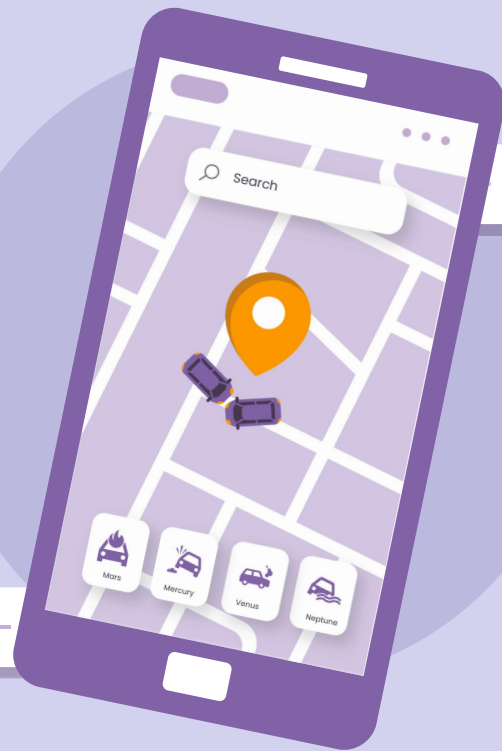


Needfinding in Older Adults' Mobility Team Pluot

Janice Teoh, Brent Ju, Jenny Huynh, Maria Wang



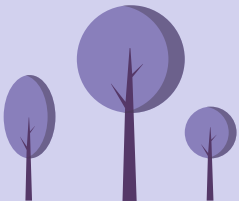
+ some other deliverables:
chrome-extension://efaidnbm
nnibpcajpcglclefindmkaj/[https://hci.stanford.edu/courses/
cs147/2024/au/assignments/A
ssignment_01_Needfinding.pd
f](https://hci.stanford.edu/courses/cs147/2024/au/assignments/Assignment_01_Needfinding.pdf)

Presentation Guidelines

One team member will present in studio. There will be 10 minutes for the presentation and an additional 5 minutes for questions and feedback.

Expected Content

1. Intro
 - a. Team members
 - b. Problem domain and why/how you chose it
2. Needfinding methodology
 - a. Participants: Why were they chosen? Why are they appropriate? How were they recruited/compensated?
 - b. Where were the interviews conducted?
 - c. Who was your “extreme user”? In what axis are they extreme?
 - d. What did you ask?
 - e. Team member roles for each interview
 - f. Apparatus – any equipment/software used (transcribing, etc.)
3. Interview results
 - a. Pictures and relevant artifacts
 - b. Key quotes and surprises
4. Analysis
 - a. At least 1 empathy map; highlight/emphasize the most interesting findings
 - b. Key insights: observations and inferences
5. Summary
 - a. Key learnings
 - b. What's next?
6. Appendix



Introduction

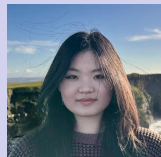


Brent Ju

BS, CS (AI)

MS, CS (Also AI :/)

Interests: music, exploring the outdoors, cooking, fashion

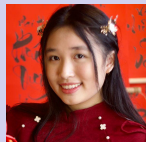


Maria Wang

BS, Design (AI + UI/UX)

MS, CS (HCI)

Interests: sustainability, drumming, art/music, poetry, concerts



Jenny Huynh

BS, SymSys (HCI)

Interests: video editing & content creation, art



Janice Teoh

BS, CS (HCI)

MS, CS (AI)

Interests: art, figure skating, coffee, fashion

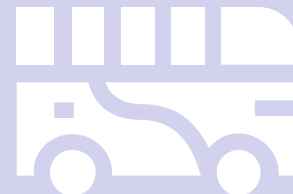
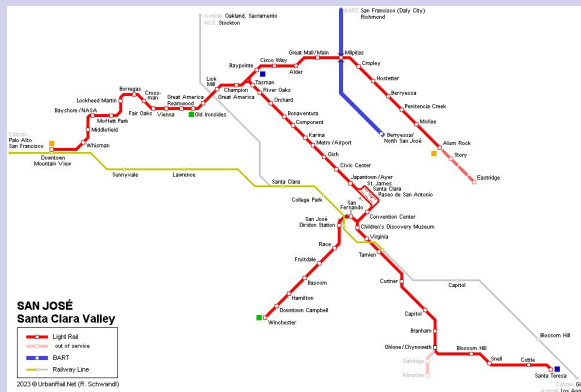
Problem Domain: Mobility for Older Adults

Why

Older adults often don't drive themselves due to their levels of physical and/or cognitive abilities. They often rely on public transportation for travelling.

What

Transportation, independence and freedom, infrastructure, and other aspects of the environment that would impact how older adults get around to their destination.



Participants– Introduction

R

- Age 70+
- Family background from South America
- Occasionally uses public transit but mainly gets rides from his friends

J

- Age 70+
- Family background from South America (Chino)
- Occasionally uses public transit to go to SF (Caltrain + Bart)
- Mainly uses a car

A

- Age 65+
- Immigrated from Africa at least a couple years ago
- Physician
- Takes public transportation often for both leisure and for travel

B,C

- Older couple
- Originally from Boston, MA but moved to Florida
- Frequently took public transit in Boston but less available access in Florida



Participants

Extreme Users:

- Older adults with mobility challenges (e.g. needing a wheelchair, limited vision, etc.)
- Older adults with limited income
- Older adults with limited transportation options.



The Interview

Where

Local Cafe in San Jose Japantown



Tools Used

Smartphone for recording audio
iPad, laptop, pen/paper for
note-taking
IPad for participants to sign
consent forms

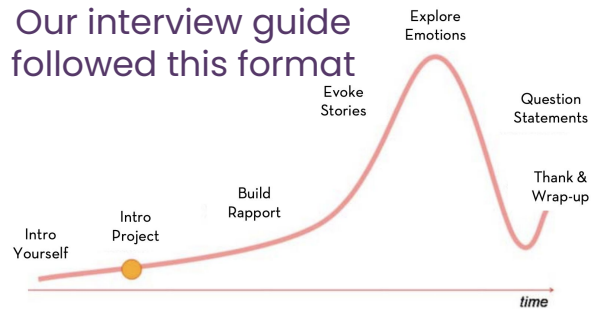
Interview Guide:

We created an interview guide (see Appendix) for example questions. We first got to know the participant then asked open-ended questions in a conversational format.

Team Member Roles

We took turns notetaking and interviewing.
Maria & Jenny interviewed J and R, both asked
questions and took notes.
Janice & Brent interviewed 3 anonymous
individuals, took turns note taking.

Our interview guide
followed this format



Anonymous

J & R

- Raul - illustrator, fashion photographer, muralist, fine painter, in 70s
- Joe - also 70s, retired, worked in corporate, mental health, byline for 18 yrs in a small newspaper in the area
- complicated day, with good company (Joe)
- Joe: beautiful day, good to be around people who are creative and expressive, try to be aware about what's around me
- Joe: well traveled, like to hear diff viewpoints on the world
- Raul: after finishing a San Jose mural, would like to travel Europe with Joe

- Joe drove here, picked Raul up
- traffic is crazy
- friend prefers not to have a car bc crazy drivers
- can't see himself without owning a car
- many incidents of people getting killed on the street
- car for independence, deal with the costs, better than
- hour to get there and hour to get home, that's a day

- Raul doesn't have a car, wants to have quality time, time is extremely important so time important, wants a car after he gets paid for a mural

① Be aware, rather know
diff ppl what's
travel going on

- minor car wreck
- car at shop
- take bus bc
can't call friends
- have car we live
in
- dangerous
San Jose
- perception
- minors
with transphobia

- Meet through a producer, Arnes
drove car and picked up
crazy traffic, picter not have
car, easy to step on
and/or
- looked a little
- called
NVA
- phone
number
terminology
Car insurance

photo taking
Barb
crashed on street
70s
rehab
- corporate
- mental health
- newspaper

seo grants
1/2 dozen times
a year
music NSF
Jazz club

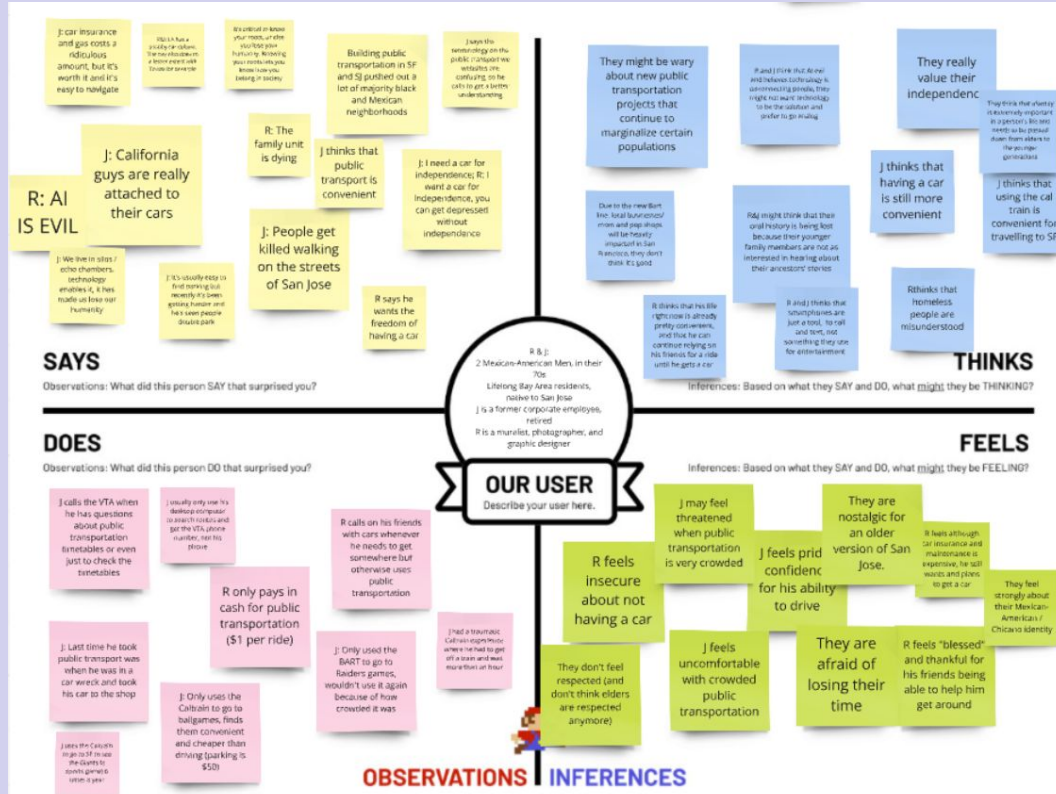
② Have all over the
world
travels to Europe
Swing song

- Transport is convenient
- want quality time
time = important
2 weeks ago
guy
talks to
homeless
cash
grandma
low mobility
depression
consuming

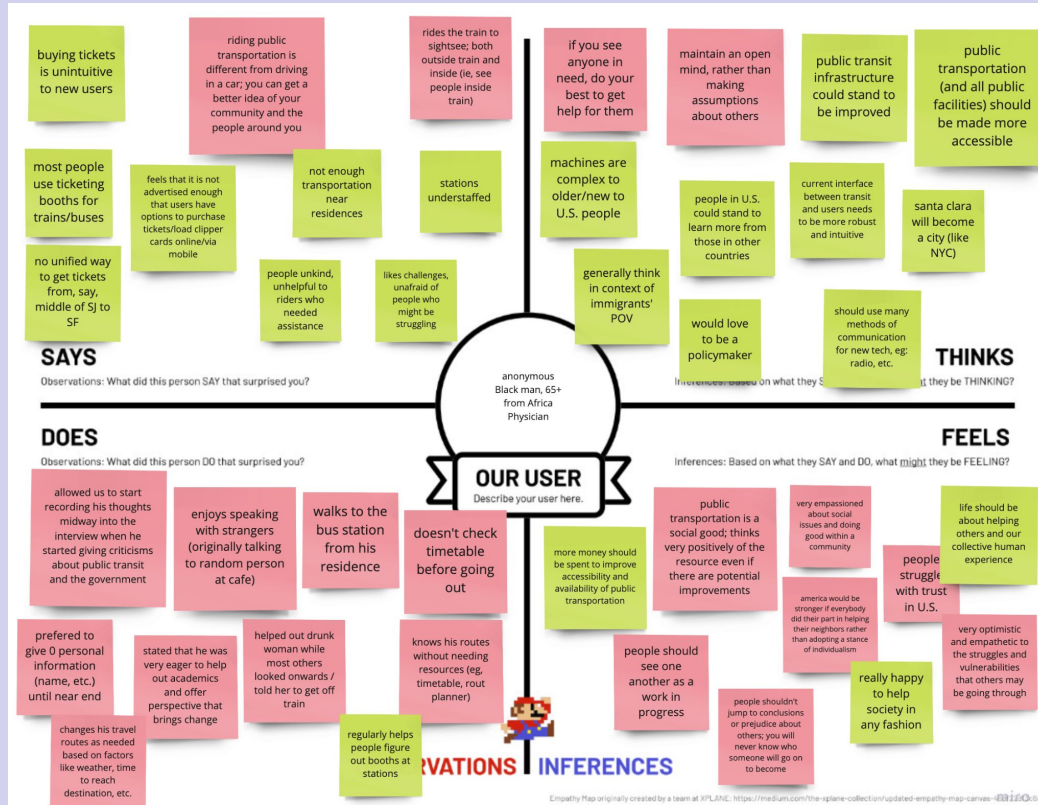
not with
calm
not as
much
70s
retired
nannance
insatiable
move you
move tools
- Want freedom
or
- Handicap
- Shadio at house
fine arts

* well-educated in
t' done it in many
off
phone number, was

Empathy Maps: J & R



Empathy Maps: A



Key Quotes/ Surprises

"Car insurance and gas costs are a ridiculous amount, but it's worth it and easy to navigate"

"There should be something that you read in the train. If you see something or someone in need, help them out."

"Outward appearances are deceitful. They could be a PhD student, a doctor, etc., just going through a tough time—but others might assume that they're a criminal, drug abuser, etc."

AI IS EVIL!!!

Interviewee stated the current system should be completely overhauled and replaced with something more robust

"The machines are really complex to people from outside of the country or elderly individuals. They often have to ask for help a number of times."

Key Learnings & Analysis



Anti-Tech

Some participants were apprehensive about the advancement of AI and ubiquitous technology.



Car-Centric

Some participants primarily use cars to get around San Jose and the Bay, whether it was borrowing friends' cars, their own cars, or ride-sharing.



Oral History

A key emphasis of one of our interviews was the importance of oral history and passing down knowledge across generations. This was directly related to their gripe with new technology.

Key Learnings & Analysis



Public Transport

Participant would not necessarily take public transportation just to travel from point A to point B, but would also do so to 'sightsee'/see more of the Bay Area



Social Good

One participant cited that they wished others would have more empathy for individuals he sees struggling (with drug abuse, for e.g.) when riding public transportation



Technological Barriers

Older adults are not familiar to apps, and often use desktop website and phone call to contact for assistance and times Older adults also struggle to operate kiosks to buy tickets

Summary: What's Next?



Dive Deeper: Accessibility

Dive deeper into areas where the current interface between riders and public transit may be unintuitive and can be improved.



Dive Deeper: Other Learnings?

The advancement of technology taking away the value of oral history was very important to some of our participants; we could continue exploration in this area.

Appendix

Interview voice recording (J & R)

<https://drive.google.com/file/d/1rM42XsTIMalifN5GoccHsPn9atk5vTf8/view?usp=sharing>

Consent Form (J & R)

<https://drive.google.com/file/d/1w693vmifd-zJ7FhtmeJGAYiAK03LcyW3/view?usp=sharing>

Interview Notes (J & R)

<https://docs.google.com/document/d/1fHgccakhACw5BLPlpDw69zrXd8lbqZnxH0IgN3fgPZo/edit#heading=h.w71zkmn68p94>

Interview voice recording (Brent and Janice, Anonymous Male)

Consent Form

Interview voice recording (Brent and Janice, C & E)

Consent Form (C, E)

Interview Guide

<https://docs.google.com/document/d/1NkQ2N8PLbAdzXLgv1s6ba9guOrbBSzyOBaaRySVxjn4/edit?usp=sharing>

