Brain Guide Application

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Alzheimer’s disease is a progressive neurodegenerative brain disorder of elderly humans; it is the sixth leading cause of death worldwide. The Brain Guide Application proposed in this project, connects two mobile applications; one for the patient and one for the caregiver. The patient’s application offers an Alzheimer’s patient a six-function software; each help through his/her daily chores that he/she struggles with all day long. The patient’s application leads to a prolonged period in each stage of the disease that aim to decrease the rate of death. The caregiver’s application contains the same functions as the patient’s application, with complete control over the functions of the patient’s application. Using Kotlin Programming Language, the Brain Guide Application was supported by a hardware-customized set with a predefined worldwide-known color devoted to Alzheimer’s, including a Quick Response (QR) code and a face-recognition camera; for example, photo icon, adding languages, and travel limits. By conducting three tests on Alzheimer’s patients at various disease stages, we added new features to the application functions that facilitated interaction between the patients and their caregivers. Through the current progress of the Brain Guide Application, it became clear that the patients will be able to deal with an active memory, be aware of their surrounding environment in a safe manner, come up with answers for every single question in their heads, and finally be familiar with people surrounding them; not only using the application, but also through dealing with the hardware set.

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