Memory Lane

A system that assists caregivers and older adults with dementia through reminiscence

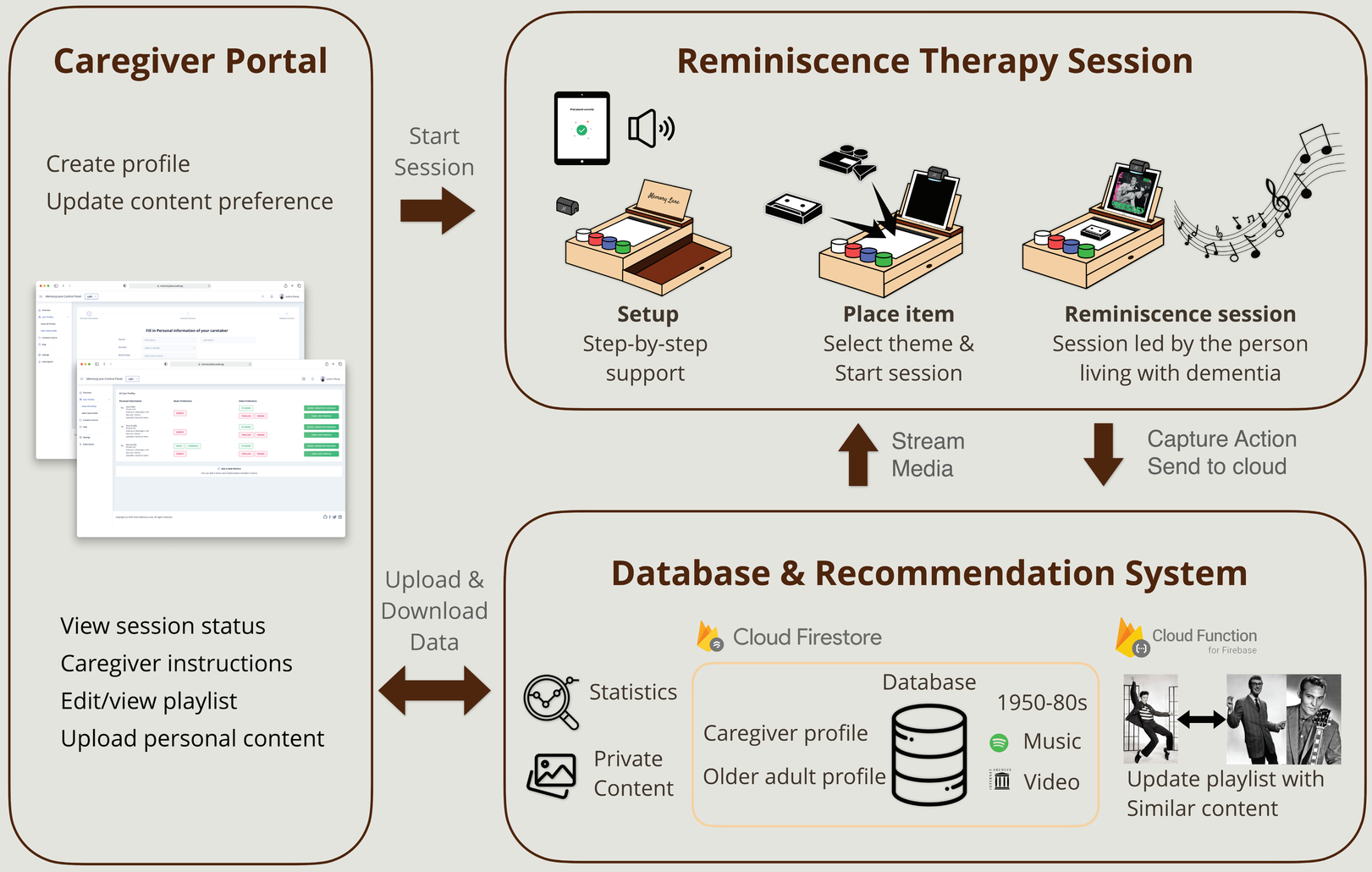
Overview

People living with dementia become less social and self-isolate as they recognize their memory loss, experience time confusion, and anxiety due to feeling they are in the wrong place. These dementia-related symptoms cause challenges for caregivers and family members. A clinically proven methodology, to minimize negative behaviors associated with dementia, is called reminiscence therapy. Reminiscence therapy helps people living with dementia revisit their past by exploring sentimental content such as music, photos, and videos. Though reminiscence therapy has been proven to be successful, there is still no comprehensive solution to support family members and caregivers in delivering reminiscence therapy in a consistent way.

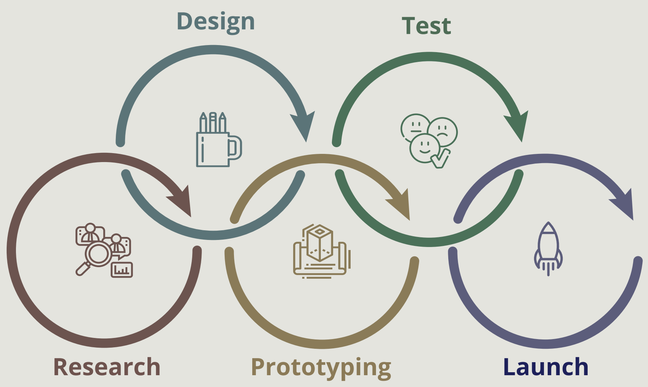
We have worked with Dr. Carolyn Parsey at UW medicine to develop a system that enable both caregivers and people living with dementia in conducting successful customized reminiscence therapy.

Solution

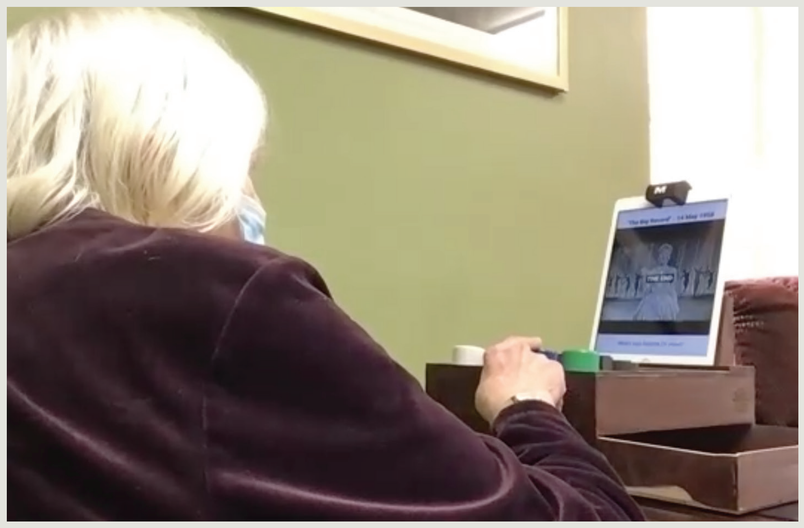
Memory Lane is a platform that allows users to navigate and annotate digital content using tangible interactions.
MemoryLane provides:
- High accessibility for people living with mild to moderate dementia.
- Easy and simple setup process; No pairing is required.
- Automated customization using Machine Learning.
- Simple caregivers web portal to access users' profiles and data.



Process/Approach



From secondary and primary research, we found **autonomy** and **personalization** are key features for our target users. We made initial assumptions based on our early research which led to our original idea of casting content to a TV and using a tablet as a remote control. However, from survey outcomes, we learned that 50% of caretakers did not find touch screens intuitive or comfortable. With the continuous research of usability and accessibility, we made a hard pivot and went through many iterations and evaluations of both hardware and software. With great support from our sponsors, individuals, and care facilities, we conducted 2 rounds of user evaluation with a total of 20 sessions to improve the user experience.



User Evaluation with older adults in the care facility

GLOBAL INNOVATION EXCHANGE

Project sponsored by
Carolyn Parsey, Ph.D
Memory and Brain Wellness Center

UW Medicine

Univesrity of Washington Master of Science in Technology Innovation
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