

## Playful Multimodal Daily Training, Diagnostics and Recommendation System within a Social Network



PLAYTIME develops an integrated theratainment solution for care, rehab and diagnostics. It motivates in a playful manner to perform personalized emotion-oriented exercise units to stimulate cognitive processes, to address physical activities and foster social inclusion.

# Project Description

## Objective of the project

The project develops an integrated theratainment solution for care, rehab and diagnostics. PLAYTIME motivates in a playful manner to perform personalized emotion-oriented exercise units to stimulate cognitive processes, to address physical activities and foster social inclusion. The objective is to motivate dementia users to enter a positive feedback cycle of periodic training with sensors that enable diagnostics on a daily basis, and to receive recommendations on the basis of these data that propose more personalized and better suited exercises for improved training.

## Project Overview

Scientific studies showed that social activities and physical activities have a significant, positive impact on the progress of dementia, a fundamental problem is motivation to perform the daily exercises. A key problem in developing knowledge about dementia and its impacting factors is the lack of assessment on the mental state and the psychophysiological dependencies as they evolve over time. However, longitudinal quantitative studies about dementia are rare. The motivation is primarily triggered from social gathering with dementia clients to jointly play with an interactive mat using internet-of-things and personalized game content. The game adjusts the requirements of home based playful training to the individual objectives of the individual user and from this involves the end user into an infinite series of dependable motivations. Since a marketing and sales company is involved as a key partner in the project, it is guaranteed that the PLAYTIME product will be introduced to the market latest after project end.



## Expected results and impact

PLAYTIME will deliver a fully integrated pilot application which will be evaluated in field tests in Austria and The Netherlands in a 2-stage approach. The solution contains an interactive mat, a mobile app, a diagnostics toolbox, a caregiver serious game and a recommendation toolbox. With this interactive, multimodal and digital solution we follow a blue ocean strategy, which satisfies the global trends of digitalization, gamification, individualization and demographic change at the same time in the growing market of care, rehab and diagnostics.

## Coordination:

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# PLAY TIME



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## Partners:

