

SmartKeeper – Assistant for Active Ageing at Home

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Abstract —

With the ageing of the Portuguese population increasing and becoming a worrying problem, it is necessary to think of ways to help the elderly population to maintain their independence. With this in mind, the project "Casa Viva+" was created, which our project is part of, and which aims to maintain a dignified life at home. To achieve this goal, it is proposed to develop a house capable of assisting with domestic chores, monitoring the health of those who inhabit it and helping with prevention and rehabilitation.

The project on which this report is focused consists in the creation of a voice-controlled assistant that will respond to the requests of the inhabitants of the "Casa Viva+". It differs from other assistants in a way that it is easier to use for the elderly, having been designed specifically for this purpose, unlike, for example, Siri or Alexa, which were developed to be used by the masses and with which the elderly population has some difficulty in using.

Through voice interaction with the assistant, it will be possible for the inhabitant to manage their agenda, find out about the weather, control devices in the house, make calls, get recipe suggestions and product recommendations.

When we finished implementing the first version of the assistant, we performed some tests with possible real users so that, based on real experiences, we could improve the assistant and make interactions as fluent as possible.

Keywords—older people, ageing at home, agent for older people, assistant for ageing, voice controlled assistant, older people and technology