



# Application Development for Mobile and Ubiquitous Computing

## PrivateViewing Second Presentation

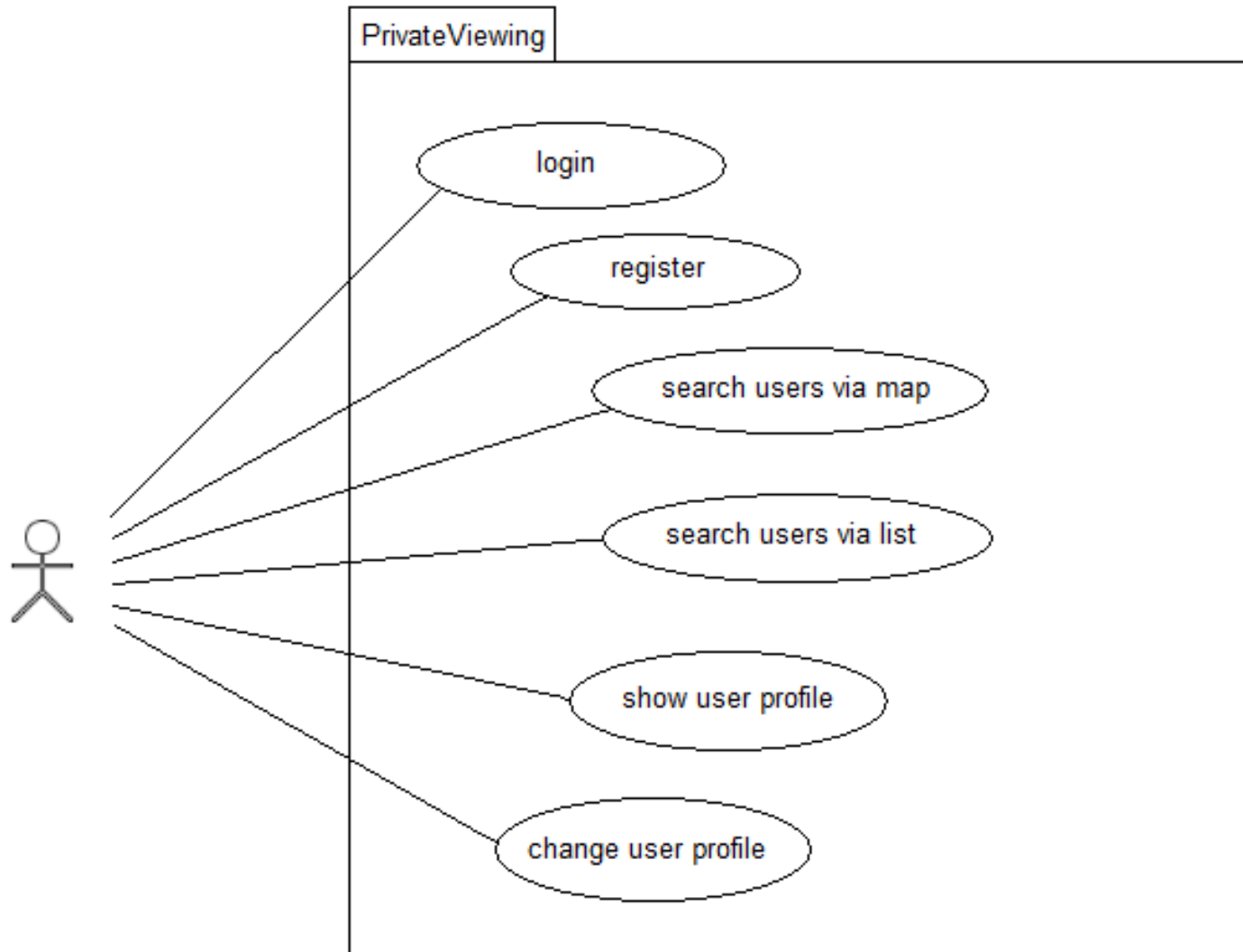
Group 10  
Team: Janne Klaper, Florian Schöpfung

## Idea:

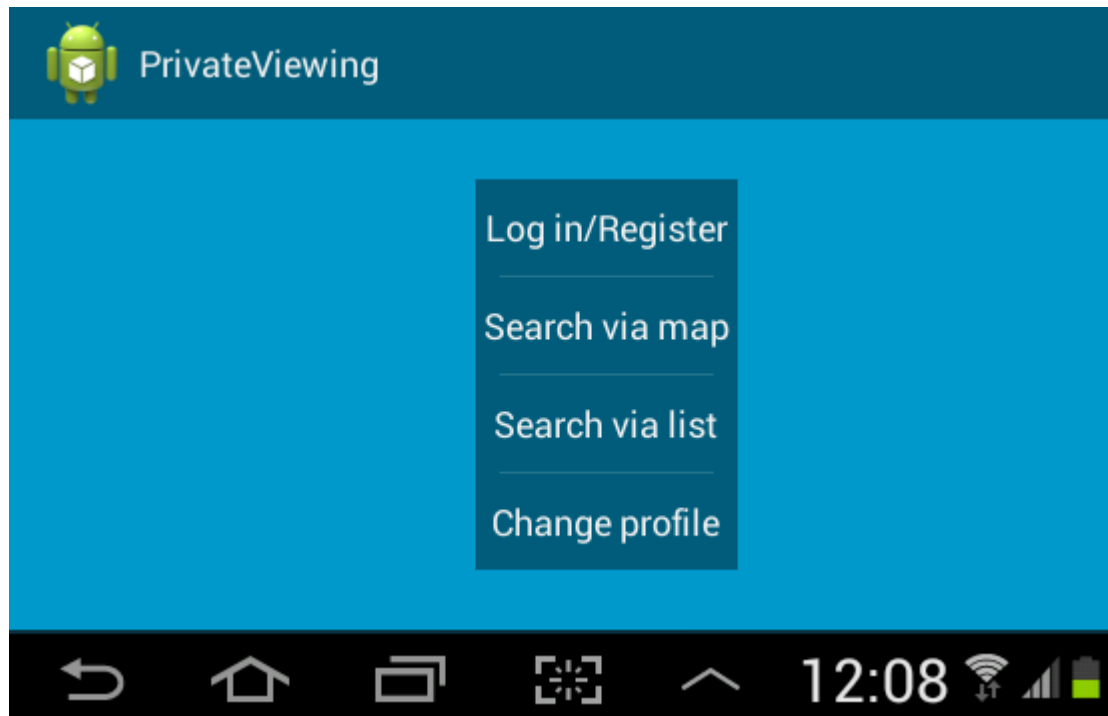
- users can look for people who let them watch their favourite team on TV

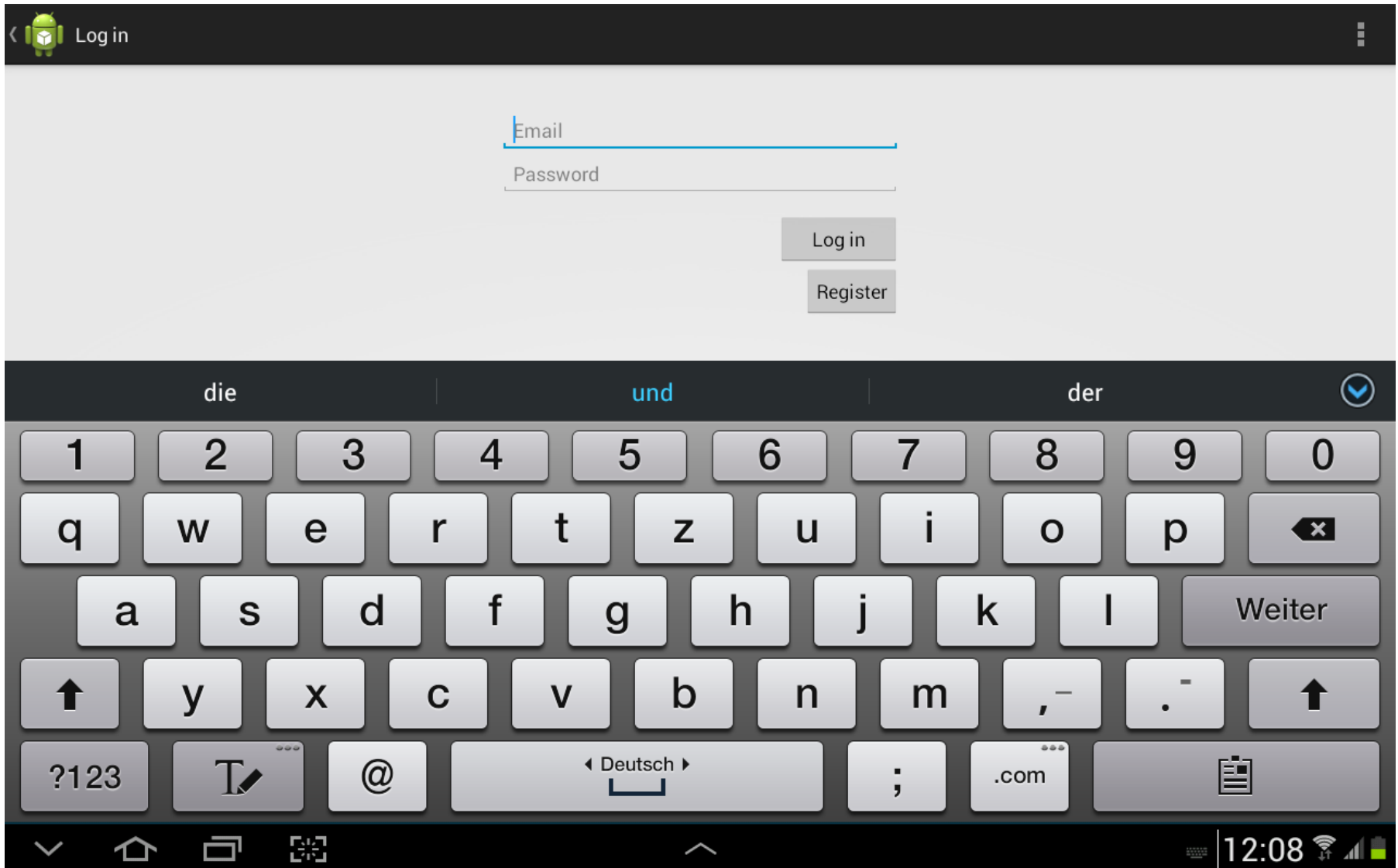
## Functions:

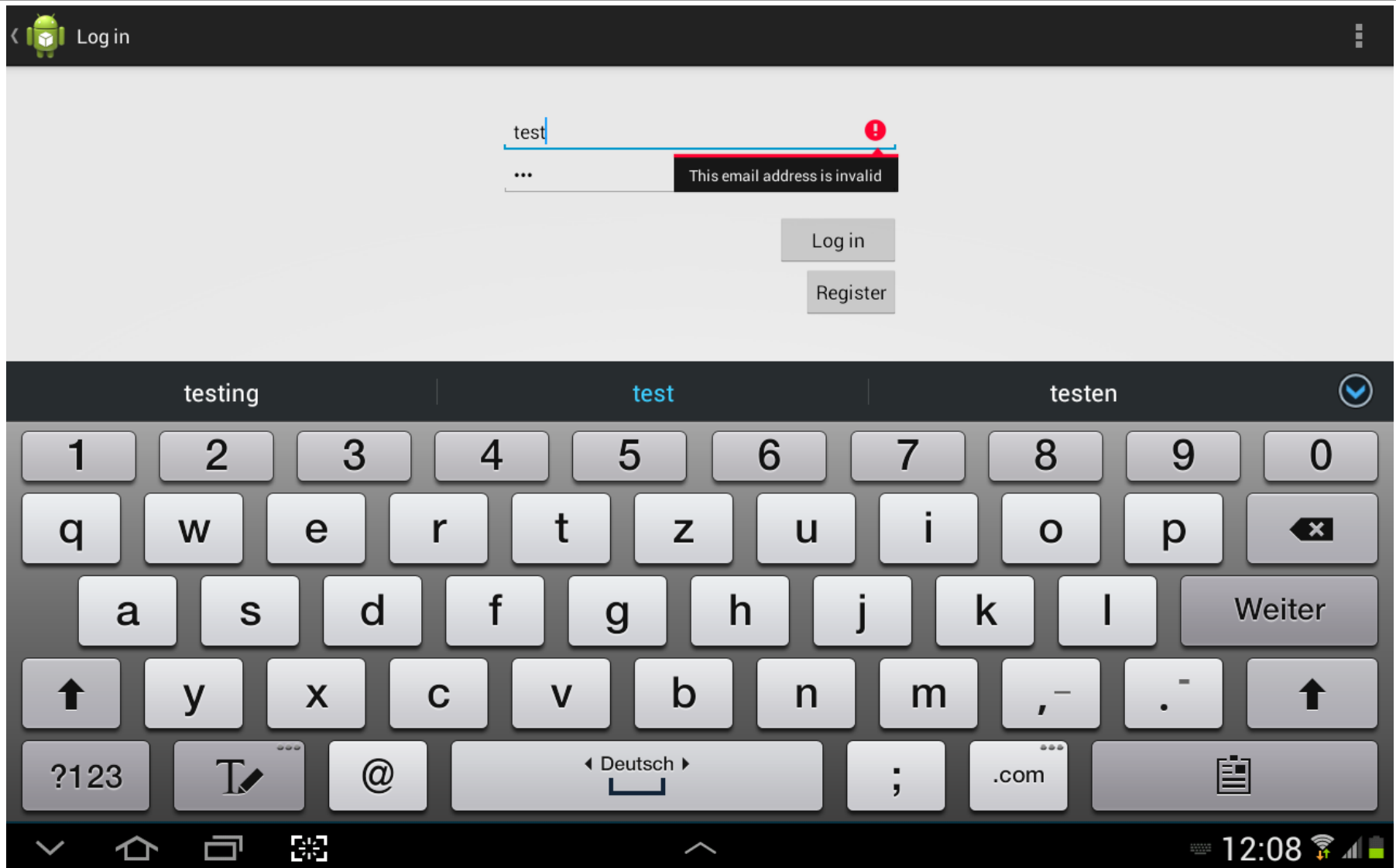
- users can register with an own profile
- profile contains personal and contact information as well as preferred sports and clubs
- users can mark themselves as available hosts for watching an upcoming match

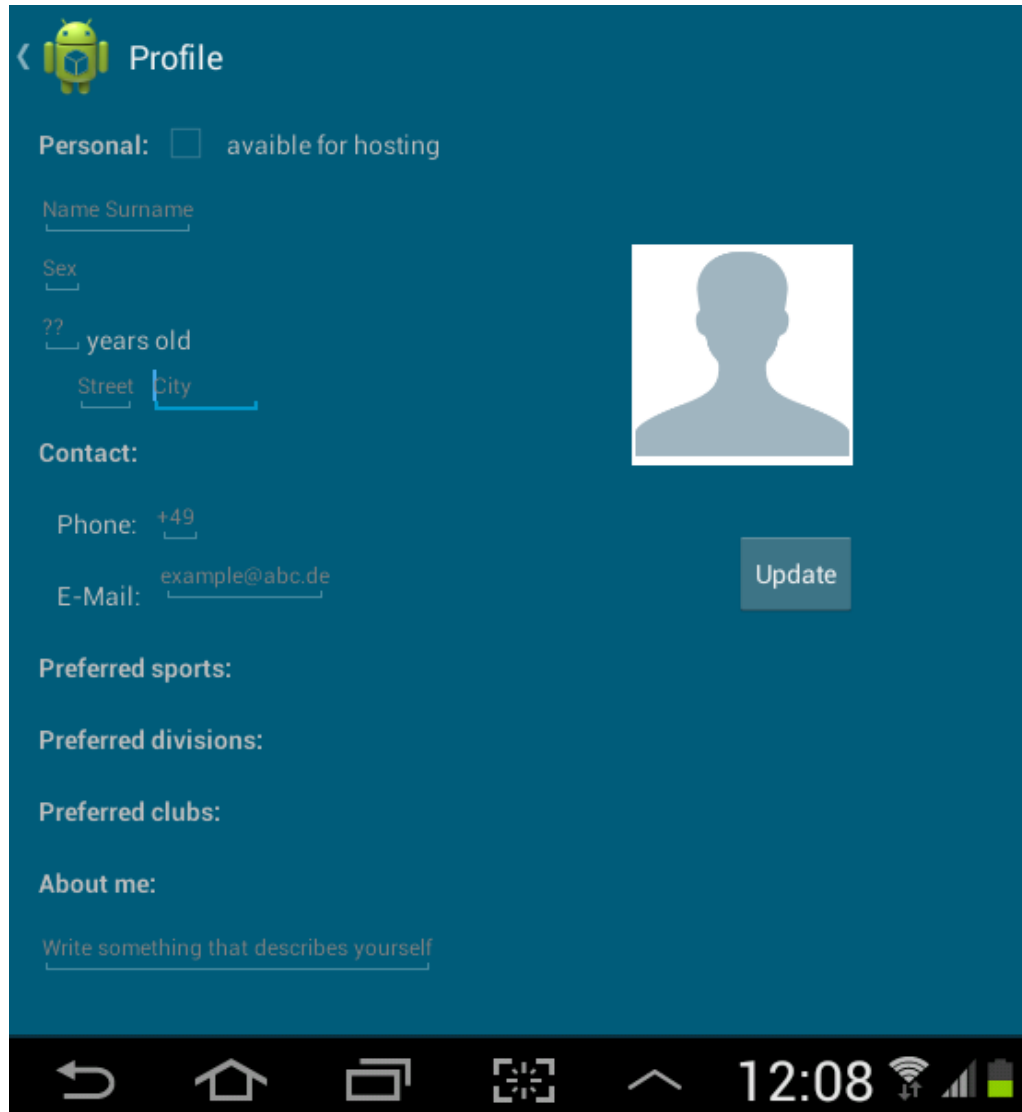


## Menu










The screenshot shows a mobile application interface for a profile page. The background is a solid teal color. At the top left, there is a back arrow icon and a small Android robot icon. The title "Profile" is displayed in white text. Below the title, there is a "Personal:" section with a checkbox labeled "available for hosting". Underneath, there are input fields for "Name Surname", "Sex", and "?? years old". Below these, there are input fields for "Street" and "City". To the right of these fields is a placeholder image of a person's head and shoulders. Below the "Personal:" section is a "Contact:" section with input fields for "Phone:" (with a "+49" prefix) and "E-Mail:" (with the text "example@abc.de"). To the right of the "E-Mail:" field is a grey "Update" button. Below the "Contact:" section are three sections: "Preferred sports:", "Preferred divisions:", and "Preferred clubs:", each followed by a large empty text area. At the bottom is an "About me:" section with a text input field containing the placeholder text "Write something that describes yourself". At the very bottom of the screen is a black Android navigation bar with icons for back, home, recent apps, search, and a signal strength indicator, along with the time "12:08" and battery status.

<  Profile

**Personal:** ☐ available for hosting

Name Surname

Sex

?? years old

Street City

**Contact:**

Phone: +49

E-Mail: example@abc.de Update

**Preferred sports:**

**Preferred divisions:**

**Preferred clubs:**

**About me:**

Write something that describes yourself

## 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.

- 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

**Done:**

- communication client  $\Leftrightarrow$  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