TECHNISCHE UNIVERSITÄT DRESDEN

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

Application Development for Mobile and Ubiquitous Computing

PrivateViewing

Second Presentation

Group 10
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Application Scenario

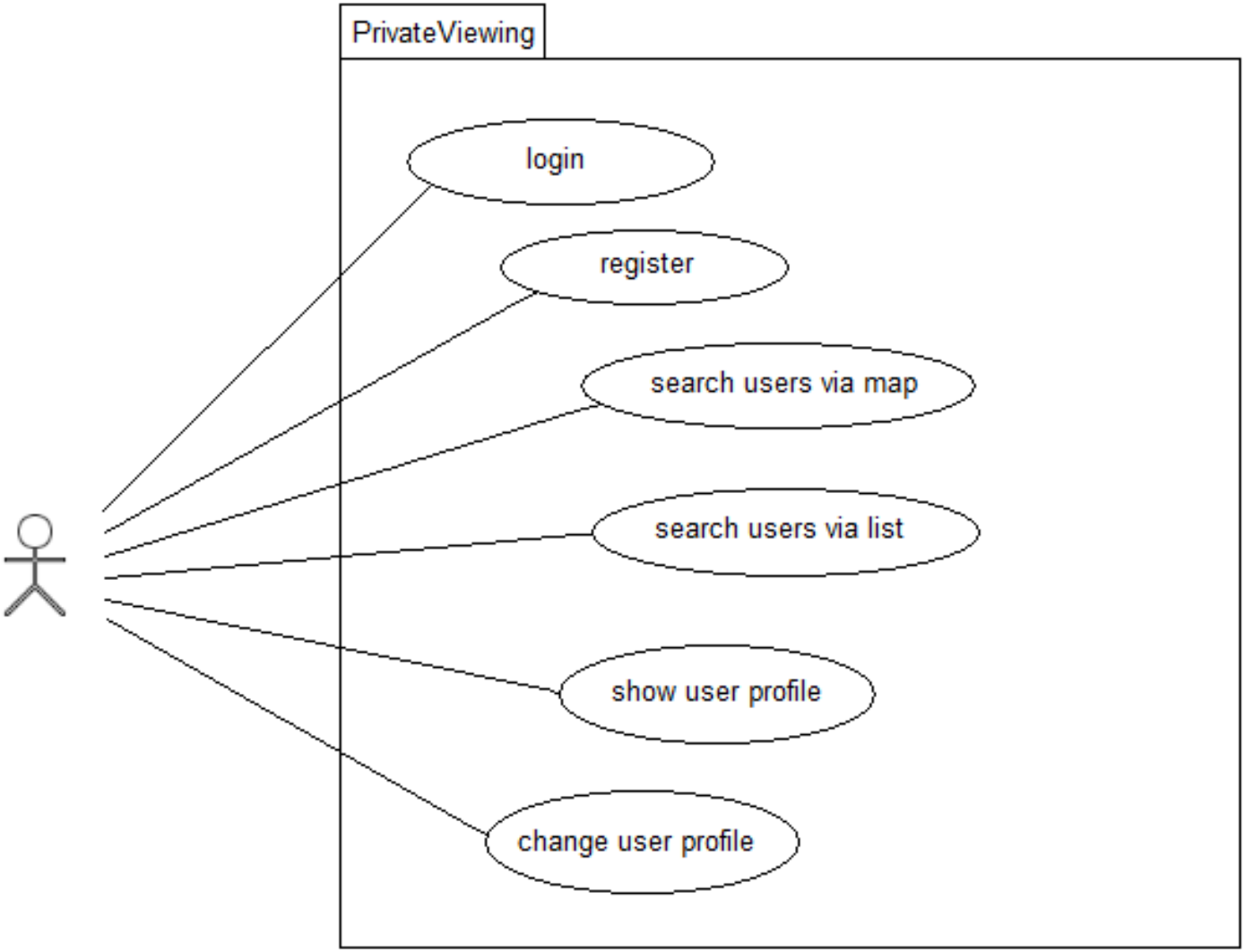
Idea:

- users can look for people who let them watch their favourite team on TV

Functions:

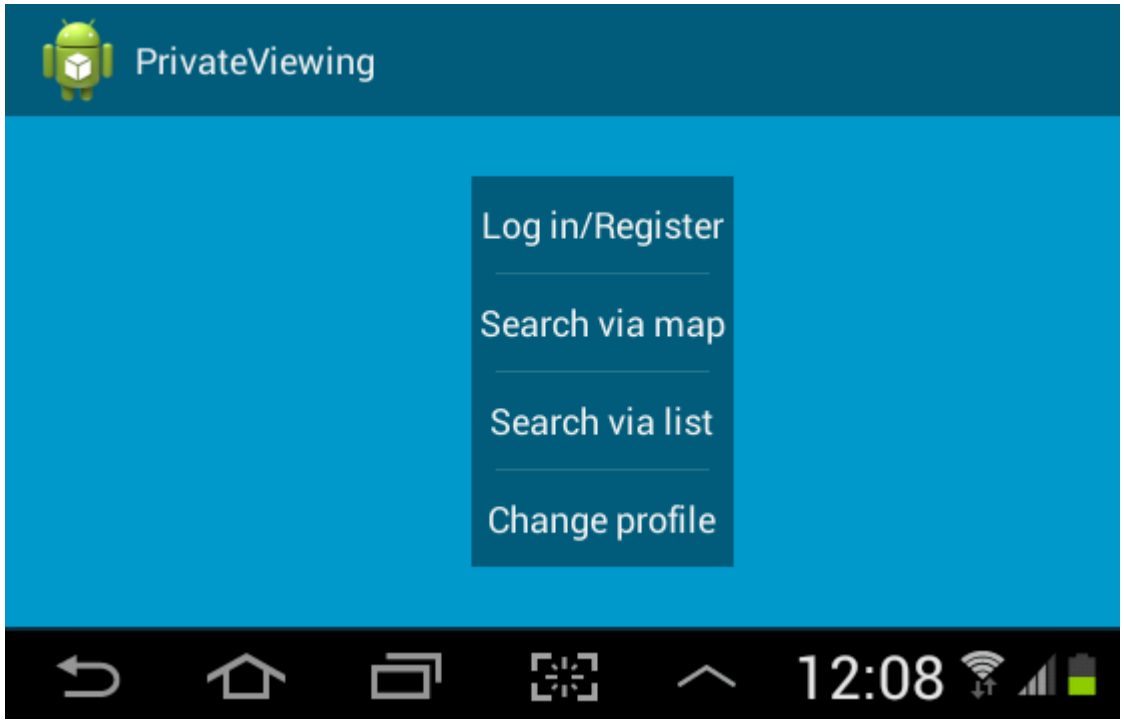
- users can register with an own profile
- profile contains personal and contact information as well as preferred sports and clubs
- users can mark themselves as available hosts for watching an upcoming match

Use Cases

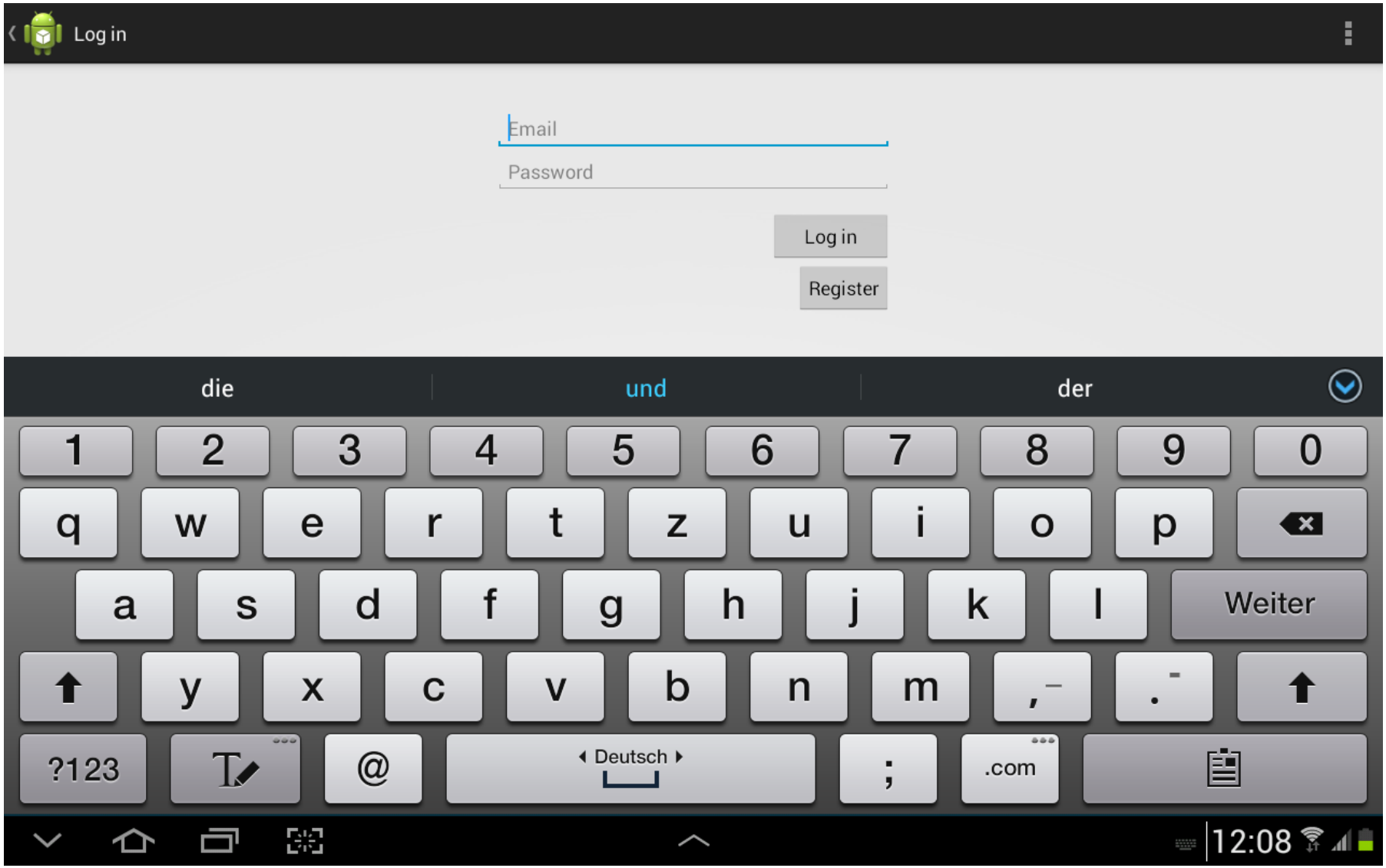

PrivateViewing
login
register
search users via map
search users via list
show user profile
change user profile

Screenshots

Menu



Screenshots



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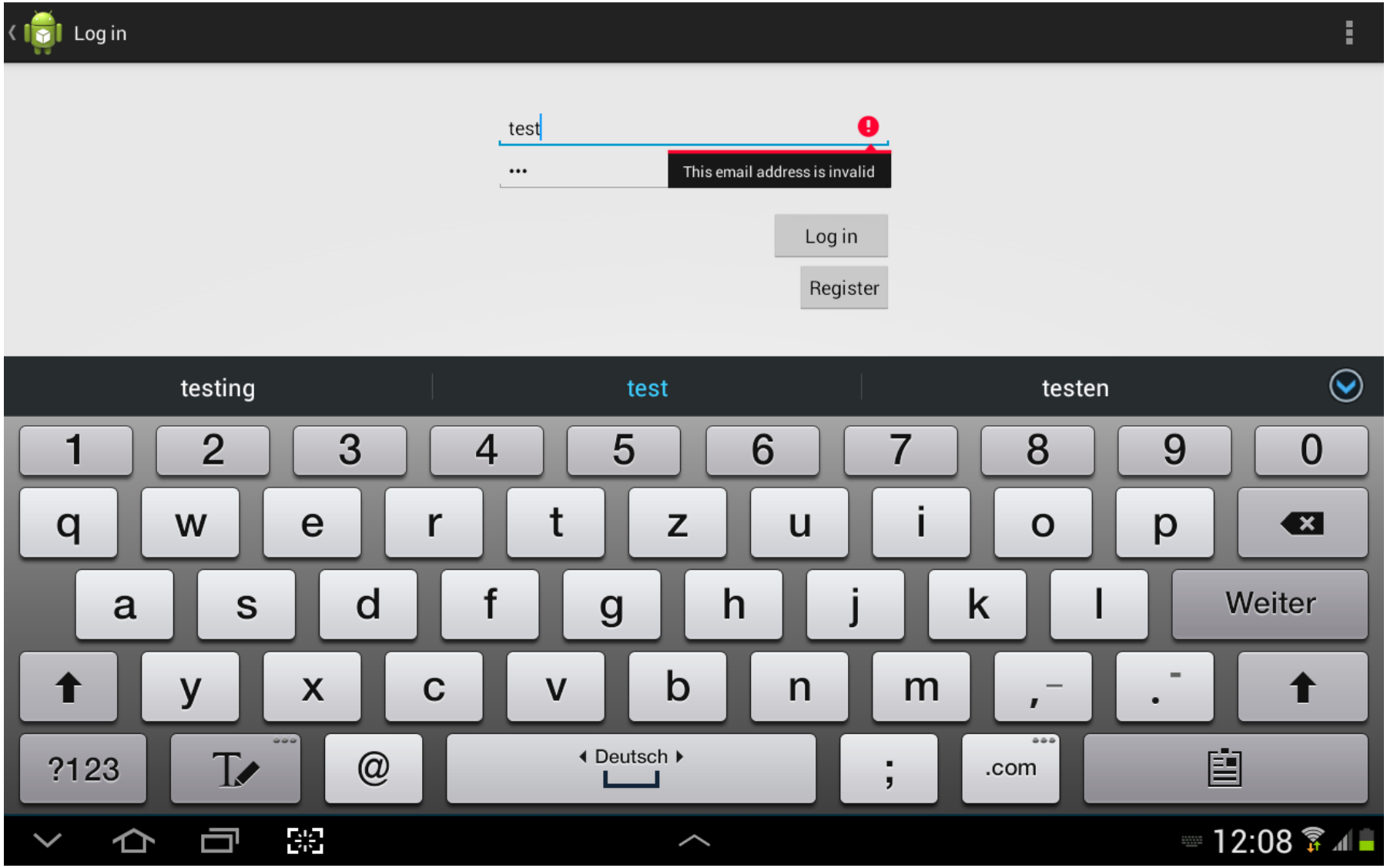

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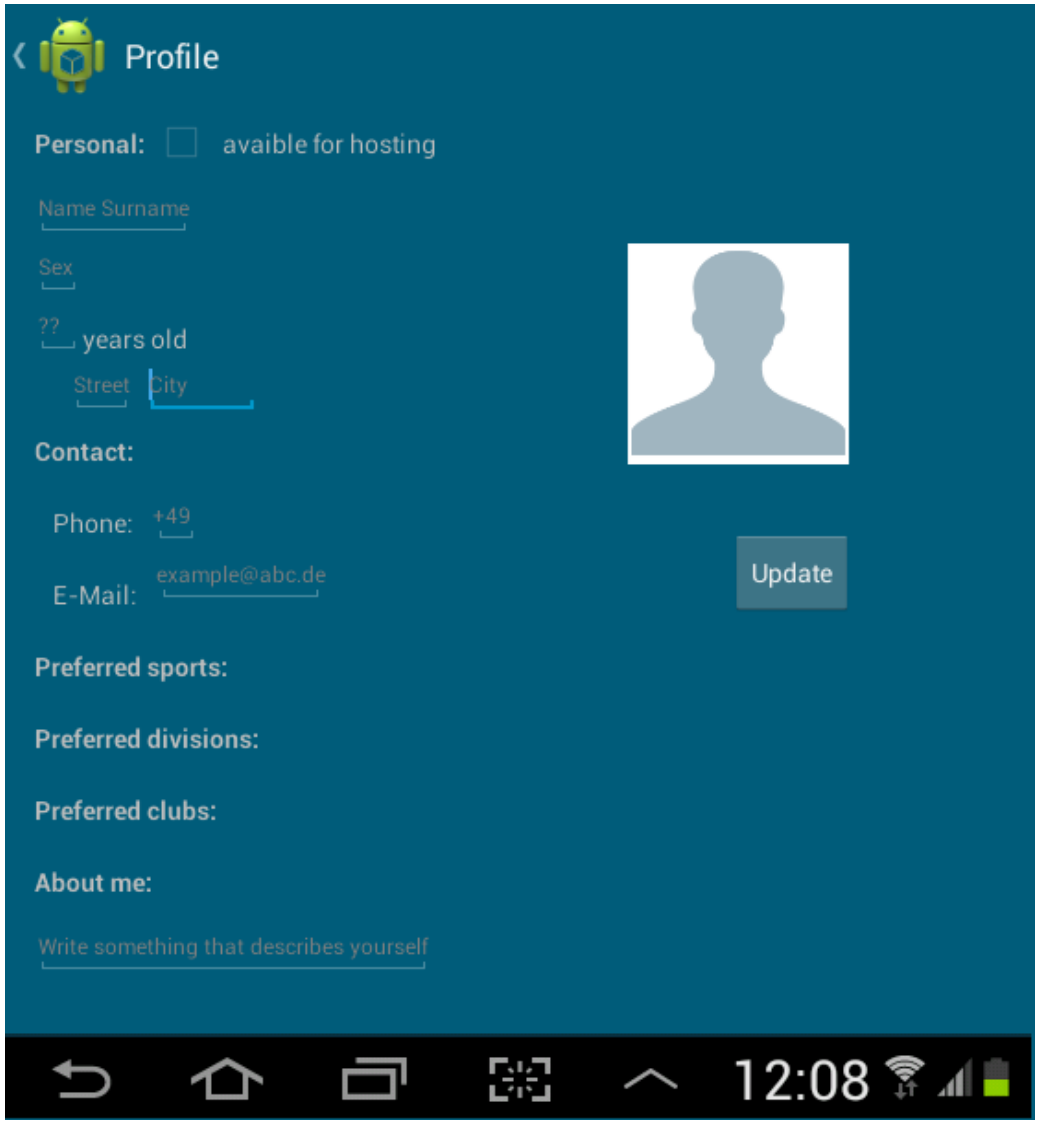

Client

- Android application containing
  - Java classes — provide functionality
  - Android XML files — provide layout
  - XML files — provide strings

- Google APIs & Google Play Services for Google Maps

Server

- Platform is Google App Engine (GAE)
- Written in Python
- Using Webapp2 library
  - User handling
  - Database management
- Data exchange between client and server
  - RESTful API
  - JSON format

Server Restful API

- /login
  - POST: Logging user in.
- /logout
  - GET: Logout user.
- /profile
  - GET: Get detailed information about specific user.
  - POST: Creating new user.
  - PUT: Updating user information.
  - DELETE: Delete user.
- /search
  - GET: Get short information about registered users.
- /position
  - PUT: Update user's location.

Adaptation and Context

- JSON format for exchanging data
  - Easy to parse and only the needed information
- Data validation before sending request
- Users have GPS coordinates
  - Viewing users in the map
  - Searching users that are near you

Work plan

Done:

- communication client ⇔ server
  - user registration and log in
  - get list of users
  - show and change profile

To do:

- Fixing the user login in client app
- Fixing problems with getting location
- Making usable list view
- Adding user location update to client
- Improving layout