E. Urdaneta (Convener). Universal Remote Console (URC) framework for an ageing society. Gerontechnology 2010;9(2):172; doi:10.4017/gt.2010.09.02.243.00 **Participants** *E. Urdaneta (Spain), G. Zimmermann (Germany), J. Alexandersson (Germany), and J. Yanguas (Spain)*. **ISSUE** The Universal Remote Console (URC) framework is a standards-based technology (ISO/IEC 24752) for an open user interface platform for the next generation of Ambient Intelligence and service and device environments in general. It allows for pluggable, personalized user interfaces that are adaptable to the individual needs and preferences of any person, (especially elderly people) using any modality for input and output. In Europe, the EU-funded project i2home has been spear-heading implementation and development of the URC technology in digital homes, building on its potentials for task-based user interfaces. **CONTENT** lessons learned at the international level for future work on pluggable user interfaces will be presented from i2home project perspective. The main objectives of this symposium are: (i) to bring together individuals and organizations with an interest in research and development of the URC technology in an ageing society; (ii) to establish a common understanding of the needs and requirements of a pluggable user interface applications in the context of Ambient Intelligence from various perspectives of users (elderly people, care professionals, family caregivers), developers and other stakeholders. **STRUCTURE** Elena Urdaneta will start the discussion from the point of view of i2home project for an ageing society. Gottfried Zimmerman will analyze the Universal Remote Console (URC) ecosystem and technology. Also the effectiveness of this technology for the concept of the Design for all will be emphasized. Jan Alexandersson will discuss the i2home project, its technology and challenges when implementing user interfaces for persons with special needs, research methodology, anecdotes and success stories. Finally, the international URC consortium OpenURC, which has been one of the tangible outcomes of the project, will be described. Javier Yanguas will discuss the necessity that technology, older users and gerontology professionals work together on different fields such as practical approach (new services design and implementation). Following the individual presentations, there will be an open discussion led by Elena Urdaneta, focusing on the next steps to effectively use i2home technology in an ageing society. **CONCLUSION** Despite increasing needs and considerable technical development in the area, new thoughts, ideas and challenges for a new paradigm based on the searching for a common and integrative approach between gerontologists and technologists is needed.

Keywords: telehomecare, ambient technologies, universal remote console

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E. Urdaneta. The experience of i2home project. Gerontechnology 2010;9(2):172-173; doi:10.4017/gt.2010.09.02.244.00 **Purpose** This presentation is focused on the experience of the European project i2home. Its main objectives are to implement the Universal Remote Console (URC) standard (ISO/IEC 24752) and use it for implementing user interfaces for scenarios for elderly and disabled persons. **Method** While URC technology facilitates pluggable user interfaces for everyone in arbitrary scenarios where the task is to interact with any appliance or service, the focus in the i2home project is the digital home. In i2home, the user-centred design (UCD) methodology is used. Consequently, the user's needs are driving the development of the technology. In the UCD approach, one cycle consists of four phases: requirements, implementation, test and evaluation. To this end, the consortium consists of 9 partners from 5

countries, ranging from academic to industrial partners. Amongst these we have partners focusing on users only, whereas other partners focus on technical development, or even both. **Results & Discussion** Due to the dynamics that the Consortium was able to generate around the i2home project, and the achieved results, the scope of the applicability of i2home results augmented significantly and went well beyond the initially projected application domain, 'eInclusion' , with respect to home appliances. New, important, domains and markets could be identified and respective projects launched in AAL, independent living, eHealth, energy, automotive, public transportation and tourism. This, we consider a very significant, very positive and stimulating result and perspective seen from the exploitation angle. On the other side, each market requires a specific approach for its thorough understanding, and the project could not provide the resources necessary to carry out this work. In conclusion, the i2home project has been a very exciting time for all project members. The project has completed the full set of planned activities and delivered the impressive results. A lot of time has been invested in contact and exchange with, in particular, other eInclusion projects. i2home has even made collaborations outside the scope of the EU funding program.
Keyywords: ageing, technology, eInclusion, older people needs
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G. ZIMMERMANN, J. ALEXANDERSSON, J. BUND. The URC ecosystem and how it supports Design for All. Gerontechnolgy 2010;9(2):173; doi:10.4017/gt.2010.09.02.245.00 **Purpose** In the past, 'Design for All' has often been understood as following a one-size-fits-all approach in which one user interface is designed with the goal of serving all user groups equally well. This can be a useful approach for devices that are shared between many users, in public environments, such as ticket machines. However, this approach can lead to the missed usability and accessibility opportunities that can come with personalized user interfaces. This is particularly true for domestic devices and services to be used by older users and users with cognitive impairment. **Method** In i2home, Universal Remote Console (URC) technology was employed to cater to different user groups by the design of individual (personalized) user interfaces that connect to common devices and services in the home (such as entertainment, home security, reminder/calendar and heating/air conditioning). In addition, task models have been integrated into the URC framework to provide step-by-step instructions (e.g. for blood pressure metering) or to trigger automated system responses to user-initiated events (e.g. reminding the user to close the windows when they leave their home). **Results & Discussion** The European project, i2home, has confirmed the validity of a personalized-user-interface approach, in the context of devices and services in the digital home designed to be used by older people and people with cognitive impairment. This presentation gives an overview of the features and benefits of URC technology with regard to Design for All and User-Centered Design. This is based on the results and experiences of the i2home project and other projects employing URC technology. These projects are connected through the OpenURC Consortium as an ongoing international platform driving the further development and application of URC technology, including applications in the area of gerontechnology.
Keywords: universal remote, design for all; user-centered design; personalized interfaces
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J. ALEXANDERSSON. Common understanding of the needs and requirements of URC: The technological approach and vision. Gerontechnology 2010;9(2):173-174;
doi:10.4017/gt.2010.09.02.246.00 **Purpose** Today, the industrial approach for implementing technological solutions for persons with special needs in the scope of Ambient Assisted Living and eInclusion is still dominated by proprietary solutions that constitute islands of technology. Consequently, vital factors like interoperability and affordability are nonexistent, prohibiting those persons that would most benefit from using it, from engaging with the technology to live an independent life. Through the i2home[1] project, we have witnessed a substantial step towards the long-term vision of an internet with built-in, accessible, usable, feasible and affordable, user interfaces for everyone. To reach this goal, it is inevitable that different stakeholders

operating in the market to agree on technology that allows for realizing accessible user interfaces. As we have witnessed in the last decades, agreed-upon platforms, protocols and technology automatically lead to crucial factors like innovation and affordability. **Method** In i2home, the technology platform is based on the Universal Remote Console standard (ISO/IEC 24752), an open platform that allows for implementing particularly accessible user interfaces for interaction with any networked appliance and/or service. **Results & Discussion** In this presentation, we describe the i2home project, its technology, the challenges of implementing user interfaces for persons with special needs, research methodology, anecdotes and success stories. Finally, the international URC consortium OpenURC, which has been one of the tangible outcomes of the project, is described.

References

1. www.i2home.org; retrieved January, 2010

Keywords: accessible user interfaces, user-centred design, universal remote console

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J. YANGUAS. Common understanding of the needs and requirements of URC: The gerontological approach and vision. Gerontechnology 2010;174; doi:10.4017/gt.2010.09.02.247.00 **Purpose** This presentation is focused on the comparison of the Universal Remote Console (URC), older peoples needs and the gerontological approach. The main goals will be to exchange lessons learned at the international level at two levels: (i) to merge the interrelationships between URC, older people needs and requirements, and gerontological knowledge; It will be crucial to think about the different prioritization and meanings for the technology, users and gerontology. (ii) to examine the future work on pluggable user interfaces with the URC ecosystem as backbone for flexible user interfaces in the healthy ageing society and e-health environments. **Method** The URC increases the communication between devices with different languages, promoting intuitive communication and facilitation of the performance of the activities of daily life. The URC has been effectively assessed in the i2home- ' Intuitive Interaction for Everyone with Home Appliances based on Industry Standards' project (EC FP6-033502) with older people with and without cognitive impairment. **Results & Discussion** The technology has to be able to help with a gerontological planification to increase life quality and maintain a healthy ageing society. In conclusion, this manuscript will intend to discuss and to analyze the necessity that technology, older users and gerontology professionals work together on different fields such as practical approach (new services design and implementation) and also about new thoughts, ideas and challenges that we need to resolve in the near future for a new paradigm based on the searching of a common and integrative approach.

Keywords: ageing, technology, gerontology, older people needs

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