prototype screens with book name
- Simulate reaction to joining book club group



Results



What Worked?

- Elicited strong positive emotions towards book clubs
- UI made participant reveal that the actual group is more important than the book
- Prototype prompted participant to share key insights about book club

What Didn't Work?

- Participant spoke more than she did interact with prototype due to prior book club involvement

What's Next? 📋

Solution

- Gardening!

Ethics

- Legal implications
- Recruiting and assisting a diverse population

Audience

- Audience is both urban and suburban of varying levels of physical ability
- Unsure of whether to expand out from elderly people just yet

Appendix



Mary-Lue

It would be game-changing if we: could deliver a similar sense of purpose through responsibility to more people.

1. How might we: create more opportunities for elderly individuals to help each other?
2. How might we: facilitate interdependence between elderly individuals to create a sense of equality?
3. How might we: help cultivate a sense of independence and self-sufficiency for elderly individuals?
4. How might we: create structure for elderly individuals in their everyday lives? 🧑
5. How might we: facilitate community events without them feeling “old”? 🐰
6. How might we: have elderly people interact with younger individuals more often?
7. How might we: provide elderly people with explicit roles within their community? 🐰 😊
8. How might we: expand the opportunities for the elderly in the community volunteering space? 🧑 🎨 😊
9. How might we: create avenues for senior citizens to learn new skills? 🎨
10. How might we: create new avenues for senior citizens to feel needed by their community? 🧑 🐰 🎨 😊
- 11. How might we: expand opportunities for senior citizens to get involved and feel purposeful within their local community?**

Robin

It would be game-changing to: help new retirees capitalize on the window between career and retirement to ensure healthy and long retirements.

1. How might we: connect seniors with foster pets? 🐰 🤗
2. **How might we: ensure every senior always has someone... or something... to talk to whenever they need?** 🐰 🎵 😢
3. How might we: do speed dating for new retirees and hobbies? 🤗
4. How might we: make every new retiree try a new sport?
5. How might we: prevent people's loved ones from passing?
6. How might we: ensure that young people are aware of the full consequences of their choices early in life? 🏃‍♂️ 🏃‍♀️ 😢
7. How might we: make everyone develop the habit of an active and social lifestyle from a young age regardless of profession?
8. How might we: make young people choose hobbies and jobs that result in long term active lifestyles in retirement? 🐰 🎵 😢
9. How might we: replace people's loved ones when they die?
10. How might we: make sure every senior has friends who are living active lifestyles? 🤗

Marie

It would be game-changing if we: could ensure that all retirees have supportive communities that facilitate and encourage healthy lifestyles. 🌎

1. How might we: help existing elderly friend groups stay accountable to one another? 🐰 😊
2. How might we: help elderly people learn about opportunities in their area like joining social clubs, planning trips, or signing up for daily activities to add structure to their day?
社会治理 🐰 🚲
3. How might we: create a way for elderly people to form new friendships and join friend groups?
4. How might we: connect more individuals interested in fitness in the elderly community?
5. How might we: make communal physical activity more appealing to those less socially inclined? 🏃 🐰 🌱
6. How might we: make those who work out together feel more like a team? 🏃
7. **How might we: learn a team sport that is geared towards elderly people with less physical mobility and greater physical risk? 🏃**
8. How might we: leverage telecommunications to connect elderly fitness peer groups separated by distance?
9. How might we: make fitness groups more accessible and inviting for elderly people?
社会治理 🐰 🌱
10. How might we: make existing peer fitness groups more inviting to those elderly without a cohort? 🐰

<p>A app with digital pets that older adults can take care of</p> <p>Brendan McLaughlin</p> <p>A</p>	<p>A dedicated real-life friend for a elderly adult to hang out with and talk to</p> <p>Brendan McLaughlin</p>	<p>Location-based tinder-esque friend-finder</p> <p>Ethan Helman</p>	<p>online professional therapy for elderly people who are experiencing loneliness</p> <p>Ethan Helman</p>	<p>connect elderly people from across the globe so that they might meet people from different cultures</p> <p>Ethan Helman</p> <p>A</p>	<p>A platform that connects elderly citizens with pet owners (e.g. an elderly person whose dog died recently and they are too old to get a new dog)</p> <p>Adam Berry</p> <p>A E</p>	<p>AI-chat bot that will talk to elderly citizens about things that they are interested in e.g. family, sports,</p> <p>Adam Berry</p>	<p>A platform that connects the elderly with an individual who stops by to deliver them meals / chat.</p> <p>Adam Berry</p> <p>E</p>
<p>An app where an older adult can go on it and immediately start talking to a real person on the (audio or video) whenever they want</p> <p>Brendan McLaughlin</p> <p>E</p>	<p>Establishing better connections with grandchildren by creating a game that they can play together. the game would simultaneously make the adult stay sharp and maybe make the kids learn new things</p> <p>Brendan McLaughlin</p> <p>A B E</p>	<p>hire someone to "sit and listen" create volunteer opportunities for people to sit and listen</p> <p>Ethan Helman</p>	<p>rent a pet for a day</p> <p>Ethan Helman</p>	<p>leverage class structure for lower-schools to connect elderly people with younger kids</p> <p>Ethan Helman</p> <p>E A</p>	<p>Allow people elderly people to connect (physically or virtually) with others to provide a space to talk about</p> <p>Adam Berry</p>	<p>Online forums (Reddit-esque) for elderly citizens to talk about subject-related things e.g. the news, powerball, cars, 1950s politics, etc.</p> <p>Adam Berry</p> <p>A</p>	<p>Anonymous app where elderly people can tell stories from their youth.</p> <p>Adam Berry</p> <p>B</p>
<p>.... talk to AI</p> <p>Brendan McLaughlin</p>	<p>[something] that helps elderly get real pets and helps them take care of them</p> <p>Brendan McLaughlin</p> <p>B</p>	<p>give prisoners reduced sentences if they volunteer to sit with old people</p> <p>Ethan Helman</p> <p>E</p>	<p>for anyone that wants to rant about something, elderly people can hop online to sit and listen...might be entertaining...never know what someone is going to say!</p> <p>Ethan Helman</p> <p>E</p>	<p>Connects to animal shelter -- elderly like dogs</p> <p>Ethan Helman</p> <p>A</p>	<p>Mentorship based platform where elderly citizens can advise younger people on being successful in their respective career.</p> <p>Adam Berry</p> <p>A E</p>	<p>An AI chatbot that is supposed to just some sort of virtual assistant to help elderly with tasks that are now hard BUT the outcome is that they feel less lonely</p> <p>Brendan McLaughlin</p>	
<p>a platform that helps elderly launch micro businesses like a tea shop ... like a more mature lemonade stand ... all the business infra is handled by platform so its super easy for them</p> <p>Brendan McLaughlin</p> <p>B</p>							

App where elderly can contribute to forums and things online

Brandon McLaughlin

service that allows elderly to complete tons of user interviews

A

Brandon McLaughlin

Tax Hacks to the young

Brandon McLaughlin

Create partnerships between senior homes and volunteer organizations like soup kitchens to create better pipelines for volunteering opportunities

Ethan Helman

B E A

Have elderly people help get younger individuals registered to vote...participation in democracy!

Ethan Helman

E A

Have physically capable elderly individuals volunteer to help those in more critical care situations

Ethan Helman

A platform whereby elderly citizens can volunteer for particular causes that interest them.

Adam Barry

B

A space where elderly citizens can offer their services freely to individuals who seek those services e.g. asking for a knitted jumper, ceramics, baking, mechanical expertise, etc

Adam Barry

A E

Connecting elderly citizens to those who are less fortunate and allowing them to provide services, help them with certain things, etc.

Adam Barry

For the places that senior citizens already go have them be able to volunteer there

Brandon McLaughlin

App that helps senior citizens learn about volunteering opportunities

Brandon McLaughlin

Have elderly citizens do more work with schools so as to get them to interact with younger individuals more

Ethan Helman

Leverage affinity for gardening activity to help maintain public parks - ie. plant trees, maintain gardens, etc. through community-based landscaping

Ethan Helman

B E A

OOoooc imagine if it was like a Pokemon GO type of thing where they go from task to task to complete them all

Brandon McLaughlin

Helping elderly citizens host yard sales or events that give them purpose to clean out their house (my granny is a hoarder so this would be great for her).

Adam Barry

A E

Work at farmers market

Brandon McLaughlin

Offer up wisdom to the youth

Brandon McLaughlin

Leverage the participation in religious organizations to supplement learning for younger kids

Ethan Helman

Connect senior homes with orphanages / foster homes...elderly individuals who lost loved ones with children without families

Ethan Helman

E

Classes where elderly people teach young kids very basic things

Brandon McLaughlin

Classes where elderly people teach young kids very basic things

Brandon McLaughlin

