

20/20 Thanks


Project Installment 2: Family Planning

Our specific target group is someone with moderate dementia (alzheimer's) that has the most common form of memory loss (short or long-term memory loss), and is limited in their abilities but do not require constant assistance and supervision. The goal of our self-driving car interface is to improve the safety of people with dementia that are currently driving and allow sufferers that are no long able to drive the ability to become more independent. We expect our target user will be someone approximately 3 years after diagnosis since one study revealed that 50% of people 3 years after diagnosis no longer drive (Driving and Dementia: A Review of the Literature), but they are still living somewhat independently.

1. Data What's: Things you need to find out from your data (as in Figure C.3)

| Category | Personal Interview & Research | Academic Article | Data Found Online | More Data Needed |
|---------------------------------------------------------------------------|-------------------------------|------------------|-------------------|------------------|
| The current state of driving with dementia ✓ | | | | |
| Can people with dementia effectively drive cars by themselves? | | | Check | |
| How many people keep driving after being diagnosed dementia? | | | Check | |
| What are common problems for people with dementia completing daily tasks? | | Check | Check | |
| What are the common problems | | | Check | |

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| people with dementia have when driving? | | | | |
| Information about self-driving technology ✓ | | | | |
| What functionality of self-driving cars can best help those with dementia? | | | Check | Check |
| What is the most efficient way to display data for those with memory issues? | | | Check | Check |
| Attributes of people with dementia ✓ | | | | |
| Does dementia primarily create long-term or short-term memory issues? | | Check | Check | |
| What is the most common form of dementia? | | | Check | |
| Is there existing software designed for people with dementia? | | | Check | Check |
| How frequently do people with dementia forget something? | | Check | Check | Check |

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| How long do people with dementia remember something? | | | Check | |
| How do people with memory issues or dementia learn differently from mainstreamers? | |  | Check | |

2. Data Where's: Sources that you hope to read to find those things out (as in Figure C.4)

| Category | Description and link | Date | Author | Source # | Incorp. Into Personas? |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------------------------------------|----------|------------------------|
| Driving with Dementia | Driving and Dementia: A Review of the Literature https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3292210/ | 2004 | Brown LB, Ott BR | 01 | |
| | Safe Driving for a Lifetime https://www.thehartford.com/sites/the_hartford/files/cmme-crossroads.pdf | 2015 | The Hartford Financial Services Group, Inc. | 02 | |
| | Dementia and driving: screening, assessment, and advice http://www.sciencedirect.com.ezproxy.proxy.library.oregonstate.edu/science/article/pii/S0140673605662149 | 1996 | D O'Neill | 03 | |

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| Information about self-driving technology | In-vehicle technology for self-driving cars: Advantages and challenges for aging drivers https://dspace.mit.edu/openaccess-disseminate/1721.1/105917 | 2014 | J. Yang | 04 | |
| | How UI/UX Design Will Map The Future Of Self-Driving Cars https://www.fastcodesign.com/3052738/how-ui-ux-design-will-map-the-future-of-self-driving-cars | 2015 | John Brownlee | 05 | |
| | Waymo, the google self-driving project https://waymo.com/tech/ | 2017 | Google Inc. | 06 | |
| | Here's Your First Look at Tesla's New Autopilot and UI https://www.wired.com/2016/09/tesla-software-version-8-autopilot-user-interface/ | 2016 | Jack Stewart | 07 | |
| Attributes of people with dementia | What Is Dementia? https://www.alz.org/what-is-dementia.asp | 2017 | Alzheimers Association | 08 | |
| | The Critical Importance of Assessing Attention in Older Adults with Dementia https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3571625/ | Nov. 2012 | Kolanowski et al. | 09 | |

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| | Dementia Signs and Symptoms https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589935289&section=Signs_and_Symptoms | N/A | American Speech-Language-Hearing Association | 10 | |
| | World Alzheimer Report 2012 https://www.alz.org/documents_custom/world_report_2012_final.pdf/ | 2012 | Nicole L Batsch Mary S Mittelman | 11 | |

3. Data When's (Action Plan for all things data): A schedule of the data planning/collection/organization parts of Family planning and Conception/gestation. With real dates so that you can make these deadlines.

| Phase | Activity | When Completed | Related Project Milestones |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Family Planning | <p>Distribute specific work to core team members.</p> <p>Search OSU library for peer-reviewed journals about dementia and self-driving cars.</p> <p>Find existing examples of software that has been designed for people with dementia.</p> <p>If possible, interview someone that is currently living with dementia</p> | October 20th | <p>The team has been assembled to carry out the construction of the persona.</p> <p>The professor has signed off on the plan and verified that it is both on task and achievable.</p> <p>The plan for implementation of the persona is complete and the team can move on to more in-depth data gathering and organization.</p> |

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| Conception and Gestation | <p>Integrate all the information found by the core team members and pick up the most relevant data.</p> <p>Create a potential persona of someone with dementia based on the data.</p> | October 31st | <p>Enough data points have been collected to assume a reliable average and base all further decisions. Oct. 20th</p> <p>Assumptions and data have been meshed together into a complete pool of resources to pick from. These data pools have been organized into groupings that would indicate personality traits from which the team constructs a persona. Any majorly outlying data points are discarded to clean the data. Oct. 25th</p> <p>Goals are set for completion of the personas to be met later in the lifecycle process. Oct. 31st</p> |

