Gamified Solutions in Healthcare

The Gamified Solutions in Healthcare project (ended 31.12.2015), funded by Tekes – the Finnish Funding Agency for Innovation, develops new services and effective activity solutions to elderly people through gamification. This research project combines the expertise of many different disciplines and is linked to company-driven projects that develop scalable international serious games solutions for healthcare utilisation. The project has extensive international research exchange with Singapore and Japan. The research is based on three company-driven cases.

1) Virtual Service Home application, which utilises motion-based user interfaces and enables elderly people to socialise, rehabilitate and participate in various voluntary activities from their own homes or service home rooms.

2) Gamified exercise environment indoors, which utilises both physical and digital elements – such as mobile technologies, including public displays, motion detection sensors, digital content and games – and activates people in different testing environments.

3) Gamified exercise environment outdoors, which utilises both physical and digital elements but is situated outdoors, and therefore is available to a more versatile user base. It offers new types of preventive activities targeted at people near retirement and ageing people living at home. The new possibilities and gamification elements enable more exact and correct movements when exercising.

The research project carried out in cooperation with Technology Research Center at the University of Turku focuses on gamification mechanisms, usability for elderly people, effectiveness of the solutions, and on business and production models for the solutions.