

# Newsletter no.1 January-April 2017

## Mobility exchange Jan 23rd – Feb 2<sup>nd</sup>

February 10, 2017

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Marjan Alirezaie from Örebro University visited SICS EAST during the period January 23rd to February 2nd. This visit was planned during the Linköping E-care@home workshop held in November 2016, with the goal of software pipeline setup between Örebro and SICS EAST. The main part of the setup was about the integration of the RSP framework implemented by SICS EAST, with the ontology and the ASP reasoner developed in WP2. This integration facilitates the parameter adjustment for a better reasoning performance within a long-term observation process.

Regarding the semantic integration, we also had two half-days workshops. During the workshops, we were discussing and partially designing an extension of the available SmartHome ontology. This extension allows the observation process to enrich the output of a sensing process according to the health records and the profile of the user assumed to be filled by a health practitioner. This module is going to be finalized and linked to the existing ontology.

## Advisory board meeting on February 14<sup>th</sup>

February 27, 2017

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On February 14, project manager Amy Loutfi and Sture Hägglund (head of SICS East and the advisory board) met with Olle Vogel from KKS and the advisory board in Stockholm. This was the first advisory board meeting since May 2016 and there has been some changes with respect to members of the advisory board:

- Dimiter Driankov has retired and left the advisory board. Johanna Adami has left the advisory board because of workload.
- Johanna Ulfvarson from Vinnova has joined the advisory board. She participated in her first E-care@home advisory board meeting.
- There is currently one vacancy in the advisory board.



*Johanna Ulfvarson,  
Vinnova*

The topics discussed during the 2h long meeting include:

- A candidate for the vacancy in the advisory board
- Project visibility on a national level
- Communication plan

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- Administrative support
- The need for ensuring a user perspective
- The project meeting on May 16 in Örebro

## Workshop on Personas, Use cases and System Requirements

March 9, 2017

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On March 8th, 2017, WP5 organized a full day workshop on Personas, Use cases and System Requirements in Linköping. The workshop, which was held at Linköping University premises included:

- a guest lecture by Associate Professor Mattias Arvola from IDA (Department of Computer and Information Science, Linköping University) on the topic *Writing Valuable Requirements: From Personas to Use Cases and User Stories*.



The slides from Mattias' presentation can be [downloaded from here](#).

- group discussions, three groups discussed 3-5 personas and 3-4 use cases. The discussions, that will continue via the web during the spring, focused on:
  - technical issues
  - semantic interoperability
  - usability issues
  - organizational issues
  - medical issues
  - security
  - privacy
  - ethical issues

## Workshop on data collection from various devices

March 23, 2017

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WP1 organized a full-day E-care@home workshop on data collection from various devices on March 23rd. The workshop was held at Mdh premises in Västerås. Below follows a summary of the workshop:

The first group (Ivan Tomasic, Nikola Petrovic and Hossein Fotouhi) was working on analyzing the RN-42 class 2 Bluetooth module. The main issues are the power consumption

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on sleep and transmit mode, and also different level of RF transmit power that are specified in the data sheet. Our main concentration is to develop our enhancements at the LogAndStream mechanism at the Shimmer application. We created a copy of the working project's repository at the GitHub to push/pull the changes from different machines to a central repository. This makes it easier to contribute in the project, and also better documentation of the codes.



The other group (Mobyen Uddin Ahmed and Uwe Köckemann) worked on 'collecting data from various devices (Shimmer+Remote+XBee) to the E-care@home database'. The main goal was to see various sensor devices can transmit data to the E-care@home database. Mobyen used the Android platform to access one Shimmer node via Bluetooth communication and transmit the measurements for 15 parameters (AccLowX, AccLowY, AccLowZ, WideAccLowX, WideAccLowY, WideAccLowZ, GyroscopeX, GyroscopeY, GyroscopeZ, MagnetometerX, MagnetometerY, MagnetometerZ, ECG\_LL\_RA, ECG\_LA\_RA, ECG\_Vx\_RL) with date time. Uwe used a simple network of three Zolertia Remotes. Two were equipped with motion and loudness sensors and sent the corresponding sensor values, their battery status, and internal temperatures to the third one which was used to forward data to a PC and from there to the E-care@home sensor database. In addition, two XBee nodes were used. One recorded temperature and motion while the other was used to interface with the PC (again forwarding to the database from there). It shows, we have successfully transmitted these measurements from various sensors into the E-care database from two different systems. However, there are several issues arising, e.g. sampling frequency, time, etc.