

Arrive safe, punctual and guided to your appointment despite your Alzheimer's disease

Students at the University of Applied Sciences are developing a voice assistant in cooperation with Amazon Web Services (AWS) and the Alzheimer's Association in Munich to remind patients suffering from dementia of important appointments.

MUNICH, DE-March 15, 2021 - Today, a group of computer science students released "Adjuvant," an easy-to-use, cloud-based voice assistant for Alzheimer's patients that helps them to keep and attend everyday appointments. The system runs on the Amazon Alexa™ platform and stores the patient's upcoming appointments and daily routines in the cloud for early reminders.

According to the German Alzheimer's Association, around 1.6 million people in Germany currently suffer from dementia. Around two thirds of them are cared for at home by their own family. This is not only a burden on the families, but also on the patients, as they can no longer remember essential things of daily life due to the disease and lose their independence.

Speech assistants can help here. They provide a simple way of contacting patients due to interaction through voice commands alone. The patient does not have to rely on his memory and can deal with the assistant as he would with a natural person.

"We are very pleased to be able to work with the Alzheimer's Association Munich and Amazon Web Services to provide an assistant for Alzheimer's patients. Together, we can make a positive contribution to society and enable patients to live self-determined and independent lives in harmony with the disease." -Stefan Kühnel, a student of computer science at the University of Applied Sciences in Munich.

When using the assistant, the patient should be stressed as little as possible on the mnemonic level. Interaction only occurs when a new appointment is created and when it is time for the scheduled reminder. When an appointment is due, the assistant addresses the Alzheimer's patient on a verbal level. In doing so, he informs the patient about the essential modalities of the upcoming appointment, such as the time, type and place of the appointment. The calculation of the corresponding route is carried out directly by Adjuvant on request and ends with the sending of the directions to the e-mail address stored in the Alexa account.

Furthermore, relatives and/or contact persons also have the possibility to passively intervene in the appointment management of the patient. To prevent patients from becoming confused due to the deletion of appointments by relatives, access is only limited to viewing appointments.

"The new voice assistant helps me to finally keep track of all my doctor's appointments," says Mr Mauritius, a 53-year-old Alzheimer's patient from Munich. "In the past, my family had to remind me every time of the medical follow-up for my heart catheter. This put a lot of stress on me. Before Alzheimer's, I was able to do everything quite well on my own. Today, however, with the new voice assistant, I have regained some of my independence. All I have to do now is to tell the voice assistant on which day and at what time I have made my appointment. And in good time beforehand, it reminds me when I have to leave and which route I should take. Now I don't have to feel ashamed if I forget an appointment again, because the assistant will remind me. "

Visit the official website of the Alzheimer Society Munich now to find out more about our collaboration or start using the assistant directly via the Amazon Alexa™Marketplace.

[1] German Alzheimer Society (2020): German Alzheimer Society presents new figures on dementia: Evidence for effectiveness of prevention. Available online at:

<https://www.deutsche-alzheimer.de/ueber-uns/presse/artikelansicht/artikel/deutsche-alzheimer-gesellschaft-stellt-neue-zahlen-zur-demenz-vor-hinweise-auf-wirksamkeit-von-praev.html>

(last checked on 25.10.2020)

The use of masculine personal terms explicitly includes the diverse and feminine genders.

The final draft incorporated suggestions for change from Mirna Rodic, Teresa Auerbach, Angelina Hofmannand Philip Pastuschka.

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