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concept

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Application Development for Mobile and Ubiquitous Computing
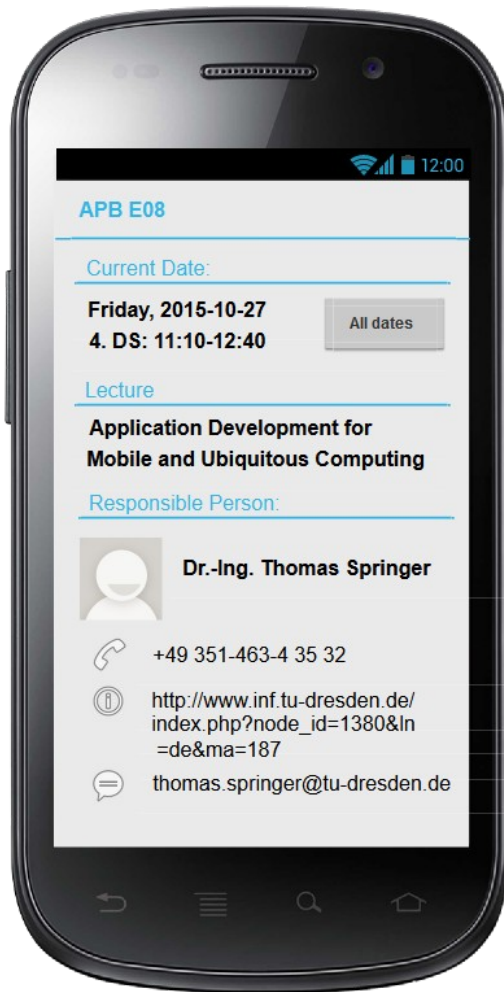
Seminar Task
First Presentation

Group No. 5
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Dresden, 30. Oct. 2015

Providing Information by NFC

Instead of writing time tables and other information on paper, they can be stored on NFC tags and retrieved by smartphones:
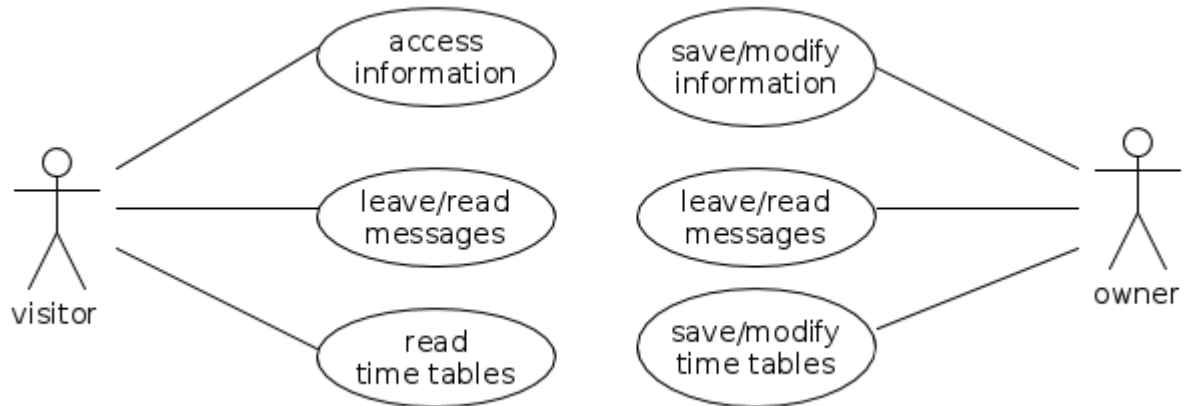
- See the time table of a lecture hall or office owner

- read and/or leave notes

- see if the room is occupied or the owner hasn't time at the moment

- get information about the room or the owner such as name, internet address, email address, phone number

Providing Information

- A visitor can access information e.g. of a lecture hall by holding his/her smartphone near the rooms info sheet
- In an application the information about the current lecture is displayed
- Additionally all dates in this lecture hall can be displayed
- Personal information of the responsible person is provided to let the user interact by e.g. email, phone or an internet browser

Use cases

Challenges

- **Context / Location Awareness**

  showing information from current location based on current time (calendar/time table), save last visited locations

- **Usability**

  Heterogeneous usage scenarios (visitor, owner)

- **Resource restrictions**

  restricted storage on NFC tags

Technologies

Near Field Communication (NFC)

- Storing a restricted amount of data
- Open an Android application when sensed by a smartphone

Android (Java)

- Offer an intuitive User Interface to present information
- Read/write information from/to NFC tags
- Further processing/interaction of these information

Work plan

- 13.11.2015 – Familiarize with NFC technology

- 27.11.2015 – First prototype
  - Application layout design
  - Read/write NFC tags

- 11.12.2015 – Second presentation

- 25.12.2015 – Refine prototype

- 13.01.2016 – Last fixes and optional features

- 27.01.2016 – Final presentation