Personal Assistance for Seniors Who Are Self-Reliant

TITLE	AUTHOR	DESCRIPTION	HIGHLIGHTS	DRAWBACKS
HABITAT- AN IOT SOLUTION FOR INDEPENDENT ELDERLY	1.ELENA BORELLI 2.GIACOMO PAOLINI 3.FRANCESCO ANTONIAZZI 4.MARINA BARBIROLI	project HABITAT (Home Assistance Based on the Internet of Things for the Autonomy of Everybody), aiming at developing smart devices to support elderly people both in their own houses and in retirement homes, and embedding them in everyday life objects, thus reducing the expenses for healthcare due to the lower need for personal assistance, and providing a better life quality to the elderly users.	The technological solutions integrated in HABITAT have the purpose to assist needy people in the longest stay in their homes in safe conditions, helping them to conduct autonomously most of the activities tied to the satisfaction of their primary needs, sustaining actions focused on both de-hospitalization and home-care.	In particular, motorized actuators could be controlled directly by the HABITAT system in order to customize the behavior of the chair according to the profile of each user.
Understanding the care and support needs of older people: a scoping review and categorisation using the WHO international classification of functioning, disability and health framework (ICF)	 Sarah Abdi Alice Spann Jacinta Borilovic Luc deWitte MarkHawley 	The number of older people with unmet care and support needs is increasing substantially due to the challenges facing the formal and informal care system in the United Kingdom. Addressing these unmet needs is becoming one of the urgent public health priorities. In order to develop effective solutions to address some of these needs, it is important first to understand the care and support needs of older people.	The review highlighted that older people living with chronic conditions have unmet care needs related to their physical and psychological health, social life, as well as the environment in which they live and interact. Findings of this review also emphasized the importance of developing care models and support services based around the needs of older people.	There is a possibility that the screening process, the analysis and interpretation of the themes was influenced by the author's own perceptions or understanding of the topic.

TITLE	AUTHOR	DESCRIPTION	HIGHLIGHTS	DRAWBACKS
Using IoT technologies to develop a low- cost smart medicinebox	1. Danyllo V. da Silva 2. Taisa G. Goncalves 3. Paulo F. Pires	Regarding IoT scenarios, we applied a scenariobased technique named ScenarIoT. The scenario can be defined as a sequence of actions or an ordered set of interactions among parts. We choose ScenarIoT because it can be employed during requirements specification, architecture definition, documentation activities, and system's features idealization. This technique supports analysts during early development activities and suggests a list of IoT arrangements with their information catalogs	This work proposed a low-cost smart medicine box system employing a robust architecture to support users and health professionals during medicines consumption. The proposed architecture enables to embody other types of devices such as wearable, electronic devices, home appliances, among others, offering infinite possibilities of applications and functions.	This system can be improved, providing a more flexible way to schedule medicines consumption alarms such as twice a week, three times a week, every other day, among others.
IoT-Based Smart Medicine Dispenser to Control and Supervise Medication Intake	1. Gleiston Guerrero Ulloa 2. Carlos Rodríguez- Domínguez 3. Miguel J. Hornos 4. Ma Mercedes Fernández- Coello	The dispenser emits a sound and lights up an LED to alert the patient that it is time to take his/her medication. When he/she is close to the smart medicine dispenser, it will identify him/her through facial recognition and deliver the prescribed medication. If the medication is not removed during the expected timings, a notification is sent to the caregiver through the mobile application so that she/he can act consequently.	Using a facial identification mechanism, it recognizes the patients registered in the system and supplies IoT-Based Smart Medicine Dispenser them with the medicines they should take just when needed. Every time the dispenser provides a medicine box, it generates a sound and illuminates the corresponding compartment. The system also sends remote notifications to caregivers, informing them of the medicines dispensed to their dependents directly on their smartphone.	To improve the proposed system, closing the dispenser compartments so that they only open when the camera detects the face of the caregiver who must place the medicine boxes in them. This would make it safer. It would also be good for the system to automatically detect which medicines and how many of them the caregiver has put in the different compartments; currently, he/she is who must provide these data through the mobile app.

TEAM LEADER:NANTHINI N

TEAM MEMBER 1:SANTHIYA R

TEAM MEMBER 2:MALAVIKA M

TEAM MEMBER 3:NANDHINI SJ