

GREAT

Persuasive Ambiences

Ambient Day-Scheduling
with Dementia



GREAT - Persuasive Ambiences

Modular assistance system to support the daily structure of people with dementia

Starting point

Even elderly people with dementia can focus their attention on a particular stimulus, but as dementia progresses, they have difficulties to shift that attention to new or changing stimuli. In the focus of their attention, they though have difficulties with the understanding of content information, while on the emotional level many skills remain. If you want to persuade people with dementia to perform a certain action (for example, to come to dinner), then they need to be prepared for it.

The project GREAT aims to prepare elderly people with dementia on the emotional level for a new or changing action. With intelligently automated modular room atmospheres that include light, sound and scent components, it should be possible to create a room ambience, which prepares dementia patients, their caregivers and relatives in a structured way for their daily activities.

Structured participation in the social daily routine is a goal of GREAT



GREAT supports people with dementia and their caregivers by means of intelligently automated room atmospheres



System specifications

GREAT is a modular system that assists people with dementia and their relatives to be prepared for new or changing daily routine.

Intelligently automated room atmospheres have an effect on mood and cognitive willingness.

The system serves to

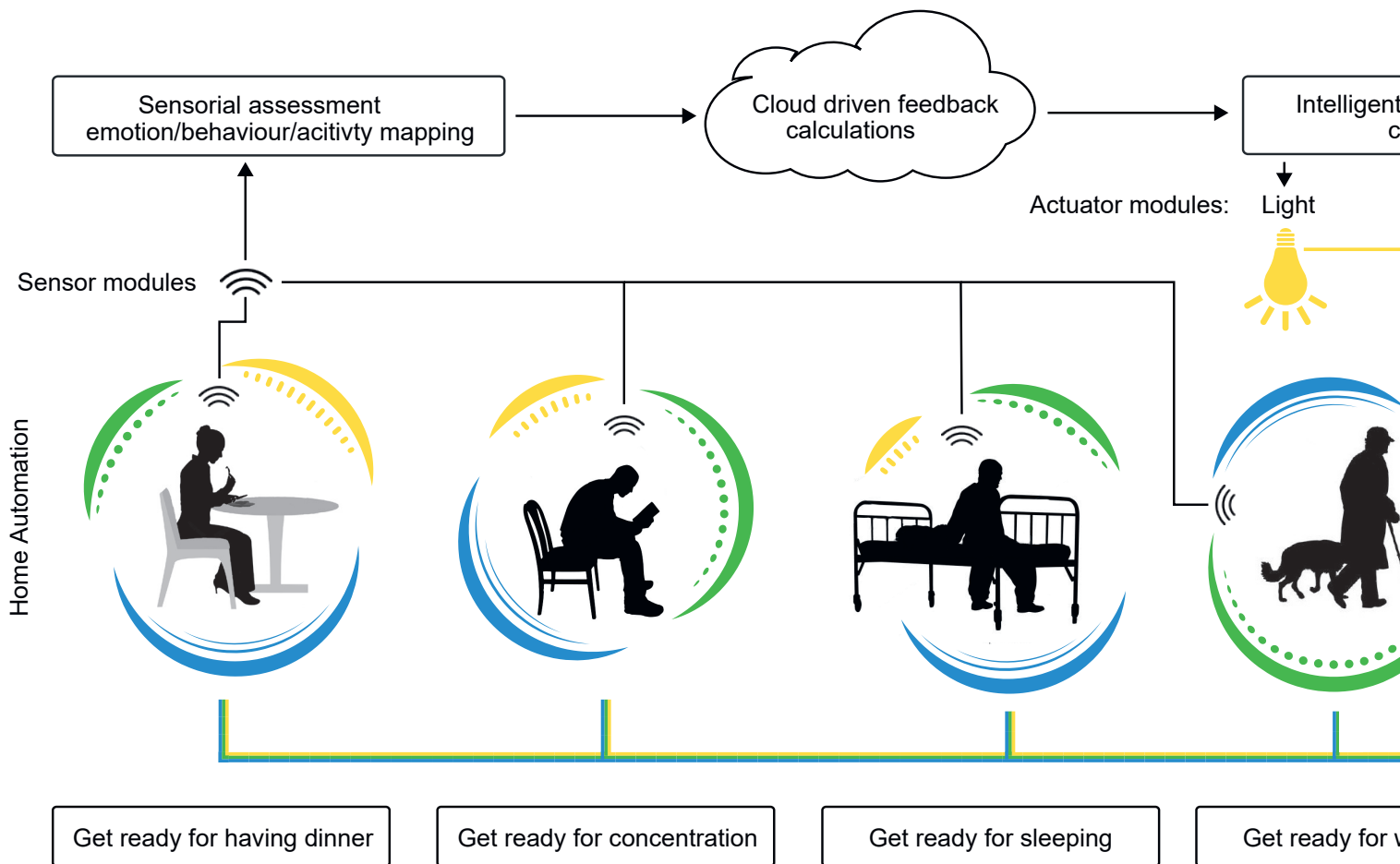
- emotional preparation for activities in the daily routine
- personal temporal orientation by supporting the circadian rhythm

GREAT consists of modular light, sound and scent modules that generate specific room ambiances via controllable building bus systems. Through evaluation of sensor data, an automated control of the room atmospheres for mood preparation takes place.

GREAT creates quality of life for dementia patients and their relatives in private homes as well as in care facilities.









System components

The assistance system uses dynamic light color variations, audible and inaudible sound frequencies as well as fragrances to emotionally prepare for planned activities. The application of light, sound and aromas is aligned on the daily routine by smart technology. The concept of mood transmission creates synergetic effects between caregivers and those in need of care.

The system registers important parameters, such as physical activity and heart rate variability and generates supportive suggestions on activating or calming ambience cycles. An easy to use mobile app is then allowing for caregivers or patients to start the suggested atmosphere. Visualizations of parameters thereby enable exchange of information among caregivers and dementia affected people.



GREAT uses the latest building automation technologies



Goal

The use of GREAT - Persuasive Ambiences will lead to a better everyday structuring and emotional readiness for changing and new activities in dementia patients. As a result, this contributes to increasing and strengthening the quality of life, autonomy, participation in the social life, skills and career opportunities of older people.

GREAT holds great potential for other areas of application in which an emotional readiness is important for people. These include intelligent light, sound or scent systems for hospitals and nursing homes but also museums and the use in marketing-oriented scenarios such as department stores or trade fairs.



GREAT is modular and expandable and can be applied in private or public spaces

Consortium

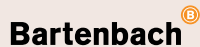
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The focus of the AAL programme is the development of products and services based on information and communication technologies. These innovative developments are designed to ensure a long and independent life in private environment.

The call 2016 focuses on “Living well with dementia” and aims to support people with dementia and their caregivers.



GREAT creates room ambiances
that activate or soothe



For more information on GREAT
please visit our website:
great.labs.fhv.at

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