media
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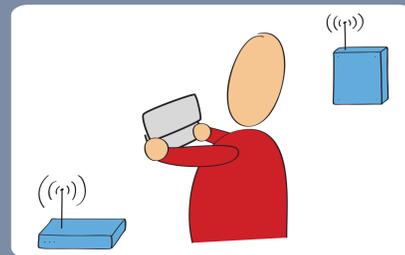UNIVERSITY

The Associative PDA 2.0
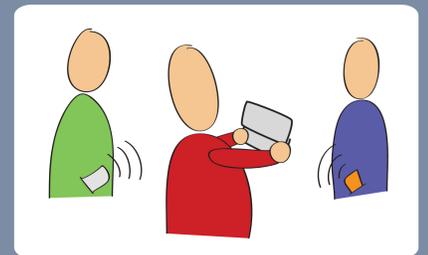## Eileen Falke, Jonathan Diehl, Jan Borchers

Problem

Common systems for personal information management fail because of poor support for mobile use, separation of information, and increasingly complex hierarchical structures, which are hard to search. With the first version of the Associative PDA, introduced at UbiComp 2007, we have proposed an associative system that overcomes the shortcomings of previous systems. In this second prototype we have concentrated on the task of note-taking and performed a large-scale evaluation.

Creating Notes

The system offers direct text input on a full keyboard for immediate note-taking. Notes are stored in the associative network with some associations defined automatically (location, people, time) and others manually. Associated items can be anything, like projects or topics relevant to the user.
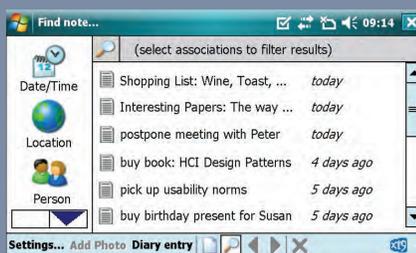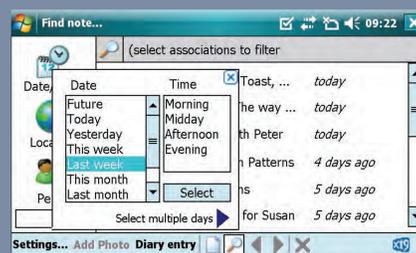

Location Tracking via WLAN

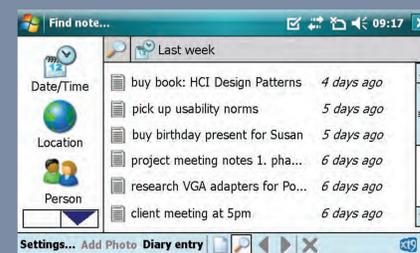People Tracking via Bluetooth

Finding Notes

To find a note, the user chooses related aspects and the system shows all associated notes. Aspects can be anything, from automatic associations, like people present or location, to manual associations, like project or topic.
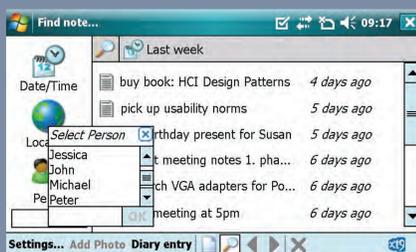

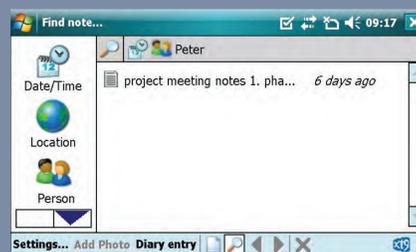Search screen listing all notes in the system chronologically
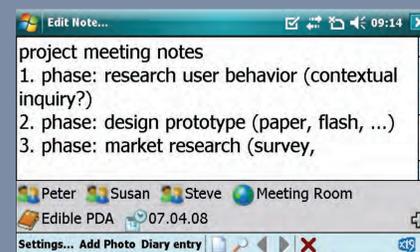
Select last week as a related aspect

Search screen shows all notes associated with a date within last week

Select Peter from present people

Search results narrowed down even further

The demanded note

Evaluation

To evaluate the system, we have conducted a diary study over 4 weeks with 11 participants. Users were given a prototype for daily note-taking, which also logged all activity and allowed free-text entry for comments about the system. The study showed that the use of associations for search is very efficient: 87% of all searches used 2 or less search steps, and the number of steps in the search did not increase with the number of notes in the system. As a next step, we want to extend the system to all tasks of personal information management.

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