

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

# Application Development for Mobile and Ubiquitous Computing

Seminar Task
Adaptation Concept Presentation

Group № 5 Team: Zhang Yi, Blavachinskaya Mariya



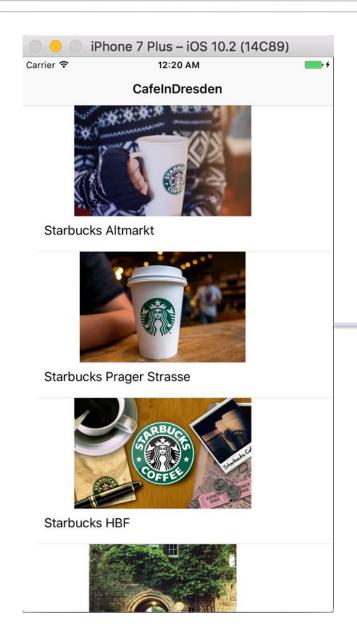
#### **Application Scenario**

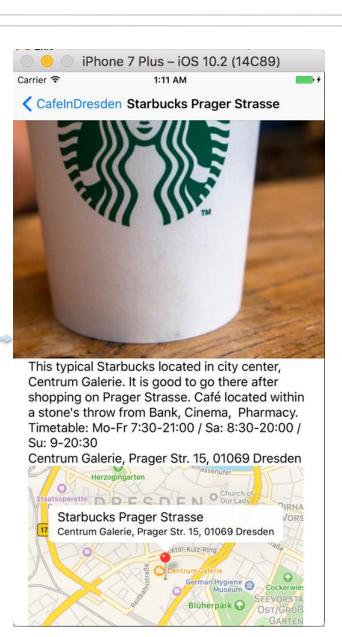
- Provide a list of good cafes in Dresden.
- List shows cafes within a radius of 5 km

•For each cafe provide a pictures, description, timetable, the exact address and location on the map.



#### **Application Scenario**







#### Adaption and Context

#### Adaptation to Screen Size

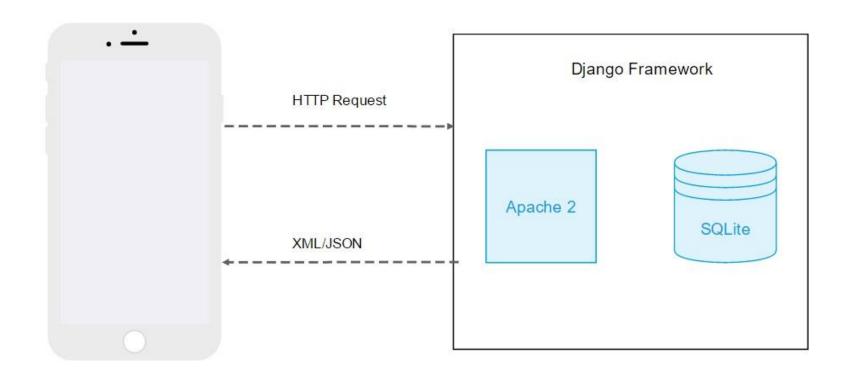
- Constraint mechanism to scale components according to screen size
- According to landscape or portrait mode different features will be designed







#### **Architecture**





### **Technologies**

- Frontend
  - Programming language: SWIFT
  - Database: CoreData
- Backend Django framework:
  - Programming language: Python
  - Database: SQLite3
  - Server: lightweight Web server (for testing), Apache2
- Maps: Apple Maps

#### **Discussion/Assessment**

- Learned new technologies: iOS programming, Django framework
- Experience in Application Development

- Problems encountered:
  - Connection to core Data,
  - Frontend and backend connection
  - Absolutely new and unknown technologies
- Still work to do:
  - Prefetching (in progress)



## Thank you for attention!