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Aim: - How can you help Sunita Sharma (65+ years old) to live a healthier and better life?

Identify one use case for elderly care (for the age group 65+) and create a working prototype to demonstrate your idea using technology known to you.

HelpWave: An integrated web-based system

Abstract

In developed societies populations are aging. Facing the global slump states are reducing expenses bringing crisis to health care systems. Solutions to decrease costs are needed. Within ICT, smartphones' features can help provide personalised health and care services that meet individual needs. There is a huge rise of applications that effectively help people but they act independently, each one for a certain purpose. In this paper we propose the HelpWave system, a cloud-centred architecture information system that integrates data from the users' smartphones APPs. Conceived as a social care network its aim is to reinforce connection between caregivers and carereceiver as for instance, older people.

Use Case Diagram: -

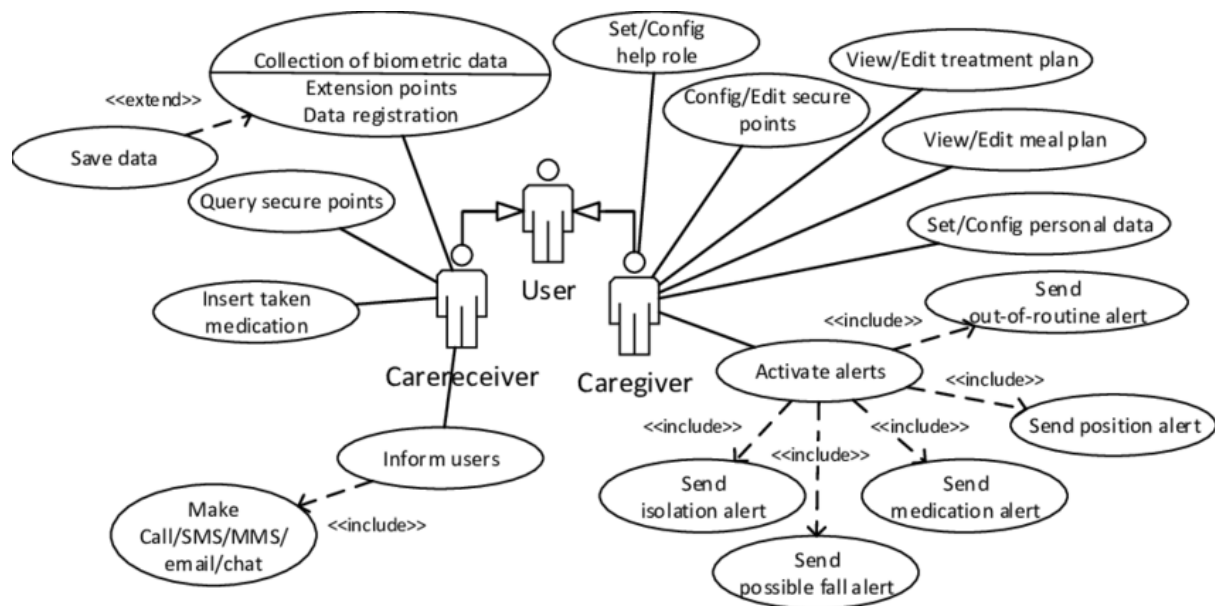


Fig. Use-case diagram describing all features of the carereceiver and caregiver type of user.

- Fictional scenarios and expected impact

Two fictional scenarios with older person's users were conceived for assessing the expected impact of the design and implementation of HelpWave: scenario 1, user in holiday, out of his home village and scenario 2, user at his home village.

5.1. Context - "Catching the wave"

Manuel and João are smartphone users that, at a given time, joined the HelpWave system by installing the HelpWave APP in their smartphone. They setup HelpWave to report time usage of Facebook and Calls, and they already use two APPs compatible with HelpWave, Compass & Magnifier (C&M) used to promote their confidence in daily mobility and HelpmePills for assisting pills intake. Note that both APPs are under

construction and are referred to corroborate the presented concepts.

5.2. Scenario 1 – In holidays

Manuel joined the "HelpWave" after knowing that a friend volunteered to help others like him, who sometimes gets disoriented and feels little confident to leave the house. He is preparing to spend holidays outside his neighbourhood. He doesn't feel confident to walk alone given the lack of proximity of known places and known people that could help in case of need. Arriving at the hotel he asks the receptionist for help, i.e. to enter "the wave" and accept the task to take care of him during his afternoon walk. In addition, as he usually forgets to take his medications, he also asks for help for remember his pills – grant permission to access his intake pills status and pills schedule. Later, it came to his knowledge that some other hotel-clients were volunteers in the "Wave" and they were in the same beach by then! Thus, Manuel decided to change its status to "accept aid on the beach" and also to provide assistance to those who may need it, like himself.

5.3. Scenario 2 – At home village

Mr. João lives alone in a remote village and he is taking an important medicine that enables him to live a normal life. His children live outside the village and are always concerned about helping him in case of need. Since they discovered that some of his father's neighbours have also "entered the wave", they joined and convinced him to join as well.