

User-driven Housing for Older People

Creating an ICT-based tool for linking housing to functional capacity

2014-09-25

Ass. Prof. Torbjörn Svensson

Prof. Susanne Iwarsson

CASE, Lund University, Sweden

User-driven Housing for Older People

- Work Package is led by Lund University, Sweden (ULUND)
- **Partners**
Ruprecht-Karls-Universität Heidelberg, Germany
(and Goethe University, Frankfurt)
National Institute of Health and Science on Aging, Italy (INRCA)
- **Subcontractor**
Riga Stradins University, Latvia

Task 1: Information and cross-national communication (12 months)

Research circles were conducted to:

- generate knowledge on how senior citizens in different European countries express their needs and expectations regarding housing options.
- establish user requirements for an ICT tool prototype.



Task 1: continued...

- By June 2013 the research circles were concluded in all four countries
- The research circles involved end users, user organisations as well as public and private stakeholders
- Each research circle consisted of 12-15 participants, who met at four occasions
- Identical meeting, data collection and data management format



Task 1: Cross-national user requirements

A core set of user requirements for the ICT tool were defined:

1/ Detect, evaluate and provide information on potential accessibility problems in current or available housings

2/ Suggest or recommend possible actions to address identified accessibility problems

3/ Interface easy to understand and use, simple in graphical design and accessible also for people with disabilities

Task 2: Training of a team of raters in the housing estate sector

- To prepare all partners, a methodology course was completed during Jan-Feb 2013
- To test the feasibility of the housing accessibility methodology outside the care sector, three employees from two housing estate companies in Sweden were trained by ULUND

Task 3: Data collection of information on environmental barriers

- To test the data collection capacity in terms of feasibility and reliability, 46 type apartments were purposefully selected, totally representing 400 apartments of different building types, standard and design
- Based on previous collaboration data have already been collected for 364 apartments

Task 4: Development of the prototype

Date for completion 2015-07-01

- Development of a prototype of a novel interactive ICT tool, is based on the structure of the Housing Enabler and using databases on environmental barriers in housing as the empirical data source



Task 4: continued...

- A team of students were engaged to set up the basic structure for the ICT tool and completed their work in January 2014
- A research engineer has been employed by ULUND to proceed with the development of the ICT tool
- A test version of the ICT tool is now available for testing by panels in Latvia and Sweden



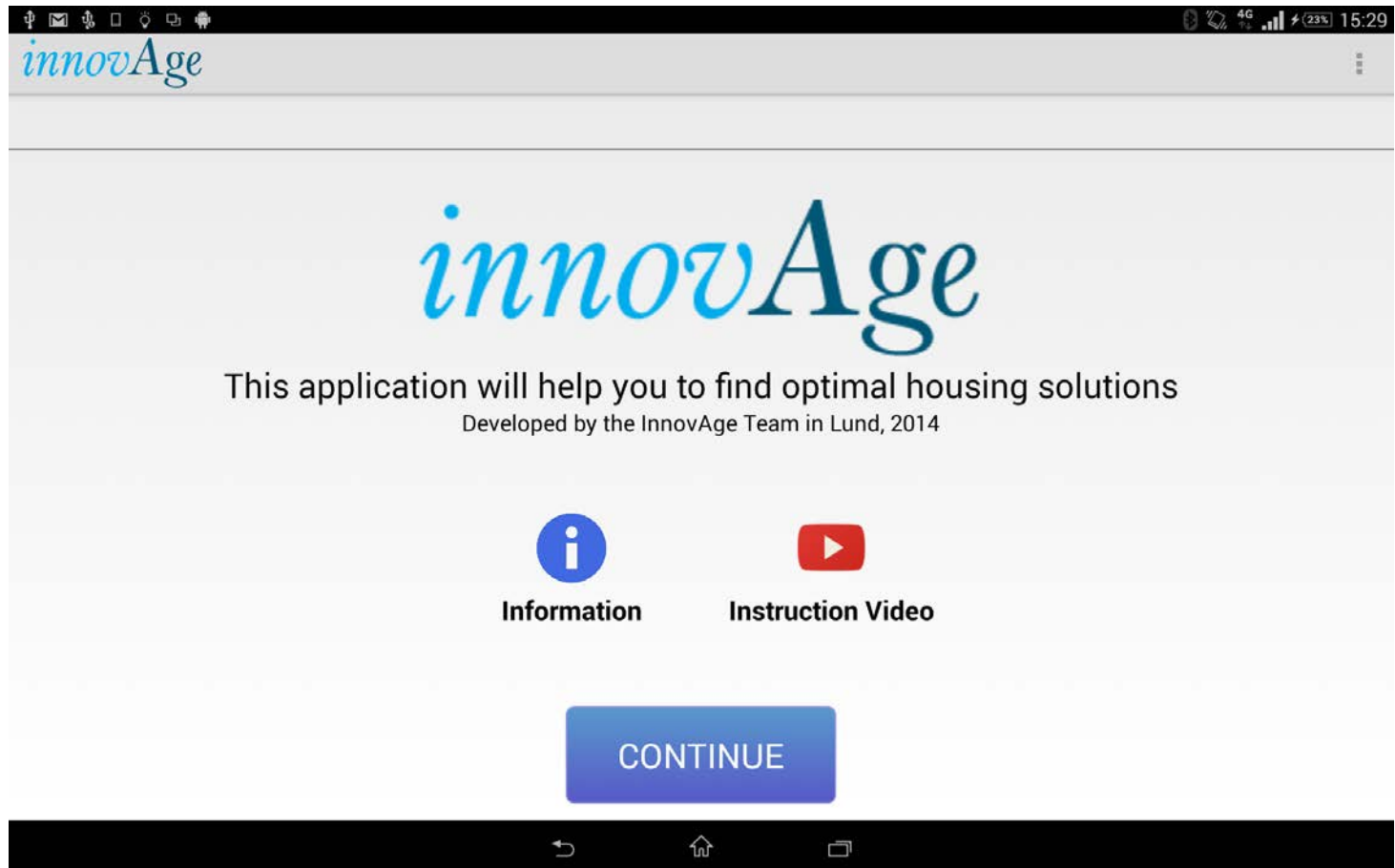
Task 5: Panels of older people to test the prototype

Date for completion 2015-07-01

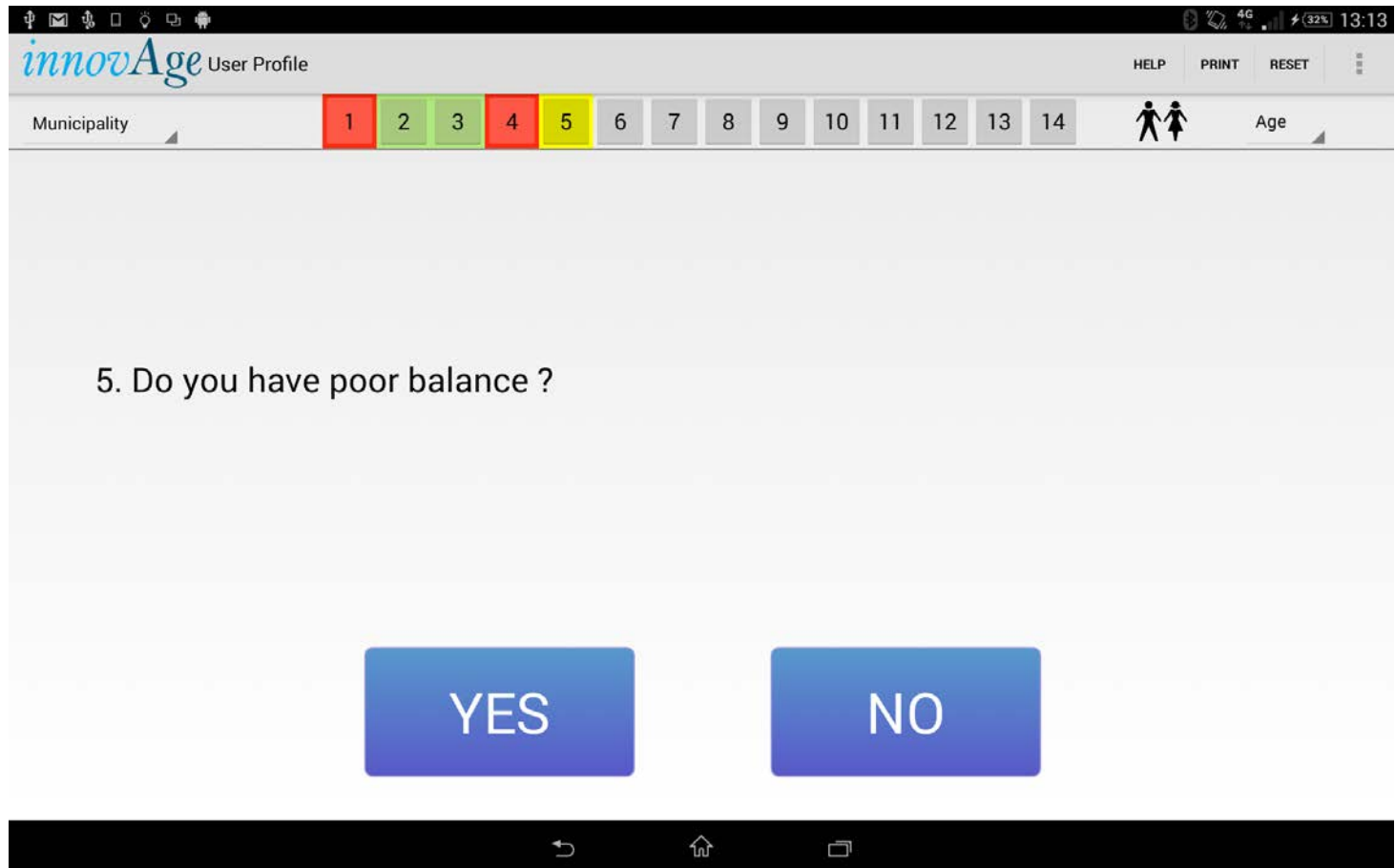
ULUND and Riga Stradins University will be involved in the usability testing of the prototype

- The older persons will use the ICT tool to test its feasibility and usability
- We will use structured data collection formats as well as open interviews (state-of-the-art methods for usability testing). Same in both countries
- An iterative process with redesigns will be used in successive panel testing

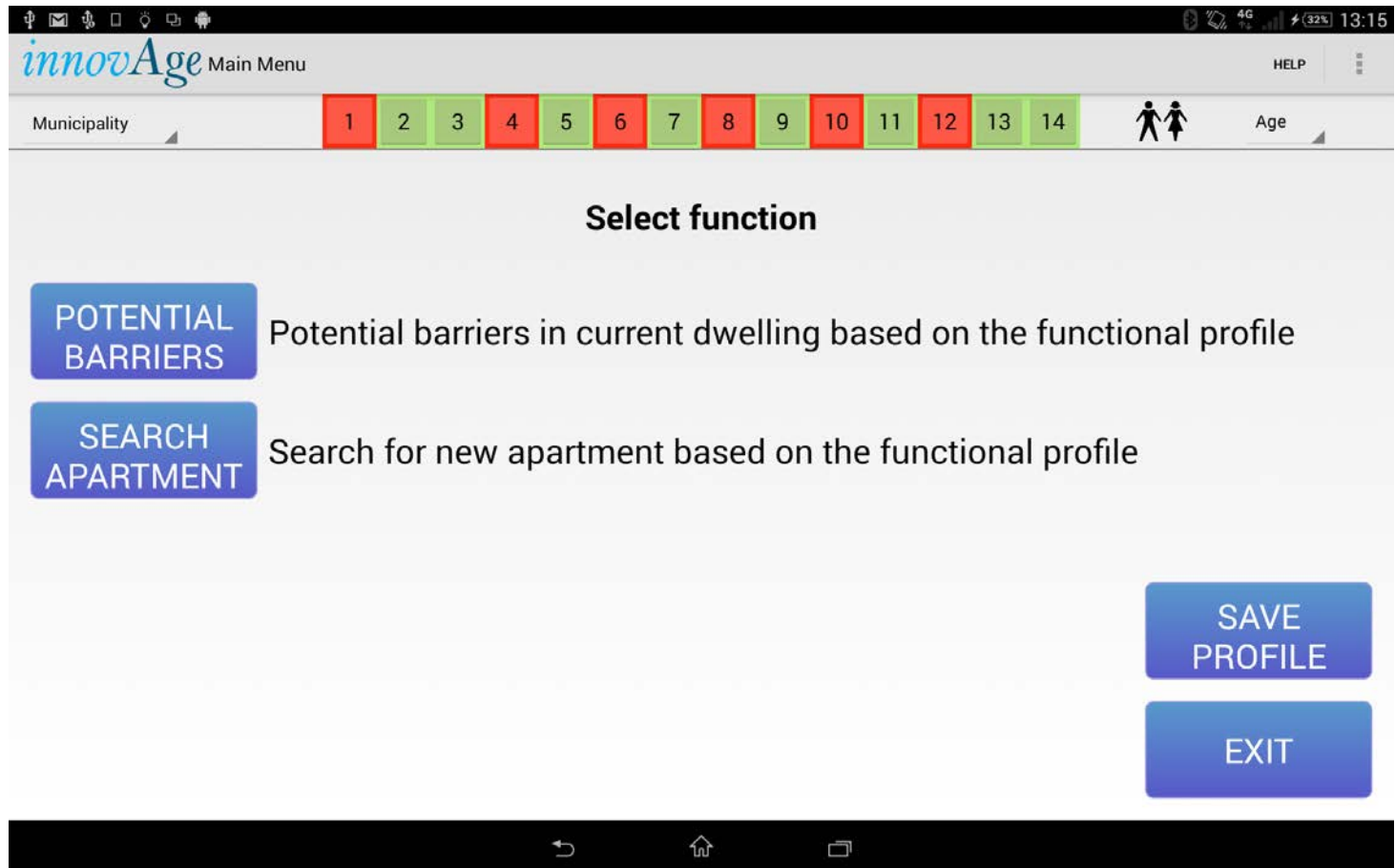
Task 4: The app to be tested



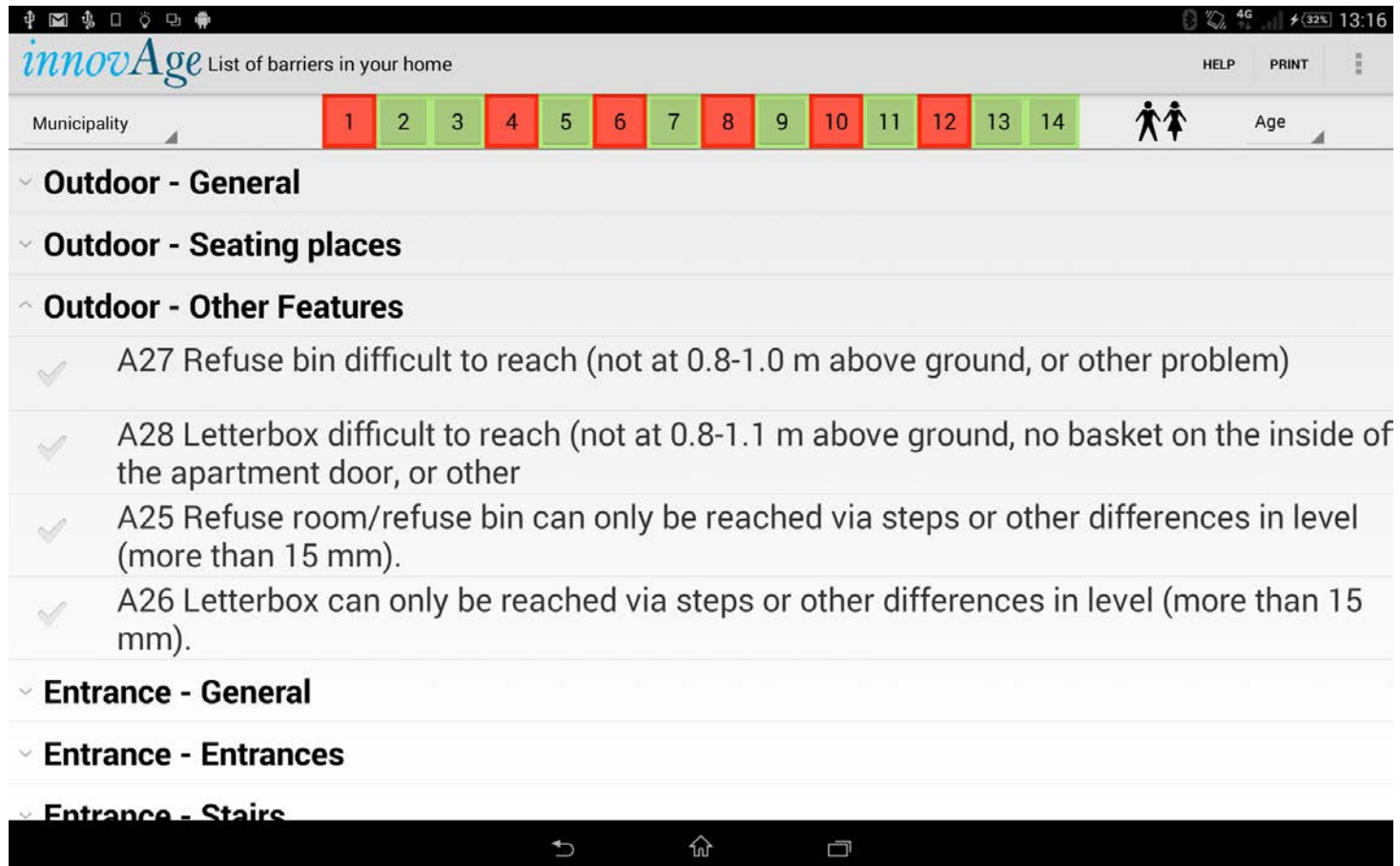
App testing continued



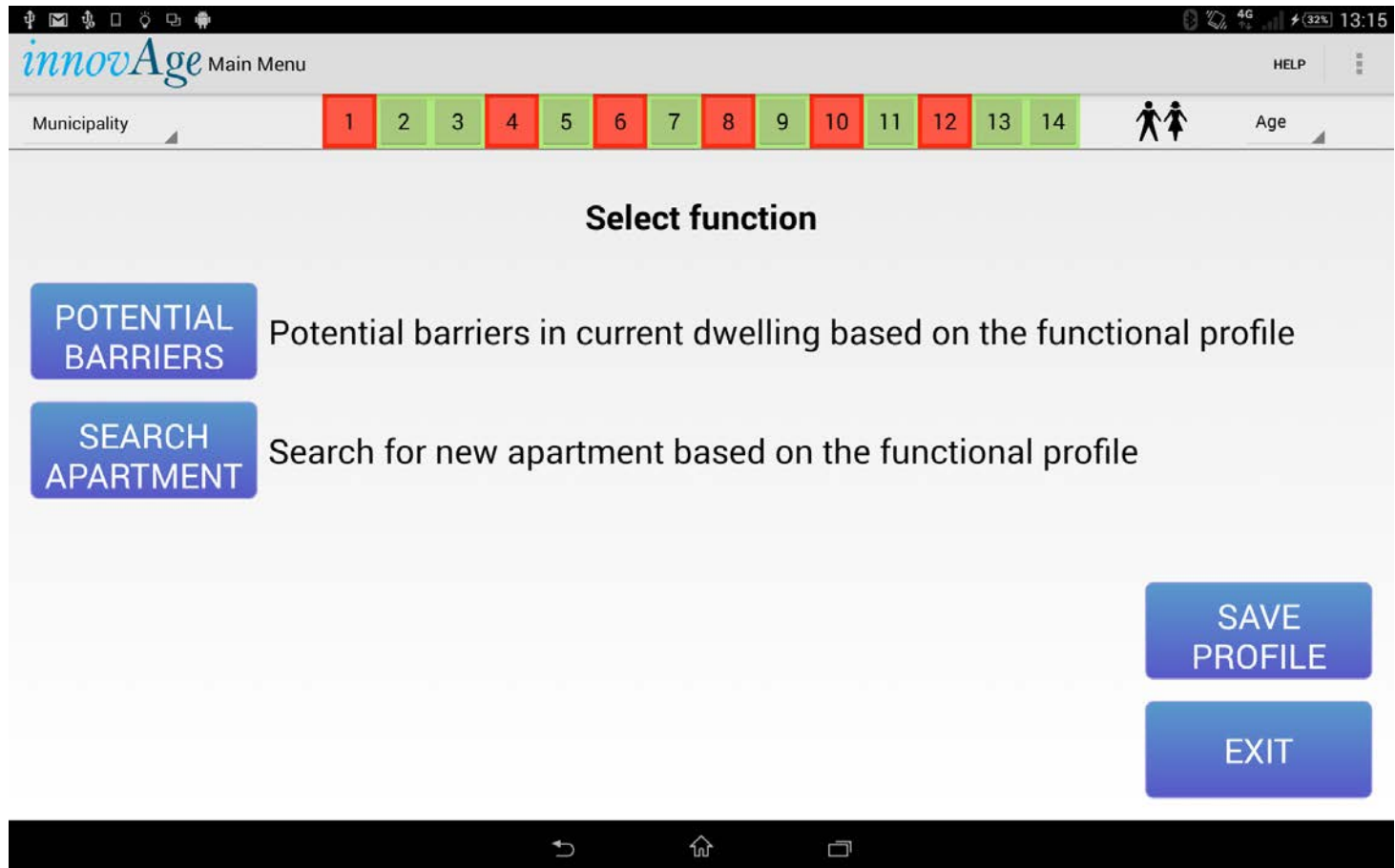
App testing continued



App testing continued



App testing continued



App testing continued

The screenshot shows the innovAge mobile application interface. At the top, there is a status bar with various icons and the time 13:17. Below that, the app header displays the 'innovAge' logo and the text 'List of selected housing'. On the right side of the header, there are 'HELP' and 'PRINT' buttons. A navigation bar below the header contains 14 numbered tabs (1-14) in alternating red and green colors, a person icon, and an 'Age' dropdown menu. The main content area is a table with the following columns: '#', 'Address', 'Floor', 'Rooms', and 'Monthly rate'. Each row in the table is preceded by a green checkmark icon. The table lists three housing options: #84 at Wienergatan (Floor 0, 4 Rooms, 825 Monthly rate), #85 at Sturegatan (Floor 0, 3 Rooms, 600 Monthly rate), and #95 at Brigadhgat (Floor 0, 3 Rooms, 700 Monthly rate). At the bottom of the screen, there is a black navigation bar with three icons: a back arrow, a home icon, and a folder icon.

#	Address	Floor	Rooms	Monthly rate
✓ 84	Wienergatan	0	4	825
✓ 85	Sturegatan	0	3	600
✓ 95	Brigadhgat	0	3	700

Questions to be discussed

- Features to be added or altered?
- Potential partners for future development?
- Potential users and uses?

Answer your questions

- Dr. Björn Slaug (rapporteur), ULund
- Dr. Signe Tomson, Riga Stradins
- Dr. Oskar Jonsson, ULund
- Research engineer Knut Mårtensson, ULund

Thank you for your attention!