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## POSTER ABSTRACT

### **“Chop it! Game”: Nutritional approach against physical frailty implemented as a game in a tablet**

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Despite the fact that frailty is a holistic condition that entails many diverse factors and has a strong impact on health both at personal and social levels throughout Europe, many tend to treat it as a uniform and less relevant syndrome by attempting to mitigate it exclusively through traditional physical stimulation. The fact, however, is that inclusive approaches have proven more effective, and for this reason, the “frAAgiLe project”, funded by the European Commission under the AAL program has created “Chop it!” a serious game for tablet specifically designed to mitigate the effects of frailty through nutritional education.

The Seventh Pillar is specially relevant when it comes to Chop it! as it is a digital solution whose aim is to contribute to the monitoring and mitigation of frailty from home with tablet devices and, in last term, alleviate the workload from health carers and professionals, especially nowadays, under the COVID 19 situation. Digital solutions have become key in solving many of the challenges that traditional methods have failed to address during the pandemic, and frailty is no less, which means that Chop it! may become a perfect companion for treatments.

“Chop it! Game” includes a basic and an advanced level. Within the basic level, the user shall train his/her memory and nutritional values by selecting healthy ingredients within a set of them that pass fast along the screen. These ingredients have been selected by professionals and they can be combined to cook healthy menus personalised for people in frail and pre-frail states. The advanced level is divided in two scenarios, where the first one trains cognitive skills in daily activities, in this case, shopping in the supermarket, while the second one trains cooking skills for healthy habits with a set of specifically designed recipes. Apart from these, the game also includes interesting documents for more information from official institutions including the World Health Organisation. The game collects data in terms of mistakes and success and sends it to the cloud, where it is stored according to European Law and processed to get to know more about the status of the user.

Up until now, “Chop it! Game” has been tested both in co-creation sessions and in Lab Testing and in the near future, definitive, longitudinal studies are to be conducted in the form of Final Trials in natural environments. More than 75% of the users were happy with the game and found it enjoyable. Feedback was received and the game is being adapted especially in terms of usability and graphics, thanks to the performance of SUS and Play Testing Questionnaire as well as the organisation of focus groups.