TECHNISCHE UNIVERSITÄT DRESDEN

Department of Computer Science Institute for System Architecture, Chair for Computer Networks

Application Development for Mobile and Ubiquitous Computing

Seminar Task
First Presentation

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Content

1. Application Scenario
2. Design and User Interface
3. Technologies
4. Architecture
5. Challenges
6. Work plan

1. Application Scenario

- some kind of anonymous Twitter based on locations

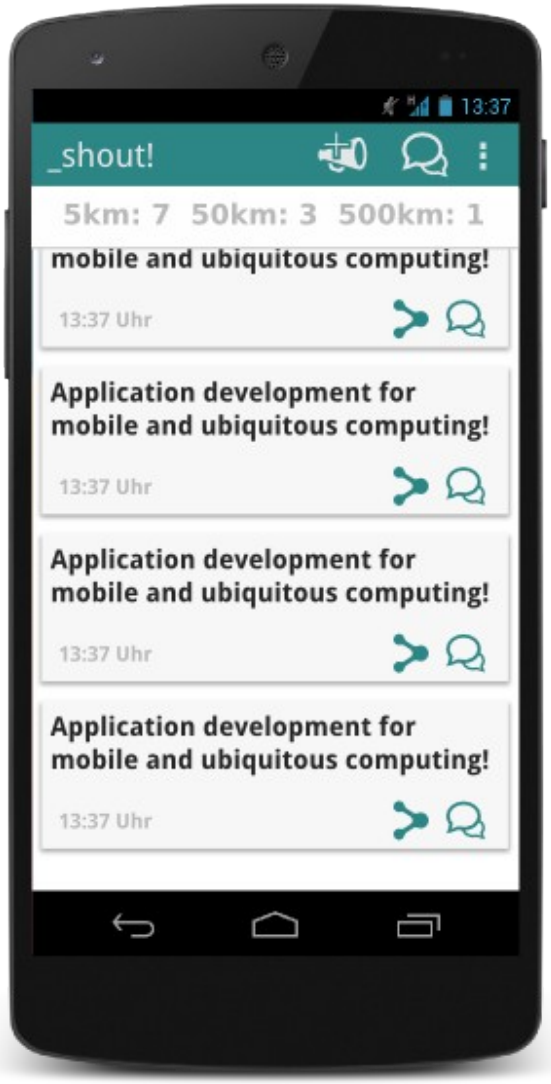
- writing shouts
  - different fixed ranges → 5 - 500km
  - user has limited amount of shouts per day
  - shout length limited to around 60 chars
  - each shout stored for 24h
  - number of sent shouts per day depends on the range of each shout

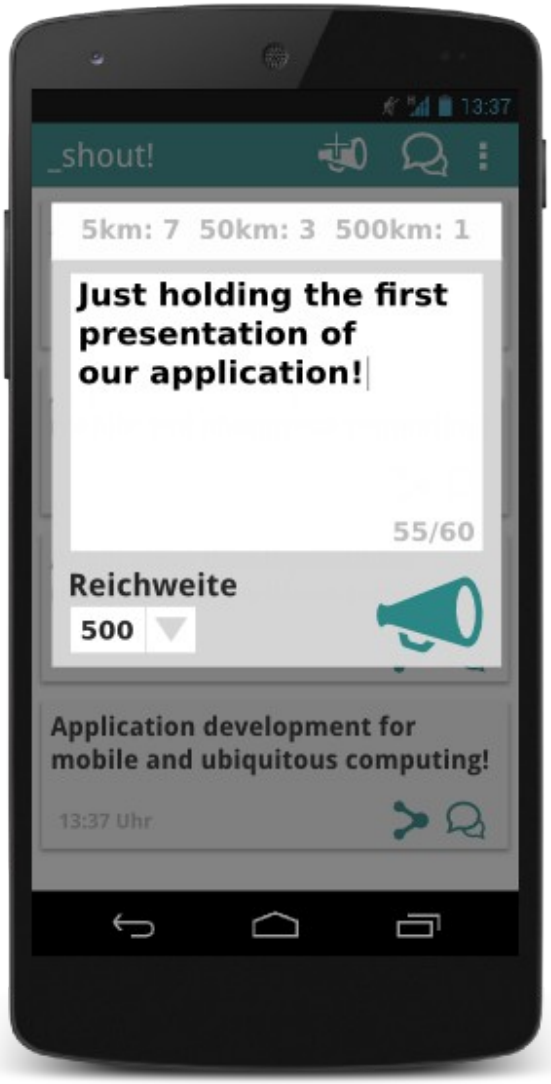
_shout!

1. Application Scenario

- reading shouts
  - listed shouts depend on reader's location
  - possibility to answer a shout via private message
- private conversations
  - pseudoanonymous (random id as nickname)
  - can be canceled by each participant

2. Design


13:37
_shout!
5km: 7 50km: 3 500km: 1
mobile and ubiquitous computing!
13:37 Uhr
Application development for mobile and ubiquitous computing!
13:37 Uhr
Application development for mobile and ubiquitous computing!
13:37 Uhr
Application development for mobile and ubiquitous computing!
13:37 Uhr


13:37
_shout!
5km: 7 50km: 3 500km: 1
Just holding the first presentation of our application!
55/60
Reichweite
500
Application development for mobile and ubiquitous computing!
13:37 Uhr

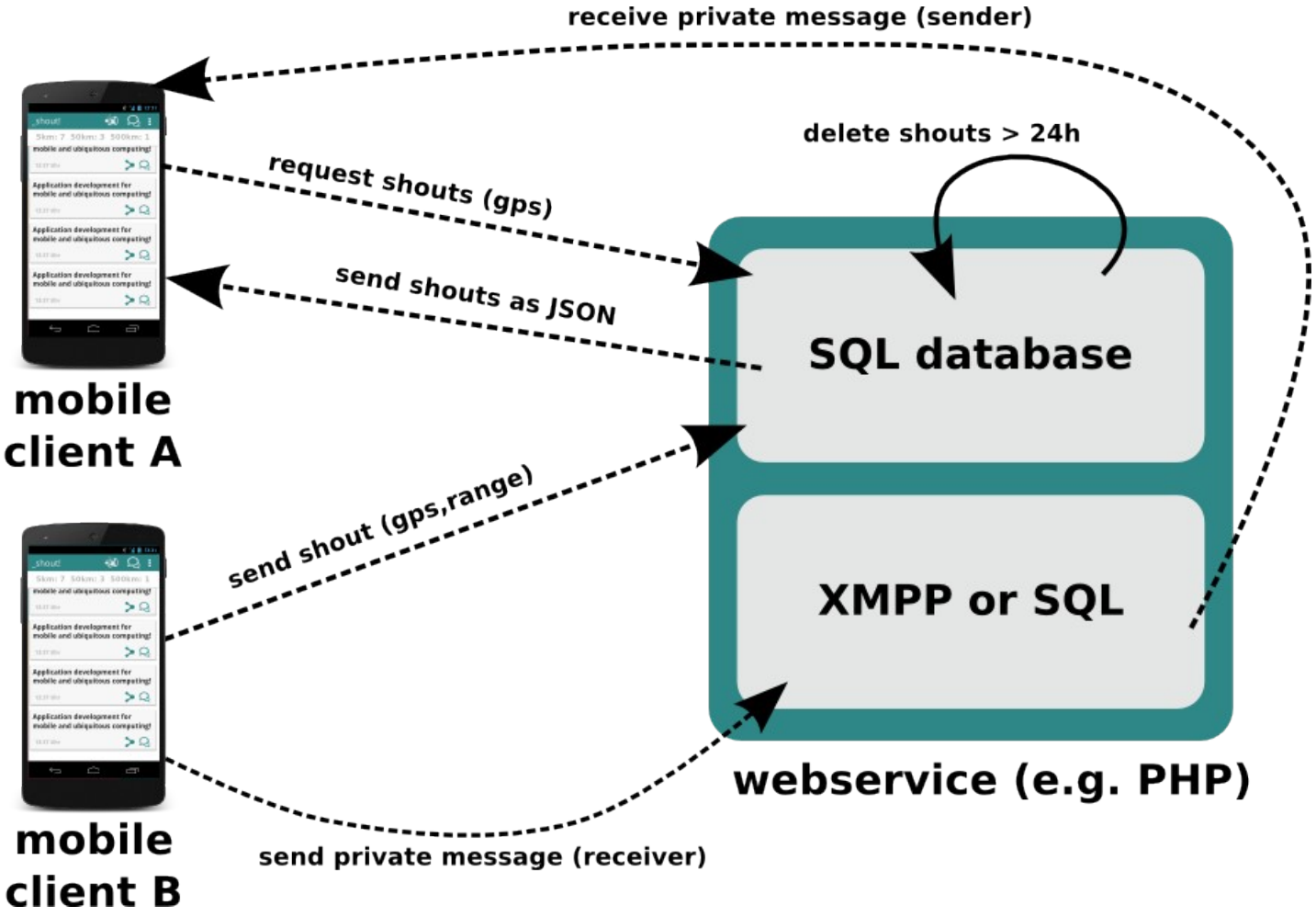
Client

- OS → Android > version 4.0
- geolocation → GPS and netbased tracking

Server

- SQL database for storing shouts
- XMPP for private conversations

4. Architecture



5. Challenges

- offline challenge
  - downloaded shouts stored on device
  - option to set the amount of stored shouts
- usability challenge
  - clear and structered user interface
  - use of of android specific gestures / controls
  - tutorial / help views
- connectivity challenge
  - reduce amount of sent data to minimum

6. Work plan

2014

- 11/20/14 → application base, elementary ui controls
- 12/01/14 → sql server
- 12/10/14 → communication between app and server
- 12/19/14 → adaption docs
- 12/31/14 → private message system

2015

- 01/15/15 → finalize user interface
- 01/30/15 → testing / bugfixing / final presentation

Questions?

Thank you for your attention!