Final Report

CS147 Winter 2022
Accessible Design for Different Abilities
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Team Members

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Problem and Solution Overview

Care home residents often struggle to find community and feel purpose. As they age, new challenges such as inconsistent energy levels and diverse abilities make it difficult to form meaningful connections. SeniorCircle is an app that groups residents of complementary ability and energy levels and assigns them a task that serves an overall community goal.

Needfinding Interviews

In the beginning, we interviewed three people who identified as seniors and learned a lot about what challenges people face as they age. We started by asking some general background questions and it didn't take long for our interviewees to open up about their lives. Some of the most surprising parts were when we heard an interviewee say they play multiplayer Diablo III or when an interviewee teared up over losing a loved one. We decided to make an empathy map for our extreme user Eva who is 98 years old and still physically and mentally healthy. Eva gave us a perspective that seniors want to feel independent even though they may not be able to do everything as they could before.

In the second round of interviews, we decided to focus on how seniors find and engage with a community. In particular, we were interested in why bingo is so popular among old folks. In this stage, we were reminded that old people is a term for many people of many abilities and they can't all be treated the same. Overall our most important insights were:

- Old folks value both surface level and deeper relationships generating the need for multiple avenues to create and maintain relationships.
- Old folks cover a wide range of ability levels causing the need to engage

high and low ability

● Community engagement becomes more difficult as one ages.

POVs and Experience Prototypes

After finding our needs, we moved on to making POVs which are a more informed reframing of the problems we found. From the POVs we made the How Might We's which got us closer to a solution but still kept the problem open. Next we brainstormed many solutions and conducted experience prototype tests. In this part, we tested key assumptions that if wrong our product would fail. Overall we took the information from our interviews and thought about it and tried to make it more tangible.

POV #1: Eva

● We met Eva, a 98 year old who is in great physical health, mentally sharp, and lives in a care home.

● We were surprised to notice Bingo is the most popular activity by far, which Eva hates.

● We wonder if this means some older people want/need simple, low-intensity activities.

● It would be game-changing to connect folks of different ability levels.

HMWs

● How might we create a new hit game like bingo?

● How might we encourage old people to try a new activity?

● How might we involve high-ability folks in the planning/helping for low-ability folks?

POV #2: Susan

● We met Susan, a 78 year old who volunteers extensively in care homes and in her community.

● We were surprised to notice her emotional connection to the people she helps.

● We wonder if this means caregivers feel an emotional connection to those they

help (and vice versa?)

- It would be game-changing to amplify the old person / caregiver connection.

HMWs

- How might we provide more opportunities for caregivers to interact with their caretakers in fun activities
- How might we have caregivers and old folks learn more about each other?
- How might we make opportunities for old people and caregivers to meet?
- How might we make caregiving feel less like being a servant and more like being a friend?

POV #3: Susan

- We met Susan, a 78 year old who volunteers extensively in care homes and in her community.
- We were surprised to notice her energy to be involved in the
- community at her age.
- We wonder if this means more people want to actively have a positive impact on older people's lives but don't know how and/or don't have time.
- It would be game-changing to provide clearer ways to actively have a positive impact on older people's lives and help people find time / incentivize people.

HMWs

- How might we involve old folks in actively having an impact on other people's lives?
- How might we create a local community volunteer/engagement opportunity to support old folks?
- How might we make older people connect with young people they don't know or are not related to?

From our POVs and HMW we brainstormed multiple solutions. These are the three we decided to move forward with and test in experience prototypes.

Solution 1:

How might we make a care home fee like a co-op or a dorm? → A care home where people pitch in to different areas and everybody does something. The assumption we wanted to test for this solution is that people in the care home would want to do tasks in this style. To test this we had a phone with a daughter of a potential resident introducing the system. We found out this was heavily dependent on the person and we think this validated our assumption because people who like this would come and people who don't would not come.

Solution 2: How might we make the process between thinking "I want to help older people" to actually showing up quick and easy? → An easily accessible one-page document that clearly outlines the necessary steps to get involved. The assumption we wanted to test was that this format is helpful. We had a zoom call with a future mock volunteer where they thought it was helpful but we needed to take extra considerations to make it readable for all abilities.

Solution 3: How might we make the process between thinking "I want to help older people" to actually showing up quick and easy? → An app where old folks post things they need help with such as cleaning the yard and someone comes to help them. The assumption we wanted to test was that older people would be comfortable to get help from people they don't know. For this test we had a zoom call with an elderly person and gave them a quiz of hypothetical situations. We learned that seniors mostly already have people they trust and don't like to get help from new people which broke our assumption.

Design Evolution

After reevaluating our assumption we brainstormed multiple solutions and chose one based on the information from our experience prototypes.