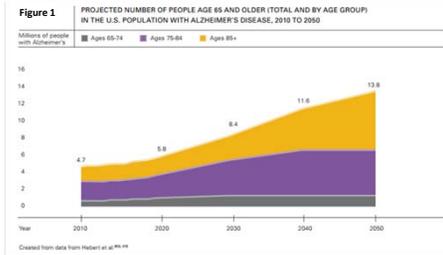


Introduction

Alzheimer's is a disease of the brain that causes problems with memory, thinking and behavior. In 2050, the number of people in the United States with Alzheimer's could reach 11-16 million. Surveys has shown that there are many challenges that the caregiver face when caring for an Alzheimer's patients, such as: being overburdened, combining care and paid work, feeling like they are alone when it comes to caring for the patient, the feeling of not being appreciated in their care work, the need for more information and advice on this disease, and availability and access of support service. With the percent of mobile use in Americans so high, the mobile application would be a handy way of having the patient's therapy sessions available at any time and possible anywhere. Having the mobile application handy will also be a great way for caregivers to receive more information about the Alzheimer's disease when they cannot reach a doctor or an internet server. Information such stages, symptoms, ways to calm a patient, and side effects of certain medications.



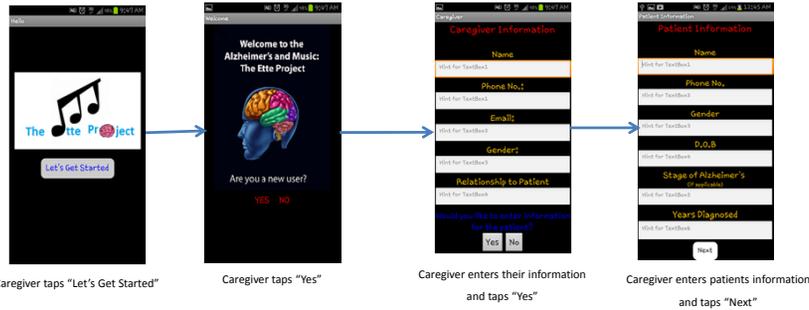
Objective

The purpose of this research is to develop a mobile application that will assist caregivers who have little knowledge about the Alzheimer's disease. The goal is potentially slow the progression of the Alzheimer's disease and increase the cognitive memory of patients and also increase the caregiver's awareness of the Alzheimer's disease by including components such as music therapy, auditory memory games and puzzles for the Alzheimer's patient and components that includes Alzheimer's information and patient progression for the caregivers.

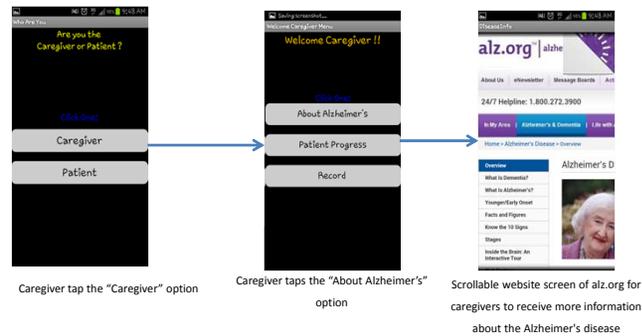
Method and Materials

We spoke with two caregivers who worked at a nursing home for elderly patients. Each caregiver has had numerous experience working with Alzheimer's and other dementia effect patients. One caregiver has 40 years of experience caring for patients who suffer from dementia while the other caregiver has _____ years of experience . Both caregivers were engaged in an unstructured Interview which lasted for 1 hour followed by observation of two use case scenarios as they interacted with the mobile application prototype. The first use case scenario represented a caregiver, who is a new user of the mobile application entering personal information for the caregiver and the patient. The second use case scenario represented a user who already enter information for the caregiver and patient and is now looking for information about the Alzheimer's disease.

Scenario 1: Caregiver entering information for their self and the patient



Scenario 2: A caregiver looking for information about the Alzheimer's disease



Results

Question	Caregivers Comments	Design Changes
What do you think about the look of the Welcome page?	Eye catching	No changes
Are there additional things you would want to know about the patient?	Medications currently taking	Caregivers or patients are able to check all the medications and write in others on the patient information page.
Are there additional menu options that we need to include? If so, what would you like for us to add?	Yes <ul style="list-style-type: none"> Arts & Craft Section Text Version of About Alzheimer's Caregivers set goals for patient (i.e. improve speech) 	<ul style="list-style-type: none"> Arts & Craft section added in Caregiver and patient section Users are able to choose between text or web version for more information about Alzheimer's. On the patient progress page Caregivers are now able to set a goal for the patient.
Would you use this mobile application in the treatment of Alzheimer's patients?	Yes	N/A

Future Work

Even though the project is not successfully completed, I plan do continuing my research by:

- Complete patient Menu components
- Implement the music therapy
- Patient User Testing

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Acknowledgements

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