

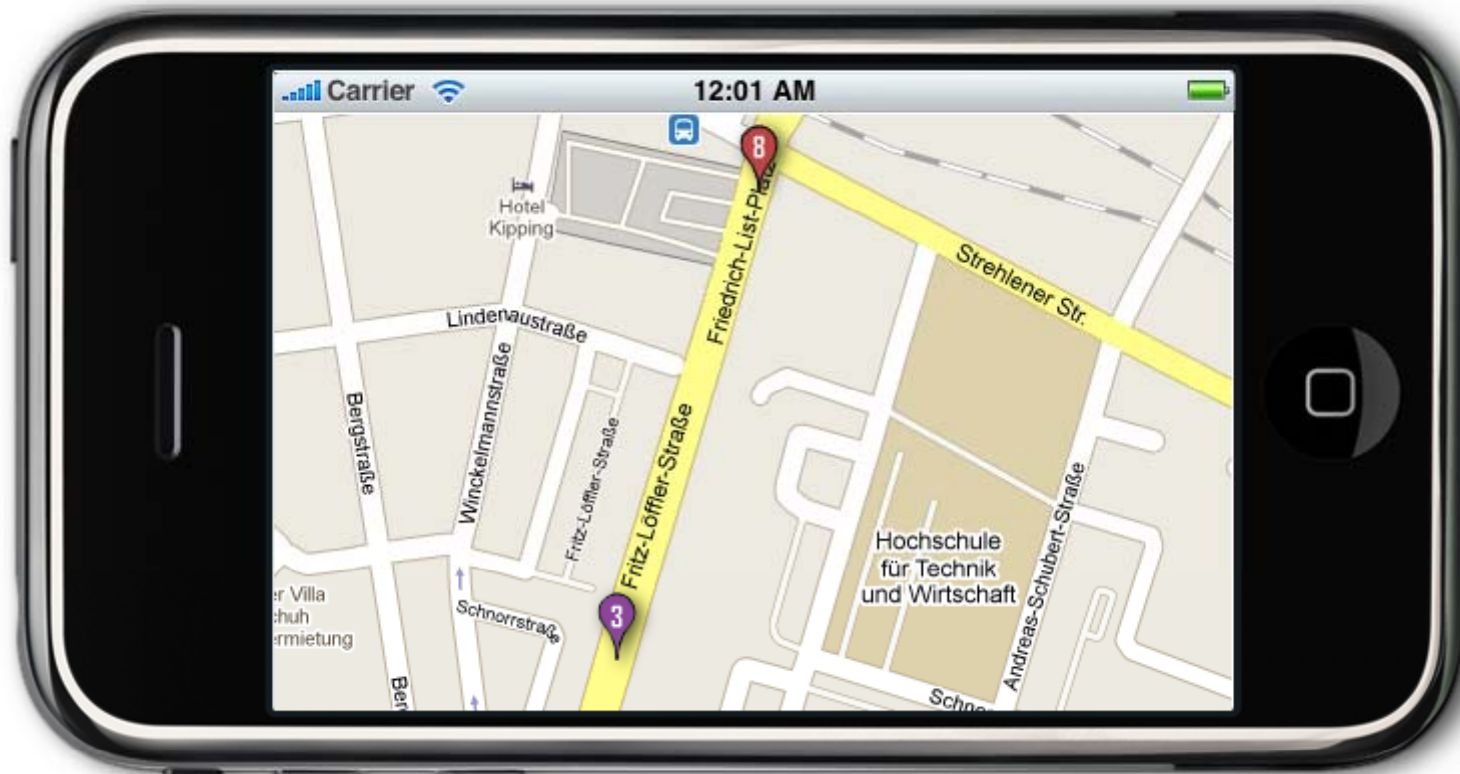
Application Development for Mobile and Ubiquitous Computing

DVB position information

Second Presentation

Group #3

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Map with moving signs for each bus/tram in monitored area

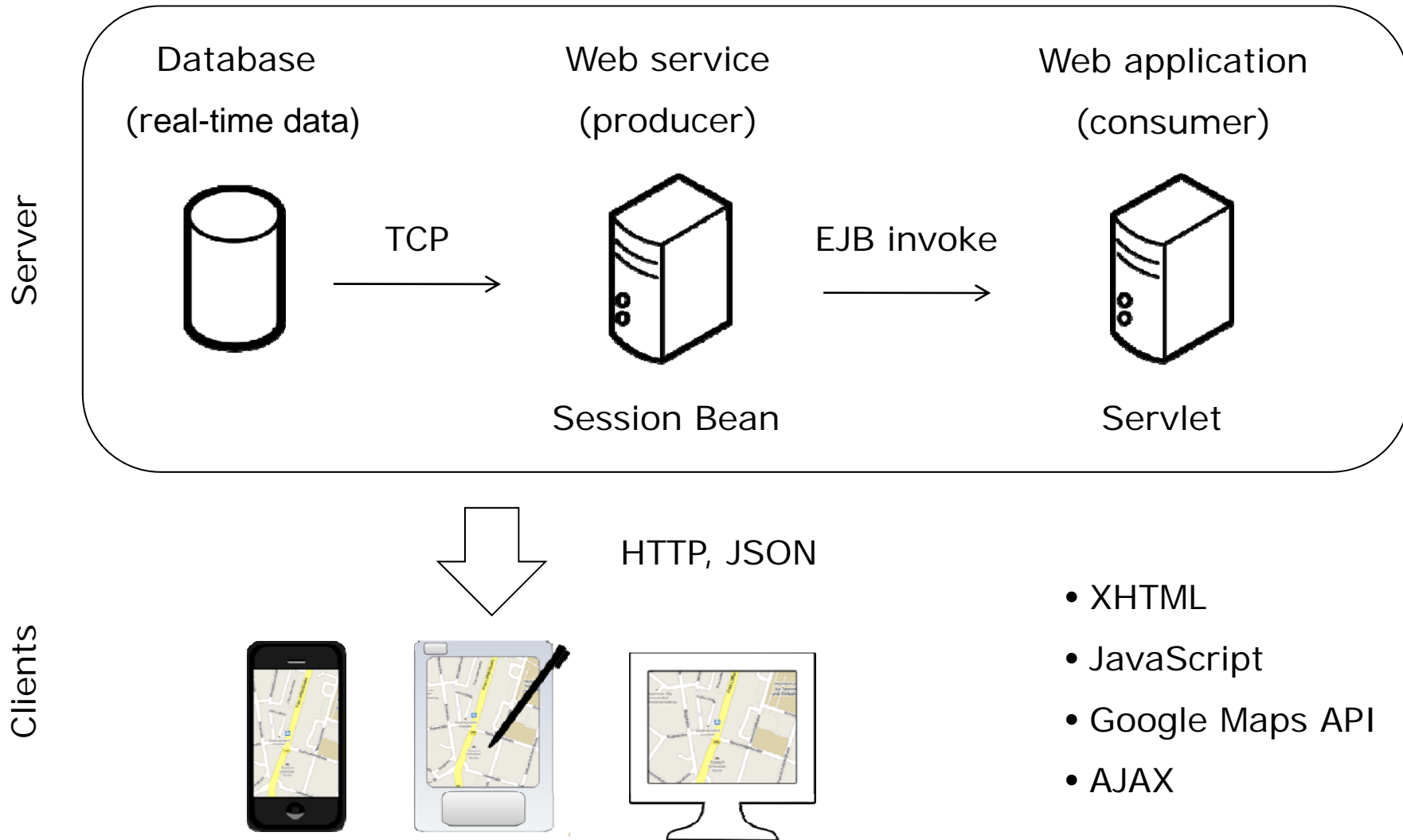


User's position and live distance between him and vehicles

- Loosely coupled system, ready for future extensions
- Data producer
 - Data from sensors are processed and available via remote interface
 - Position is predicted for few seconds into the future
- Data consumer
 - Periodically reads predictions according to request from clients
- Renderer
 - Mobile device asks periodically for current position and for predictions for approx. 10 sec.

Folie 4

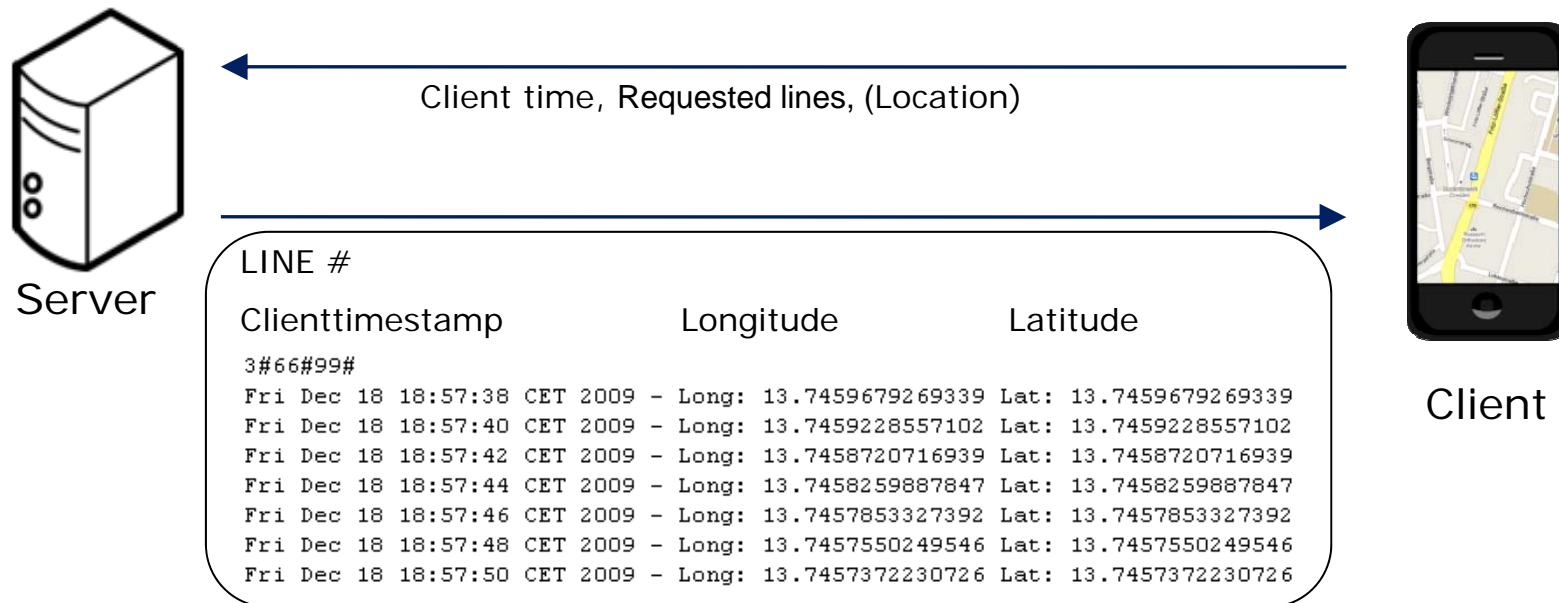
t1 How will caching be implemented (if)? We didn't want to compute predictions on each request, but have them already computed in real-time (if I remember correctly). If you want, you can add here some comments about how this will be done.
tobias; 17.12.2009



- Data producer
 - Enterprise Application
 - Data processing in Enterprise Java Bean (EJB)
- Data consumer
 - Web application (Server part)
 - Requests are handled by Servlet
- Renderer
 - Web application (Client part)
 - XHTML with JavaScript
 - Access to native functions is provided via PhoneGap (next slide)

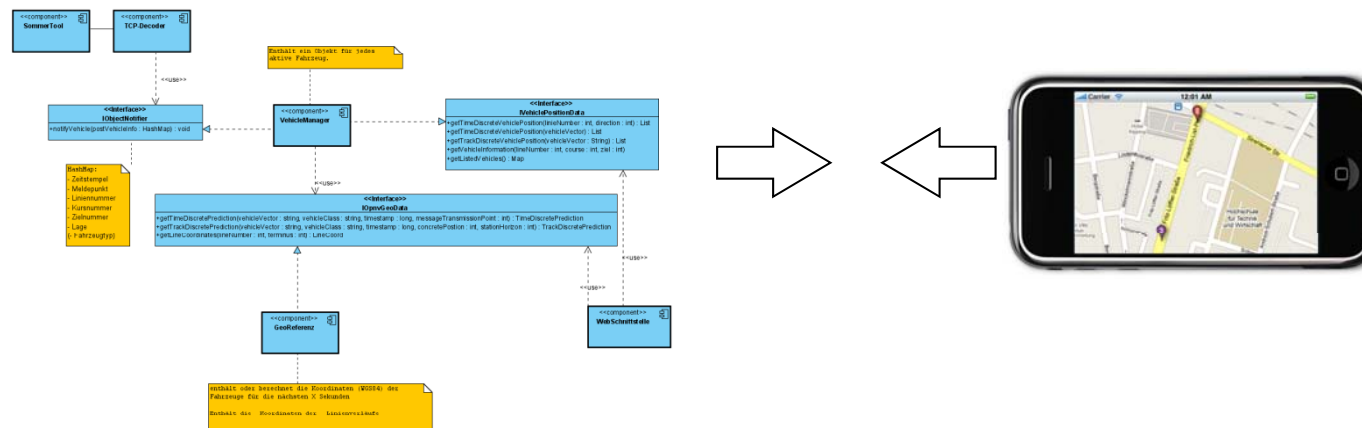
- Gap between web applications and native applications for mobile devices
- Access to specific device behavior using JavaScript
- Multiple supported platforms
 - Android, BlackBerry, Palm and Symbian WRT (Web Runtime)
- Common API
 - Device properties, location, accelerometer, contacts, orientation, camera, vibrate, sound, phone calls
 - Code can be reused across platforms
- Disadvantages
 - Different build environment for each platform
 - Framework is still under development

- Real-Time application
 - Request /Response Delays
 - Different time on server and client
 - network bandwidth



- Multiple clients
 - PhoneGap

- Calculate RealTime positions
- Merge back end with front end



- More clients

