A1: Needfinding

Studio 1, Team Candy Crush

Lianne C, Ethan B, Em H, Clare C

Team Members

Ethan B

Class of 2025
Major in Computer Science and Digital Health

Lianne C

Class of 2026
Major in Computer Science

Em H

Class of 2025
Major in Computer Science

Clare C

Class of 2024
Major in SymSys
Coterm in CS

Dementia Prevention

Participants

Ivy

85-year old resident of Santa Clara

Kevin

30-year old grandson w/ family history of Dementia

Lily

Social worker in Santa Clara Senior Centre

Dean

26-year old w/ family history of Dementia

Note: all names have been changed to protect interviewee privacy

Extreme User

Ivy

Age range for susceptibility for dementia

However extremely physically and mentally active, no signs

Questions

Could you tell us about your **daily schedule?**

What aspect of your **day-to-day** do you believe keeps your mind and body **healthy**?

Is dementia a **worry** for you? How/have you taken steps to try and **prevent** its onset?

What is your personal opinion of **technology** / your relationship with technology?

Roles and Equipment

Audio recording and transcripts

Trade-off questioning, one member for note-taking

Some no audio recording, transcript level notes

Results

"You can't just let your problems **swallow you up**- you can't just **sit with them**" - Ivy

"Coming here to **socialise** is certainly one of the reasons why the seniors stay so **mentally healthy**" - Lily

"My great-grandchildren still finish all the food off their plates, because **that's what *Uroma* said to do**" - Ivy

"I live every day like it is **my last**" - Ivy

"If you **sit in a room all day** and waste away, that is how that [dementia] happens" - Ivy

"**Patterns and scheduling** are important for dementia prevention. We host dance classes, puzzle games, anything with **repetition and memorisation**" - Lily

Results

"They weren't particularly well off…and in Filipino culture…you **don't** bring family members to institutionalized settings, even if it's a nursing home, because **it's seen as your duty to take care of your loved ones**" - Kevin

[opinions on technology] "Tech is a tool to connect people, especially over long distances, but it **shouldn't be a replacement** for people to connect… it should be as non-invasive as possible" - Kevin

"It was **well-meaning but misguided, not out of cruelty** but…when they slept they would tie a belt to [the grandfather] and the son would sleep next to him, so he couldn't wander off" - Kevin

September 2024

HEALTH & WELLNESS

Health & Wellness Program

We provide free assistance to find resources, apply for programs, understand health information, apply for utility discounts, figure out a long-term care plan, and problem-solve issues that are making life challenging. We're available by phone, email, or in-person appointments. Monday - Friday 8 am to 3 pm

Jodi Bisely, RN, Monday - Wednesday, 9am—3pm
(408) 615-3175 jbisely@santaclaraca.gov

Larisa Polozova, RN, MMS, Wednesday - Friday, 9am—3pm
(408) 615-3797 lpolozova@santaclaraca.gov

Mallory von Kugelgen, RN, Health & Wellness Coordinator, Monday—Friday, 9am—3pm
(408) 615-3180 mvonkugelgen@santaclaraca.gov

Healthy Aging Month and Fall Prevention Awareness Week

September is a time to celebrate the positive aspects of aging and to recognize that we, older adults, can take charge of our well-being by making healthy choices. One way to do that is to make sure our homes are safe, our bodies are strong, and we do what we can to prevent falls. Check with our Health & Wellness Program RNs for home safety checklists, resources in the community for home modifications/repairs, and easy ways to improve your balance, range of motion, and endurance. Our assistance is free and we have appointments available to talk!

Howdy Packet

Each month, the Health & Wellness Program staff curates a collection of current health information and resources, the Senior Center newsletter, an activity page or two, and event flyers. Our mailed packet is available to those who are homebound, or who do not use the internet. For all other members, we are happy to email you a soft copy. If you are interested in being on our mailing list, please contact Larisa Polozova, RN—Health & Wellness Program, (408) 615-3797 lpolozova@santaclaraca.gov

For those interested in accessing the Howdy Packet online, it's now available on the Health & Wellness page of the Senior Center at https://www.santaclaraca.gov/our-city/departments-a-z/parks-recreation/community-centers/senior-center/health-wellness

8

Empathy Map

SAYS

Observations: What did this person SAY that surprised you?

- 85-years old and very healthy
- Lived through World War II, immigrated from Germany
- Lived alone for the past 30-40 years, husband passed in Vietnam
- Raised 4 children on her own
- Extremely structured lifestyle, makes bed every morning, cooks for herself, etc.
- Visits the senior centre every day to exercise, read, and socialise
- Great-grandmother, still meets family once or twice a year
- Very insistent on values, great-grandchildren still hold onto lessons of discipline, etc.
- Immigrated to the U.S. without knowing English, but still managed to form a community of friends
- Strong positive outlook, despite heart and kidney problems
- Always finishes her food, reflects on food shortages in WWII

THINKS

Inferences: Based on what they SAY and DO. what might they be THINKING?

- Knows that we are new to this- Grandmotherly instincts – reassured us by smiling and encouraging our questions
- Thought we were impressionable, constant life lessons and opinions on the new generation
- "Dementia not applicable to me"- associated with other parties
- Doesn't want to think about Dementia - positive outlook, brief answers about any ailment
- People who get Dementia may owe it to their habits, not socialising
- Believes that cultural values and upbringing play into health and success
- Current generation in U.S. has not dealt with true hunger, so lose appreciation for food
- Current generation has lost discipline, scheduling
- Don't let your problems consume you, continue pushing forward
- Wants to live every day like her last, enjoy life to the end

Ivy
85-year old,
no dementia

OUR USER

Describe your user here.

DOES

Observations: What did this person DO that surprised you?

- Maintained very strong eye contact throughout the conversation
- Valued appearance, outfits well-thought out
- Laughed when talking about the future generation
- When speaking about difficult past, maintained steady tone, no rushing
- Before the interview, she was on her phone, tech literate
- Very open to interview, no signs of nervousness, happy to talk
- Uses hand gestures and nodding
- Looked at both interviewers but would primarily direct to attention to the asker of the question
- Did not feel the need to fill silence, happy to let us drive the conversation
- Storyteller, always to happy to add more detail, no one-sentence answers
- Smiled throughout the conversation, but during somber moments, straight face

FEELS

Inferences: Based on what they SAY and DO. what might they be FEELING?

- Enjoying the conversation, unrushed and long answers
- Pride in her values and her family
- Not lonely, socialising
- Pride in herself, in her story and independence
- Happy where she is right now, and that she is able to stay in one place (moved a lot throughout her life)
- Grateful to her own mother for instilling values
- Not saddened by past, looks to memories as moments of strength or teachings
- Disappointed with some aspects of current generation
- Humouring us, young and impressionable students, maybe funny
- Grateful for her connections and outlets for socialisation

OBSERVATIONS | INFERENCES

Empathy Map

Forced Independence

Strong values passed via history

Looks to the past as a teacher

History led discipline and ultimately health

Pride in herself and her family

Dementia is owed to habits and mindset/ outlook

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OBSERVATIONS | INFERENCES

Summary

Needs

- Facilitate **socialisation** among seniors
- Increased presence of **scheduling** in daily life
- Increased **repetition** and memorisation
- Provide **resources** to people whose family members have dementia

Insights

- Routine and scheduling is essential to **dementia prevention**
- Correlation vs. causation?
- Cultural influence on view of dementia
- The nursing home "solution" does not always work
- Socialisation plays an instrumental role
- Routine **memorization** and games
- Overcoming the tech literacy hurdle

What's next?

- Brainstorming and ideation
- Further interviews
- Research on dementia prevention- how do schedules and routines play a role and how can we harness this?

APPENDIX

SAYS

Observations: What did this person SAY that surprised you?

- Has worked at the center for 8 months
- Friends with the seniors (knows them by name, has inside jokes with them)
- Very few cases of dementia at the center; attendees must be able to care for themselves
- Only a few nurses on site
- Helps seniors with tech (downloading apps) and some movement
- There is some talk of dementia (some seniors are fearful) but minimal
- Senior care is very important in dementia prevention
- Center holds activities to boost memory (dance workshops, bingo nights, etc.)
- On weekdays, senior center is very packed (lines for gym)
- Gives resources for other facilities and dementia care
- Seniors often take notes to remember things

THINKS

Inferences: Based on what they SAY and DO, what might they be THINKING?

- Center actively helps with dementia prevention
- Routine and scheduling is important part of dementia prevention
- Focus on step-by-step activities (like dancing)
- Socialization is a motivator for seniors to come to center
- Health of senior correlates with visiting the center regularly
- Seniors are afraid of dementia but don't like directly voicing their fear
- Missing resources at the center, so they have to refer some seniors to specialists
- Center is a good resource for families of the seniors
- Seniors are kind and treat her and other staff well
- Seniors can be cliquey sometimes
- Seniors who go to the center are very independent (they get to the center on their own)

Lily

Santa Clara senior center staff (college student)

OUR USER

Describe your user here.

DOES

Observations: What did this person DO that surprised you?

- Was closing the facilities as we were talking
- Was excited and happy to answer questions
- Eye contact, smiling, nodding
- Eager to help out; got us the resource documents given to seniors
- Waves goodbye to seniors as they leave
- Lively answers despite end of shift
- Spoke about dementia in a lower tone (sensitive topic)
- Very relaxed, leaning against counter when first talking
- Smiled while talking about seniors
- Looked outside at the ping pong tables, checking on the seniors

FEELS

Inferences: Based on what they SAY and DO, what might they be FEELING?

- Dementia is a scary topic around center
- Actually enjoys her job; likes working with seniors
- Capable and knowledgeable of her job
- Fulfilled by her work at the center
- Happy to see others care about seniors
- Proud of the center and activities offered and effect on the community
- Humored by the seniors (for example, laughed when talking about how seniors can still be cliquey in their own age)
- Feels bad for people with dementia and families who have members with dementia
- Feels attached to the seniors
- Hopes that seniors can be healthy and active

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OBSERVATIONS | INFERENCES

SAYS

Observations: What did this person SAY that surprised you?

1. Travelled back and forth between the US the Philippines growing up
2. Has a background in education, primarily linguistics and early childhood education
3. Did a lot of outreach work, he was a missionary in the Philippines
4. He now works in social work / a nonprofit that deals with mental health issues, working with people with schizophrenia, bipolar, and other serious mental illnesses
5. When he met with his grandmother after she had developed dementia, it had been 14 years but she still remembered him
6. He worked as an informal case worker for a family in the Philippines where the grandfather had dementia
7. At one point the family had to tie a belt around the grandfather at night, to prevent him from wandering off and getting lost
8. Said that having care, compassion, and empathy for others is very important to him
9. He said he "made it [his] life goal to run towards pain"
10. His grandmother had dementia and he remembers more of her/her stories than his siblings and cousins

THINKS

Inferences: Based on what they SAY and DO, what might they be THINKING?

1. Very compassionate and thinks of others' struggles when he meets them
2. Thinking about how he can help others
3. Thinking about his grandmother and their memories together, his family
4. *Not* thinking / concerned about dementia–has a very "live life to the fullest" / "it's out of my control" mentality
5. Thinks that he is already doing his best with his lifestyle changes to prevent dementia, although it isn't specifically for that purpose
6. Thinking about his future, how he can take care of himself and his body
7. Thinking about being frustrated in the past when recalling how repetitive it can be when interacting with dementia patients
8. Thinking about work and perhaps his patients
9. Thinking about his teenage/younger adult years, perhaps lamenting his decisions/lifestyle choices then
10. Thinking about the intricacies of his culture / other Asian cultures and their perspectives regarding elder care

Kevin, 30y/o, has family history of dementia

OUR USER

Describe your user here.

DOES

Observations: What did this person DO that surprised you?

1. He maintained periods of eye contact
2. Would also look away for prolonged periods while he was remembering
3. Smiled and generally seemed upbeat during the conversation
4. During serious topics/parts of the conversation, kept a straight face
5. Keeps his phone completely on grayscale, from the backgrounds to even just using apps (using the grayscale accessibility function on iPhone)
6. Gestured a lot with his hands
7. Seemed to want to ramble but would stop to check in as if he was worried he was talking too long
8. Didn't visually look sad when recalling stories of his passed grandmother
9. Made a lot of empathetic noises like 'yeah' or 'mm-hmm' when I would comment/empathize in response to his stories
10. Leaned back in his seat

FEELS

Inferences: Based on what they SAY and DO, what might they be FEELING?

1. Felt nostalgic but still happy when speaking about his passed grandmother
2. Genuinely interested and compassionate for his work
3. Feels that he has a purpose in his work and in his life in general
4. Feels incredible compassion and empathy for others who are struggling
5. Disappointed/sad that he remembers his grandmother more than his siblings/cousins
6. Potentially feels obligated to be the one to honor her memory by telling her stories to younger generation (nieces/nephews)
7. Perhaps apprehensive about his future/getting older because he has made lifestyle changes
8. Proud to have made a difference in so many lives
9. Fulfilled in his choices to do the work that he does
10. Feels faithful to Christianity and trusting/loving of God

OBSERVATIONS | **INFERENCES**

Empathy Map originally created by a team at XPLANE: https://medium.com/the-xplane-collection/updated-empathy-map-canvas-46df22df3c8a

SAYS

Observations: What did this person SAY that surprised you?

1. He's lived in san mateo his whole life
2. Only the women in his family have had dementia
3. His great grandma would occasionally 'blow up' at family gatherings when they would visit her because to her, they were strangers in her house
4. Concerned about his sister, aunt, female cousins being susceptible to dementia later in life
5. "My grandma took it pretty well, if I were in her position and was missing my mom in that situation, I definitely don't think I would be as calm"
6. His grandma has some tech literacy, she used to do the crossword on the newspaper everyday but now uses a computer
7. His grandma was so obsessed with 'Farmville' that she would log into his Facebook account to send herself gifts, invite his friends, etc so he had to change his password
8. His great grandma immigrated from Italy when she was a child, and his family has also stayed based in San Mateo ever since then
9. His great grandma went to college and worked a desk job, but still maintained traditional values like women doing the cooking
10. His grandma loves to take photos of things, to the point Where she has many photo albums and multiple hard drives

THINKS

Inferences: Based on what they SAY and DO, what might they be THINKING?

1. Thinks that he won't get dementia because his family told him that only women in his family get it
2. Thinks that with modern medicine there will eventually be more medical support for determining if someone will get dementia or not
3. Doesn't have many concerns or thoughts about his far future
4. Thinks that his grandma is better at technology than most old people
5. Thinks that older people learn how to use technology better through in-person teaching / receiving support from family and friends
6. Thinks his grandma may be developing dementia but it isn't confirmed, just based on his observations of her forgetfulness
7. Wonders if regular actions like going through old photo albums may help "jog her memory" regarding his grandma
8. Wonders what it would have been like to be able to speak to his grandma as an adult, since he was still a child when she passed
9. Perhaps because he seems to value his immediate family a lot, he regrets not connecting more with his older/more distant family
10. Unsure about details of dementia / seems like he hasn't really thought about it or knows about it in detail

Dean, 26y/o, family history of dementia

OUR USER

Describe your user here.

DOES

Observations: What did this person DO that surprised you?

1. Physically very relaxed into his armchair
2. Didn't make a lot of eye contact, mostly looking to the side
3. Rubbed or fidgeted with his beard a lot while he was thinking
4. Put his hands behind his head a lot while leaning backwards into his chair
5. Generally kept a serious/straight face during the conversation
6. Did not seem outwardly very expressive pr emotional when discussing serious personal topics
7. Laughed when recalling tidbits about his grandmother that he thought were funny
8. Spent time thinking about his responses in silence/not rushed to answer right away
9. His posture was slouched when sitting forward in his chair
10. Didn't gesture a lot, crossed his arms when they weren't behind his head

FEELS

Inferences: Based on what they SAY and DO, what might they be FEELING?

1. Feels fond of his grandma, humor at her antics when recalling them
2. Feels proud of his great grandma for being one of the very few women who went to Cal during her time
3. Feels worried for his grandma regarding potentially also developing dementia
4. Happy with his family / lots of love for his relatives and his mom
5. Apprehensive for his mother / scared about what he will do if she develops dementia as they both age
6. Seems like he feels content with living in San Mateo as all his family is close by
7. Critical of his parents / grandparents Facebook usage
8. Feels unconcerned about his chances of getting dementia
9. Feels very comfortable, or maybe comforted, talking about family as he was very physically relaxed
10. Feels nostalgic when recalling memories of family gatherings

OBSERVATIONS | **INFERENCES**

Empathy Map originally created by a team at XPLANE: https://medium.com/the-xplane-collection/updated-empathy-map-canvas-46df22df3c8a