

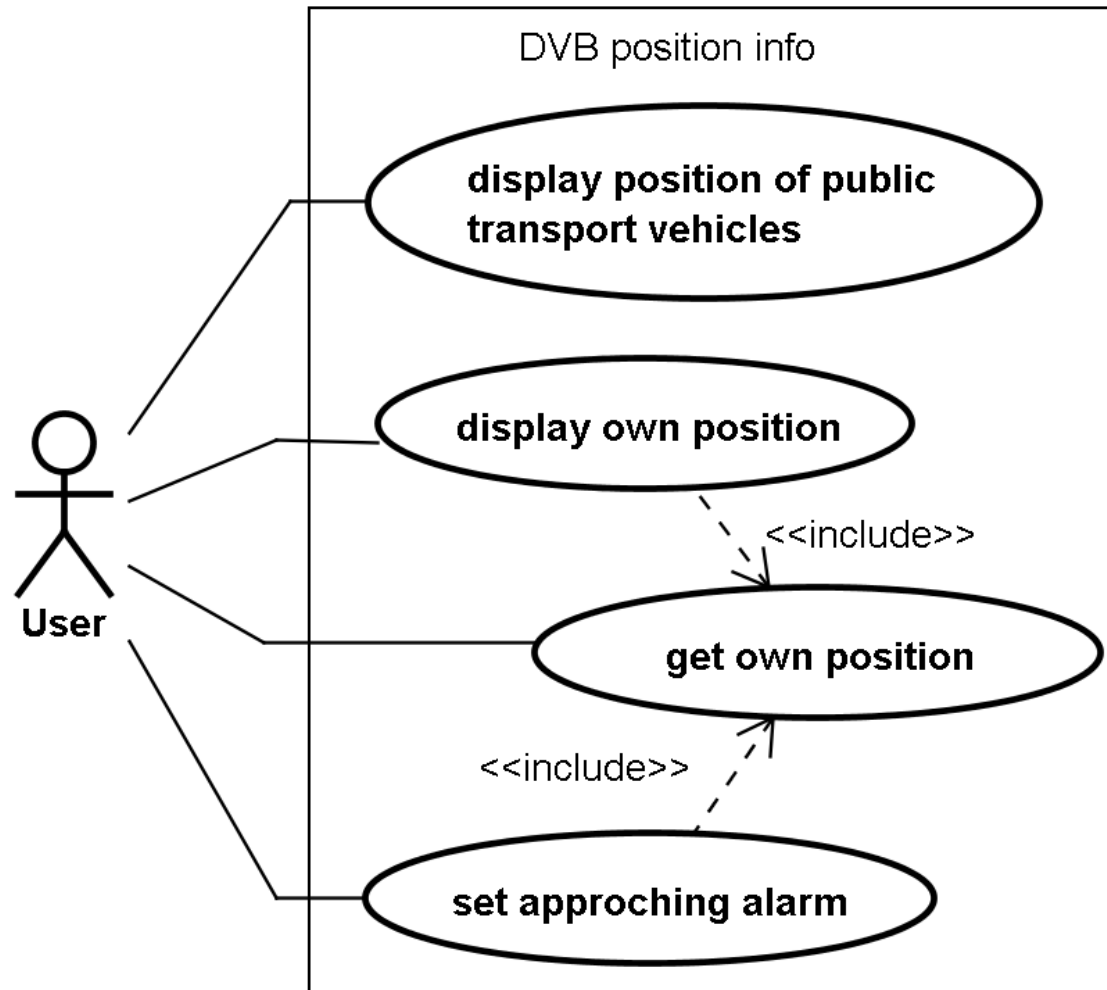
Application Development for Mobile and Ubiquitous Computing

DVB position information First Presentation

Group #3

Team: Sven Fröhlich, Tobias Smolka

- User sees live map with public transportation vehicles (trams, busses)
- Map can be zoomed, scrolled, moved
- User can display his own position (from device's GPS or entered manually)
- User can see live distance between him and monitored vehicles
- User can set approaching alarm for radius and line number and be notified when the vehicle enters the radius





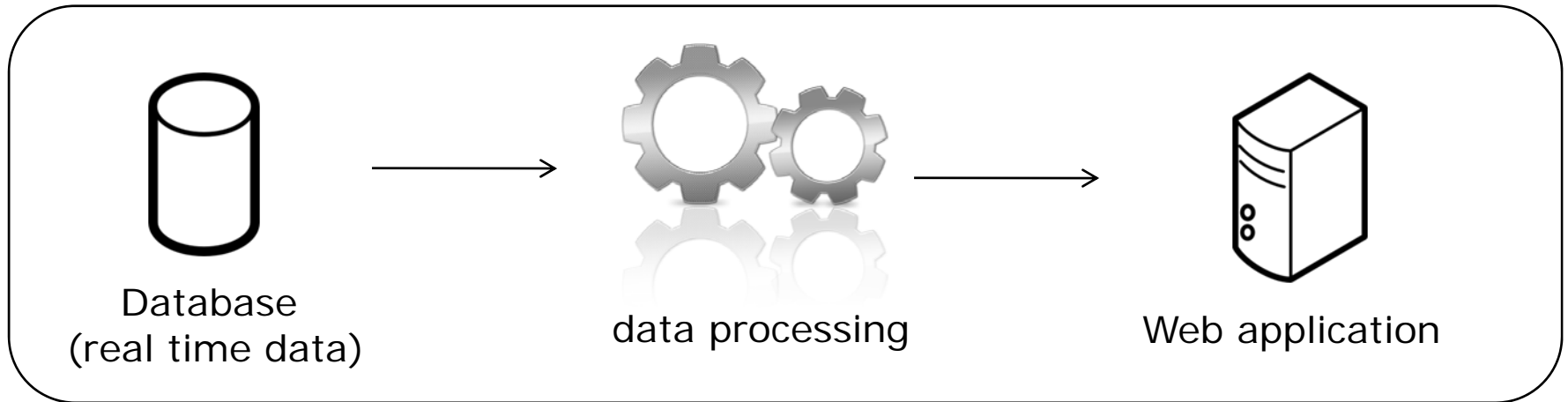
Map with moving signs for each bus/tram in monitored area



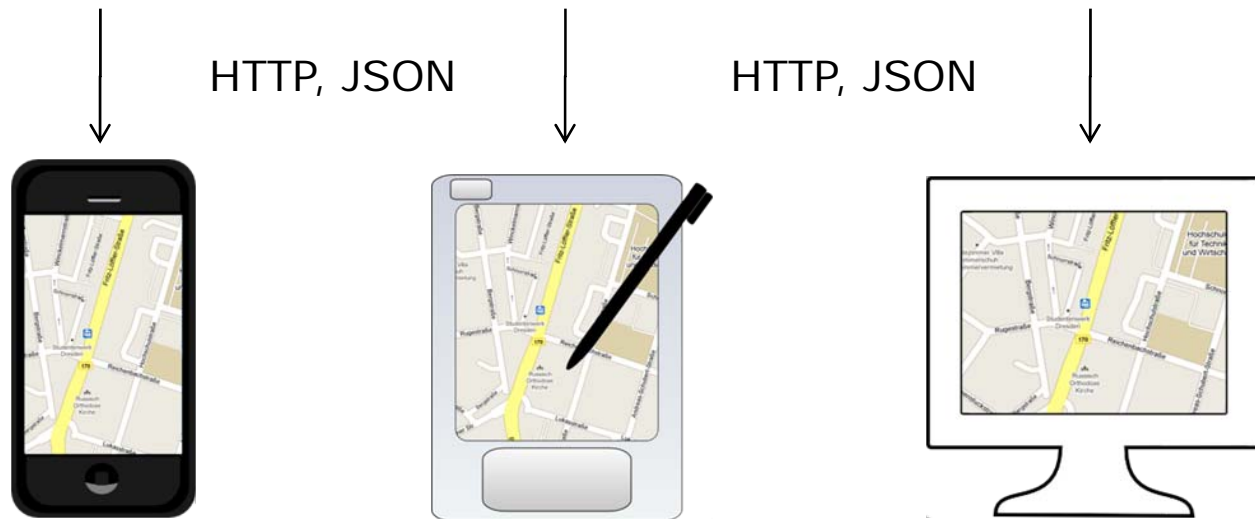
User's position and live distance between him and vehicles

- 30.10.09** Design of communication protocol
- 13.11.09** Dummy prototype web application with basic web client
- 04.12.09** Features in user interface implemented
- 18.12.09** Deployed on multiple platforms
- 21.01.10** Service and clients implemented, tested and optimized
- Basic data model:
put the real-time data to objects
- Extended data model:
computations and predictions

Server



Clients



Client

- XHTML, JavaScript, AJAX
- Google Maps API for rendering maps
- PhoneGap and Web Runtime (WRT)
 - Frameworks for integrating web applications with mobile devices (accessing GPS via JavaScript and more)

Server

- Java EE
- Application Server (JBoss)

Frontend

- Java EE, JSP, XHTML

- Real-Time application
 - Request /Response Delays
 - network bandwidth
- Multiple clients
 - Different platforms, screen sizes, input interfaces
- Usability
 - Small screen size
 - User friendly interface