2b: Design Research Plan

People
Our goal for this project is to design a product that will be used by senior citizens that suffer from mild-to-severe memory loss. Other stakeholders include their families, caretakers, doctors and possible nursing home staff. Gaining access to these target participants may be a bit of a challenge, as policies are often in place to protect the privacy of these senior citizens. Interacting with seniors with memory loss is also a delicate matter. Thus, we have been reaching out to local nursing homes to inquire about conducting a behavioral observation on the interaction between caretakers and residents. If we do not get access to a nursing home we can still interview our friends and family members who are caretakers to get similar information.

Another source that we think will be useful are vendors that sell accessibility equipment to senior citizens. Because we are focused on creating a device that can be used by seniors, it is important that we understand types of forms that would be most effective for the seniors. By talking to a vendor, we will be able to get information on which forms of equipment are more popular and which forms are avoided.

Methods
Primary methods: Interviews
In the case that we do not get access to the seniors themselves, we plan to interview caretakers and vendors. In these interviews, our primary goal will be to get a sense of the methods used by these people to help the seniors in their daily routine. Thus, we will ask questions that put the senior in focus and make sure to clear up any assumptions.

Other methods: Contextual inquiry
Our project will aim to aid seniors with memory loss throughout their daily routine, which is very similar to the job of a caretaker. Ideally, we will be able to observe and ask a caretaker how they do this job as they are doing it. This way we can get a better grasp of the current methods that a caretaker uses, as well as senior reactions to those methods.

Memory Loss - Caretaker Interview Protocol
Background/Context
Thank you for taking the time to speak with me today. My group is currently working on designing a product for assisting senior citizens that suffer from mild to severe memory loss. We would like to gain perspectives from caretakers and those who work with individuals with memory loss on a regular basis.

Feel free to not answer any question if you don’t feel comfortable. Before we start, is it okay if I record this conversation?

Intro questions
- Can you tell us a little bit about yourself? What do you do for a living, and what is your relationship to the individual being taken care of?
- If family member or family friend>
  - How long have you known this person?
- If caretaking is their profession>
  - How long have you been working as a caretaker?
- How long have you been taking care of this person?
  - If not recent>
    - Has the amount of time you spend taking care of this person changed since when you first started?
- On a daily basis, how often do you interact with this person?
- How do you take care of them? Can you run through an average day?
  - Stop to ask questions throughout the scenario. Be prepared to ask for more details throughout. Probe them on things that seem unclear.

Memory Loss
- What kind of things does [insert person] have trouble remembering?
  - For each of the things they mention>
    - How often does this happen/how often do they forget?
      - Can you tell us about a recent time when this occurred?
      - Do they ever later remember the information they originally forgot?
        - If yes>
          - How long does it take for them to remember?
    - Is there a particular place/environment where this memory loss usually happens?
    - What steps are currently being taken to ensure that they remember?
      - Do they take any medications?
        - If yes>
          - Which ones? What effect do they have, and are there any side effects? How often do they take this medication?
    - If [insert person] writes stuff down/records information>
      - Does recording information interfere with their ability to perform other daily tasks?
        - If yes> How so?
  - How much are you, as the caretaker, involved in the remembering process?
- How severely has memory loss affected [insert person]'s daily life?
  - Can you tell me about the most recent event of their memory loss affecting their daily life?
- Can you think of one thing (such as a device) that would really help improve [insert person]'s daily life in terms of memory? <Be prepared to probe and ask for expanded explanation.>
- Have you tried anything in the past that you thought would help improve [insert person]'s memory, but did not?
  - If yes>
    - Can you tell us a bit about it? <Be prepared to ask for expanded explanation.>