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

Application Development for Mobile and Ubiquitous Computing

Seminar Task
First Presentation

Team 12

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Scenario Description:

[1]Location-based service that obtains user's coordinates through GPS and allows him to know which are the most nearly tram stops.

[1] The information that the application offers is about tram's number and timetable so the user can know how many time is going to wait.

[1] In addittion gets an estimated time between current time and next tram's time elaborating a list ordered by time.

Flag 1
Trams 3 and 8

Flag 2
Tram 11
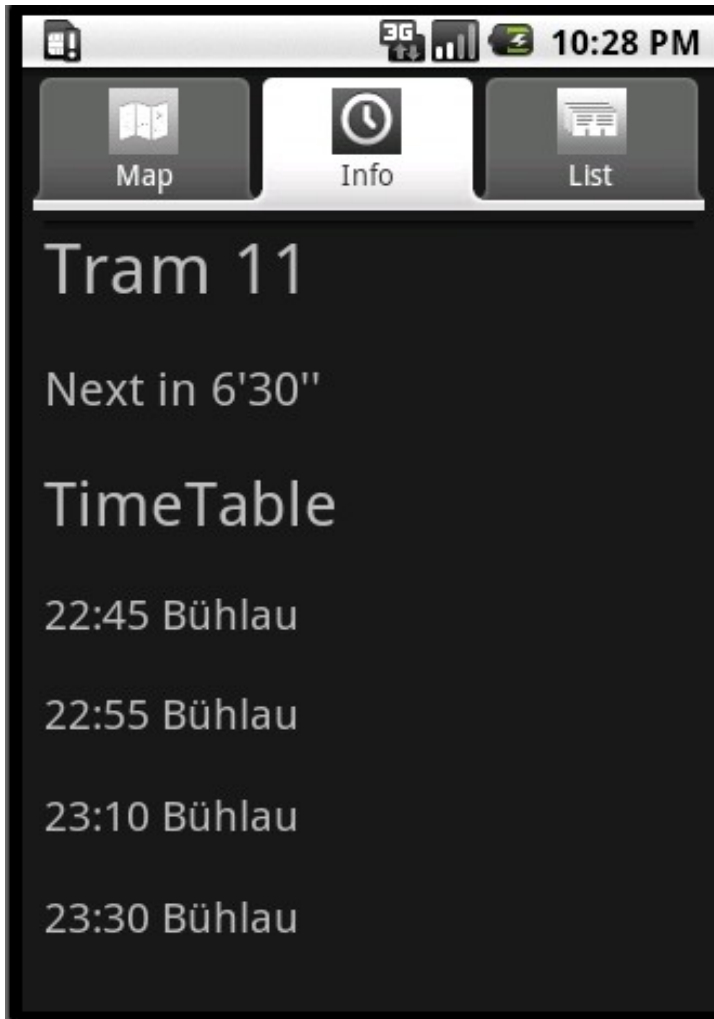
Scenario has some tabs with options:
1 Map view
1 Line information
1 List ordered by time

When the user selects one line
gets how many time left till
the next tram and a general
view of the timetable.

Server:
[1] Java EE
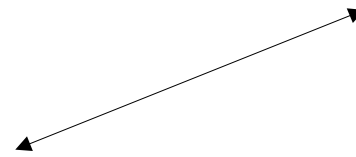[1] Access via SOAP

Client:
[1] Android 1.6
[1] Google Maps API for rendering maps

Connection via WLAN and GPS

Device

Gps position

Get information (http)

Request timetable

Get timetable file

Technological challenges

Restricted mobile devices capabilities
- Power consumption
- Memory

Customer satisfaction
Usability
- User friendly interface
Safety
Consistency
- Timetable update
- Calculate time "current time" minus "time departure's tram"

¹Understand Android development platform

¹Develop a basic application with tabs that can get the timetable file from the server.

¹Integrate Google Maps API in our application.

¹Make some improvements and test that all requeriments are working right. Found a catchy name.