

Design Brief

5th of September, 2018

User Group

In regards to the participants/users, we have chosen to design for senior citizens who are cognitively or physically limited due to their age. Whilst not exclusive, we would be targeting the age group of 65 and above based on the research where this age group is where they begin to identify as *senior citizens*.

The personas that we will be utilising involve that of;

1. Comfort Christina

Comfort Christina is reliant on familiarity, comfort and activities that feel habitual to her, at the age of 84, she enjoys seeing family and friends so long as she is completely comfortable. Whilst remaining social, Christina still appreciates her down time watching TV on her sofa, and enjoying a cup of tea. By providing Christina with greater means of accessibility and travelling options, it would not only allow her to expand her social life, it would also allow for Christina to feel more mobile and able with her lifestyle.

2. Analog Allan

Analog Allan is everyone's favourite Grandpa, and although not as 'tech-savvy' as his kids or grandkids, Allans' eagerness to learn is demonstrated through his purchases of smart devices and maintaining contact with his grandkids through multi-player games such as Words with Friends. A proud man, Allan rarely asks for assistance with anything and enjoys being independent, but if only he could accept the help he is provided with!

3. Naive Nelly

Naive Nelly has been independent for 30 years. She's primarily able to care for herself but finds herself missing plans frequently. In 2013 she bought a now outdated cheap android and has found it harder than her old Nokia. After an incident when she lost navigation at her local shopping hub, her family have begun to notice the risks facing her when living independently. Despite this, Nelly doesn't think she needs help and is refusing any offers for aid.

Despite the circumstantial differences between the three personas, the overall intention with our design solution remains the same and proactive alongside one another.

Problem

We will solve the problem of accessibility as we've concluded that it's the most important factor when attempting to address social fulfillment, maintenance of mental and physical health and feelings of empowerment and self sufficiency.

Inevitably, senior citizens will lose the ability to walk, drive and self-manage and as a result will have to severely limit their access to the outside world. Between this point of degradation and able-health lies a period of time where access is dictated by familiarity and convenience.

Strategy

To provide a solution we must first:

1. Understand what/where senior citizens want to access
2. What are the characteristics of senior citizens' preferred mode of transport
3. What characteristics of user interfaces do senior citizens find intuitive

Our Vision

Our mission and vision is to provide a more convenient and easier to use service for senior citizens to increase accessibility providing a better quality of life. We will do this by introducing technology and transportation as a '*Helpful Friend*'.

Vision Metaphor

'Helpful Friend'

With our accessibility mission for senior citizens, we want them to feel as if they are travelling with a *Helpful Friend*, who is happy to help out wherever possible however, still respects their independence when providing aid.

Justification of Vision

Through our vision we aim to provide greater accessibility for senior citizens aged 65 and above and provide them with a '*Helpful Friend*' with which they will feel comfortable to gain assistance and improve their day to day life by having greater access to destinations, locations and social activities.

Our Key Findings (Data from user research)

- 1) General findings
 - a) Wants to feel empowered
 - i) Able
 - ii) Self-sufficient
 - iii) Independent
 - b) Are self conscious
 - i) Of being a burden
 - ii) Their appearance
 - iii) Their ability to provide for self
 - c) Are prideful
 - i) Will refrain from requesting aid from others
 - ii) In denial of their degradation
 - d) Have lower physical and mental endurance
 - e) Anxious of the unknown (familiarity)
 - i) Threat to their fragility
- 2) Problems with current solutions

- a) Public transport not familiar enough
 - i) Can be beneficial with spontaneous chatter
 - ii) Complex system and scheduling (especially in Korea)
 - iii) Constantly changing services (maintenance)
 - iv) Hard to stay informed unless tech-savvy
 - b) Public transport not convenient enough
 - i) Walk to bus stop, walk back
 - ii) Missing and having to walk a stop is a big deal
 - c) Public transport is not comfortable enough
 - i) Getting on and off in short period of time
 - ii) Typically get a seat but the seats themselves aren't comfy
 - d) Retirement home shuttle busses are not affordable
 - e) Cars have a time limit
 - f) Getting friends and family to drive is inconvenient (but rewarding when possible)
- 3) Lifestyle characteristics of senior citizens
- a) Some SCs are happy to help others
 - b) Prefer face to face interactions
- 4) UI Findings
- a) Feel overwhelmed by variety of functions on devices like mobile phones, don't make attempt to learn the functionality [Interview 1: Anne: near end.

Our Design Criteria

In regards to the design criteria we wish to follow, in order to grasp which components are ranked higher than others, they have been split into *must have*, *should have*, & *must not*. These specifications will ensure the most salient aspects will be presented in our solution. *Quality over quantity* of features.

Emotional

Must (Primary):

1. Make senior citizens feel in control
2. Make senior citizens feel safe
3. Allow them to feel empowered and independent
4. Address their anxieties related to transportation

Should (Secondary):

5. Feel like the service 'gets' them
6. Be a joy to use

Must Not:

7. Must not make our users feel as if they are a charity case
8. Must not let users feel scared
9. Make users frustrated
10. Make users annoyed
11. Make users feel lost

Usability

Must (Primary):

- Be intuitive and familiar [9, 10]
- Clearly communicate it's functionality [9,11, 1, 2]
- Language neutral interface through use of visual cues [11]

Should (Secondary):

- Be personalized to user's needs [5]
- Available for all platforms/devices
- Aesthetically appealing [6]

Must Not:

- Overwhelm user with information or features [9, 5]
- Must not *repulse* users due to unfamiliarity [10, 9]

Features

Must (Primary):

- Allow users to plan trips to a destination [1,3]
- Allow user to check time of arrival [1,4, 11]
- Allow users to check progress of trip [1, 4, 11]
- Allow users to travel with friends [6, 2]
- Allow users to stop in the case of an emergency [1,2,4]

Should (Secondary):

- Be able to save frequently travelled trips [5, 8]
- Expose sensor information [2, 8]

Must Not:

- UI crashes

What do we want to Achieve...?

It's core we will use the design criteria outlined above to design a service that will provide a more convenient, efficient and comfortable method of accessing the amenities and social events that senior citizens want to access. To achieve this we will:

- 1) Perform some crazy, anything-goes, ideation.
- 2) Filter our ideas by the viability of autonomous vehicles.
- 3) Mix and combine our ideas until we have a few, interesting, viable solutions.
- 4) Storyboard the use of our favorite ideas. (3+)
- 5) Build paper prototypes for our favorite ideas. (3+)
- 6) Evaluate these paper prototypes with 8 users
- 7) Interpret our findings, make changes, and pick the most promising concept
- 8) Flesh out the main concept into:
 - a) User flow
 - b) Wireframes
 - c) Interactive low-fi wireframes

We not only want to develop the technological aspects of this design brief, more so, we wish to **empower** and promote healthy **independence** and **wellbeing** amongst senior citizens.

