TECHNISCHE UNIVERSITÄT DRESDEN

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

Application Development for Mobile and Ubiquitous Computing

Seminar Task
First Presentation

GroupNo.
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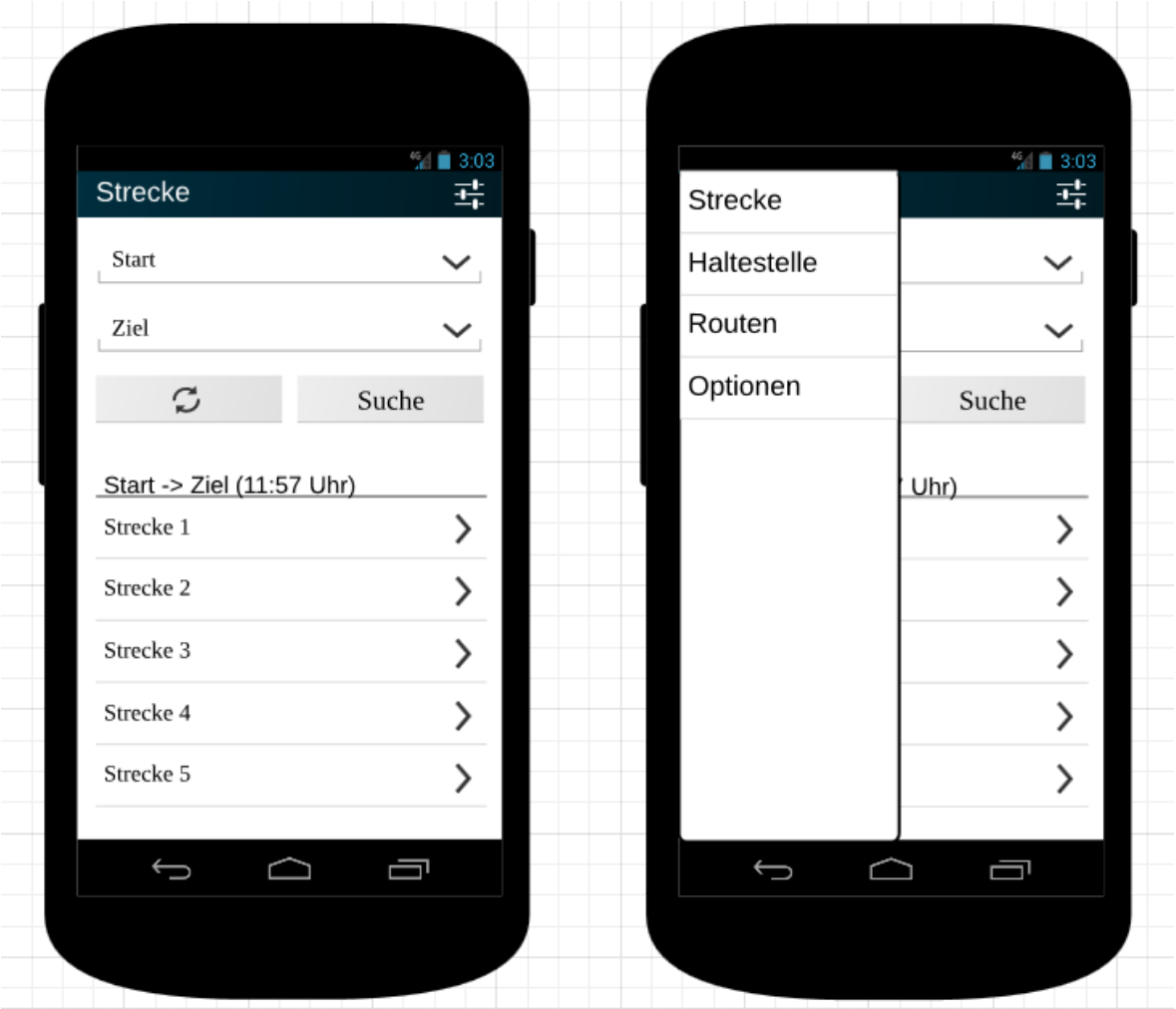
1. Application Scenario
2. Technologies
3. Challenges
4. Work plan

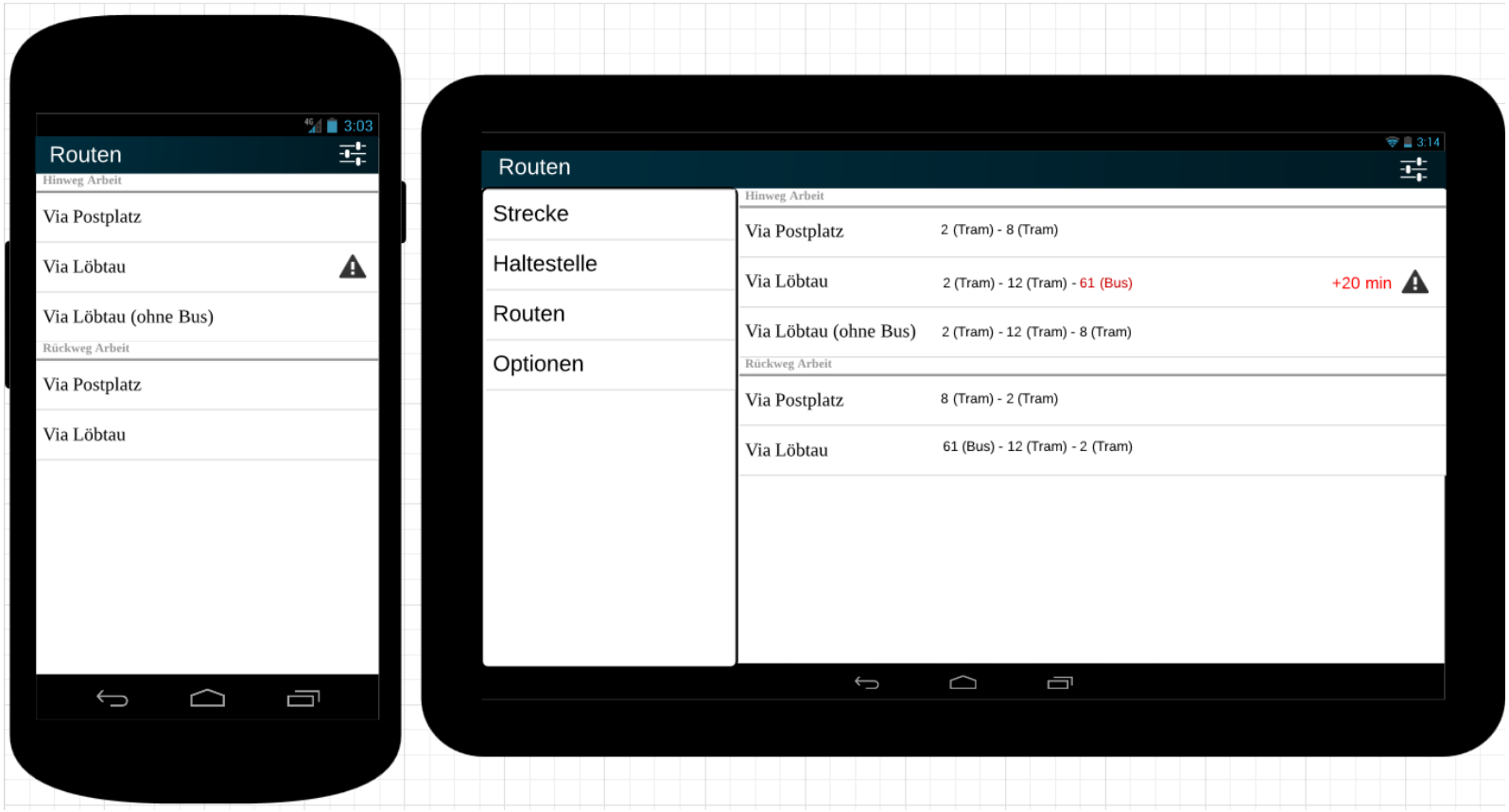
Application Scenario I

- **journey planner for public transport in Dresden**
  - **information about**
    - **journeys from first location to final destination**
    - **departures from any stop in Dresden**
  - **save your most used journeys**
    - **available to the time you need them – no endless loading times**
- **Available for Android 4.0+**

Application Scenario II



Application Scenario III



Technologies

- Android Studio
- Java
- Maven
- Public-Transport-Enabler library

Challenges

- low data volume in transfer
  - API of the DVB only requires and returns small data
- high performance
  - computing work mostly done on the DVB servers
- adaptation concepts
  - prefetching
  - caching

Work plan

- 24.11.2014: Collecting possible app ideas
- 31.11.2014: Analysis Phase
  Find a public transport API or database access

- 07.11.2014: First presentation
  Begin of conception phase, plan the app architecture

- 21.11.2014: Implement a first prototype

- 19.12.2014: Adaptation concept document
  Improve prototype to final app

- 16.01.2015: Testing, Bugfixing and Optimizing

- 30.01.2015: Final presentation