



CMPE 491 – Senior Design Project

Proposal Report

Project Name: MemorEase

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MemorEase is an innovative project aimed at assisting individuals with memory impairments, particularly the elderly and Alzheimer's patients, through a personalized, technology-driven solution. The application leverages Kotlin, Firebase, and NLP-powered APIs to create dynamic memory exercises and quizzes using content uploaded by caregivers, such as photos, audio, and text. These quizzes not only serve as cognitive rehabilitation tools but also generate analytical reports to identify patterns of cognitive decline and potential brain regions affected. By combining neuroscience insights with advanced technology, MemorEase aims to improve the quality of life for users, ease the caregiving process, and provide valuable data to healthcare professionals for better treatment planning. With a focus on accessibility, user engagement, and privacy compliance, MemorEase aspires to contribute to a more compassionate and efficient approach to managing memory-related challenges.