

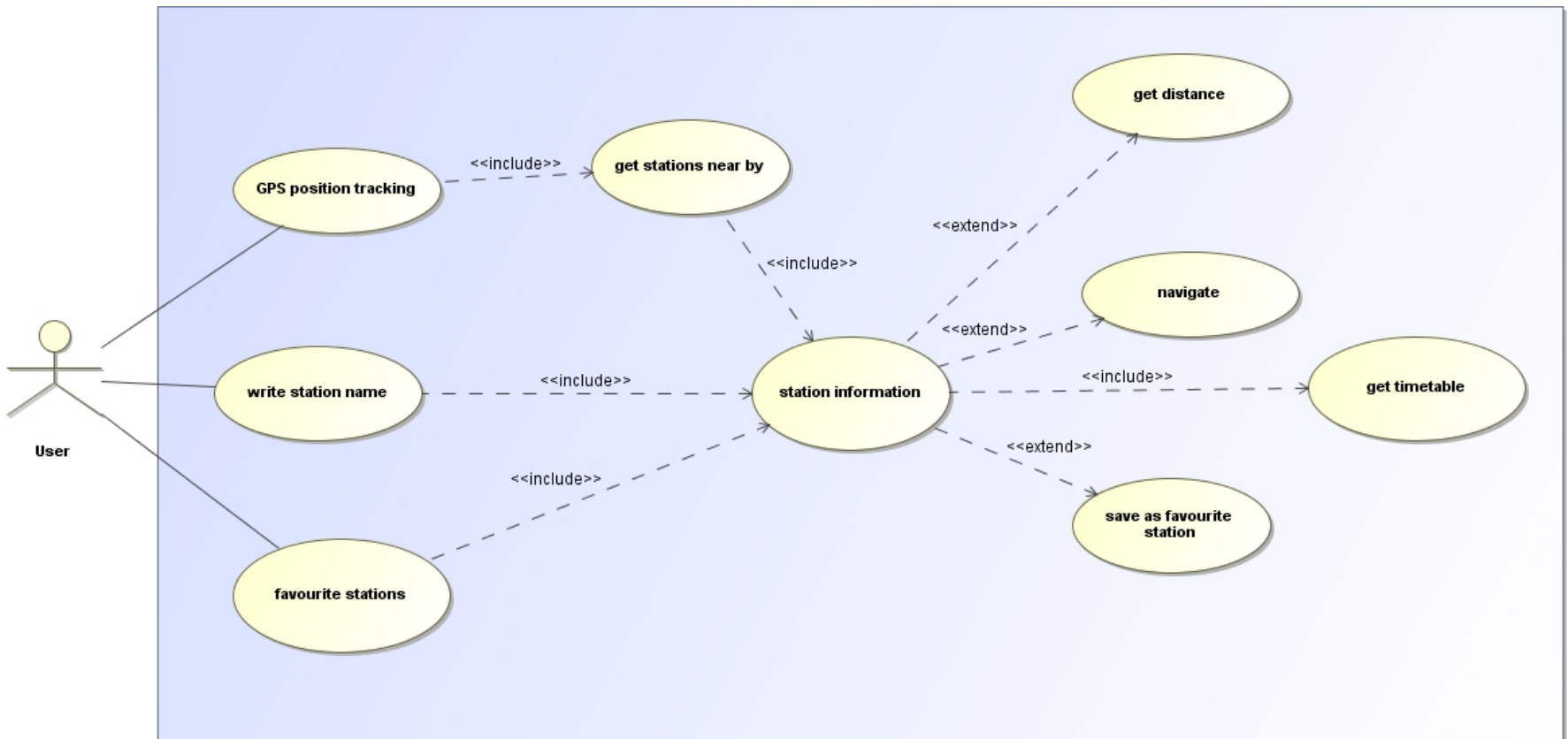
Application Development for Mobile and Ubiquitous Computing

DVB Timetable Monitor Second Presentation

GroupNo. 8

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- Get information about next departures of transportation vehicles (busses, trams, trains) for any DVB station
 - Search for stations via text input
 - Get nearby stations for current position
 - Save favourite stations for quick select
- Get information about how much time a user need to get to the selected station
- Get information about how long the distance to the selected station is
- The user can navigate from his current position to the selected station with a navigation application (e.g. Google Maps)

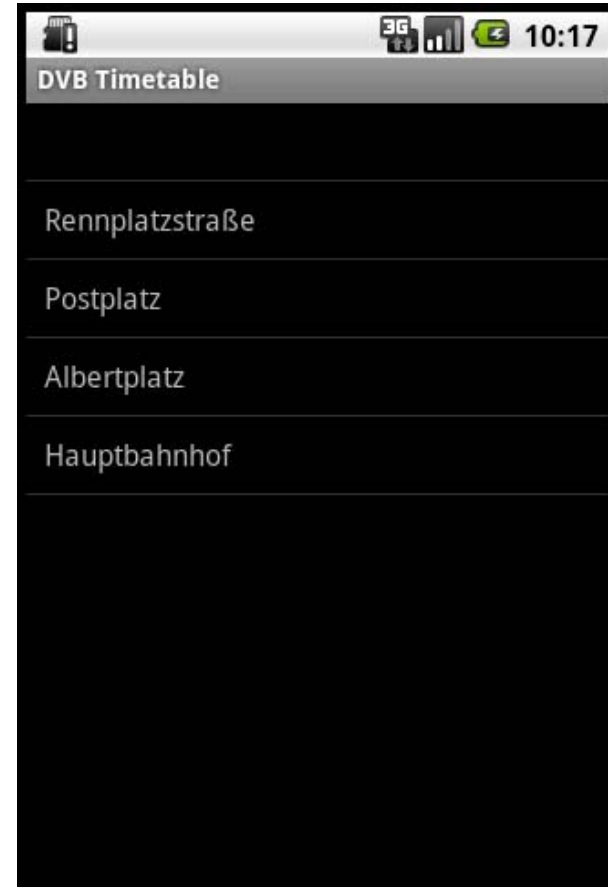






DVB Timetable

| Linie | Richtung | Abfahrt in... |
|-------|------------------|---------------|
| 65 | Blasewitz | 6 |
| 2 | Gorbitz | 7 |
| 65 | Luga | 7 |
| 1 | Leutowitz | 10 |
| 1 | Prohlis | 11 |
| 2 | Kleinzschachwitz | 11 |
| 65 | Blasewitz | 12 |
| 2 | Kleinzschachwitz | 14 |
| 2 | Gorbitz | 15 |
| 1 | Prohlis | 16 |



DVB Timetable

- Rennplatzstraße
- Postplatz
- Albertplatz
- Hauptbahnhof

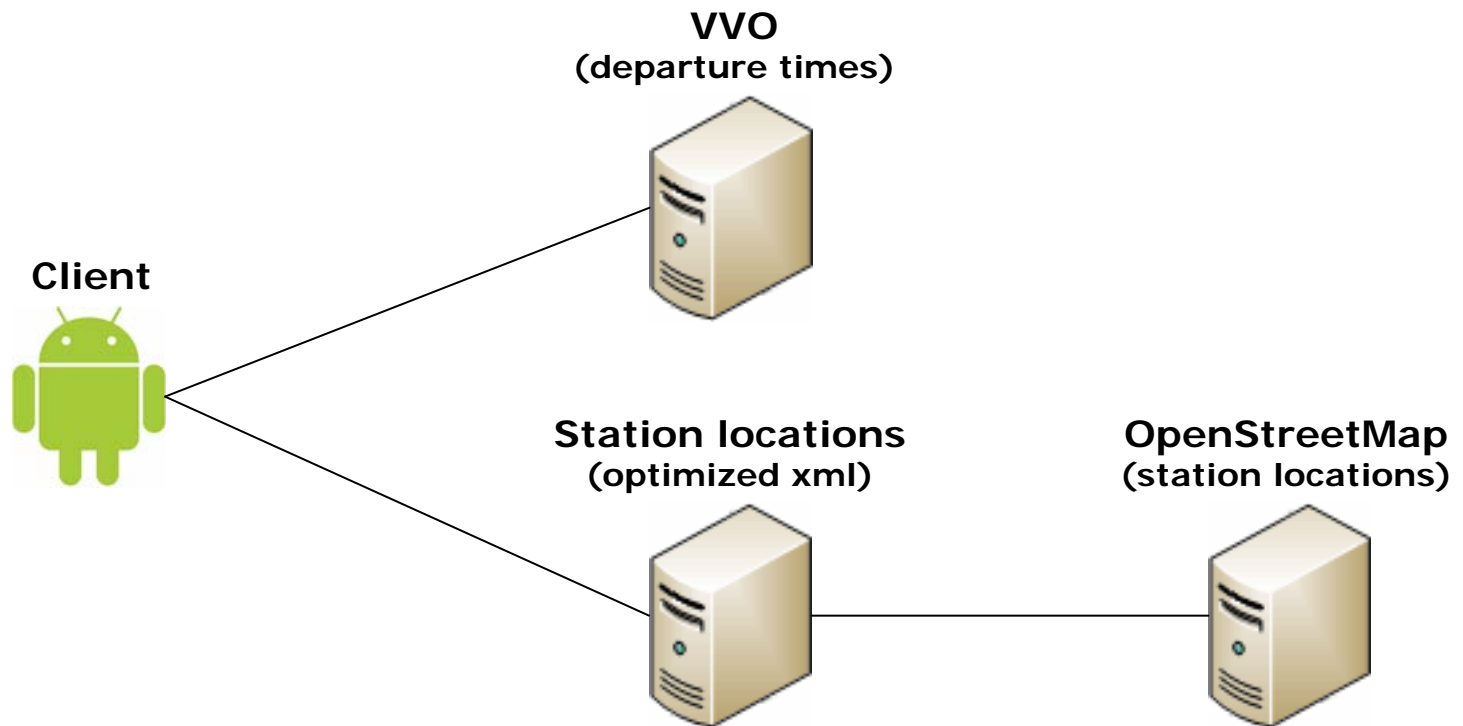
OS: Android

Application Ports:

- Intern:
 - Get current location (GPS, Wireless Location)

- External:
 - DVB live data for departure times
 - Location data for stations
 - Google Maps for navigation and distance calculation

Server components



Real time

- Request/Response Delays
 - Network bandwidth
-
- Usability
 - Quick station selection
 - Easy to use

 - OS compatibility
 - Android Version as low as possible

- DVB live data for all available station names
 - strange VVO API
 - solution: set up a list with all station names manually

- Calculate distance and time to get to a station
 - The Google Directions API
 - query limit of 2,500 directions requests per day
 - Terms: using Directions data without displaying a map for which directions data was requested is prohibited
 - alternative: calculate air-line distance

- XML-Resources
 - ReferenceTable overflow (max=512)
→ max 512 items
 - alternative: static Array

- 17.12.2010 Second presentation
- 17.01.2011 Final version
- 26.01.2011 Bug fixing and improvements
- 28.01.2011 Final presentation