CSC425 Deliverable 2: User Research & Problem Definition Submission Template

Student Name: Tucker Jones
Branch Name: Tucker
Date Submitted: August 31, 2025

Target User Group

Elderly People who live alone
Primarily those with limited mobility, family contact or digital literacy.

Problem Description

Many elderly people living alone have many different struggles to face from social isolation, health risks, immobility, limited access to support services, and they are more susceptible to internet scams. All of this can lead to poor mental health, increased risk of accidents, delayed emergency response and financial crises. There is plenty of technology out there to help the elderly, but many cannot access these resources.

Evidence of the Problem

- *According to our report, 57% of seniors feel lonely. Seniors who are divorced or widowed have a higher rate of loneliness (63%), but even those in relationships feel lonely. More than half of married seniors (53%) and seniors in a relationship (50%) reported experiencing loneliness.* — Medicarefaq.com

- According to the AARP (2024), The amount of money victims lose through fraud increases with age, partly because older people tend to have more to lose. The FTC found that among the victims who included their ages in their complaints, adults in their 70s reported losing a median of $1,000, compared with a median of about $417 reported by those in their 20s

- 37% of elderly adults say lack of digital skills prevents them from fully benefiting from new technology - Elderly And Technology Statistics Statistics: Market Data Report 2025

"How Might We" Statement

How might we design solutions that help elderly individuals living alone learn to access the resources around them and educate them on potential dangers?

User Persona

Name: Carol
Age: 87
Living Situation: Widowed, lives alone in a suburban home
Location: Murray, KY
Daily Routine: Watches TV, scrolls through Facebook, Shops online, Drinks wine
Challenges:

- No nearby family
- Has had a fall in the past
- Feels lonely
- Struggles to understand technology

Technology Comfort Level: Low (uses a smartphone daily, no home computer)

Ethical Lens Applied

Principle: Right to safety and access of resources

- **Application:** This issue violates ethical principles of dignity and care by allowing elderly individuals who live alone to face disproportionate risks of injury, neglect, and social isolation, particularly when digital tools and emergency services are not accessible or inclusive.

- **Stakeholders Impacted:** Elderly individuals living alone, caregivers and family members, healthcare providers, technology developers, social service agencies.

- **Professional Standard:** Aligns with **ACM Code of Ethics 1.1**: *"Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing."*