

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

# Application Development for Mobile and Ubiquitous Computing

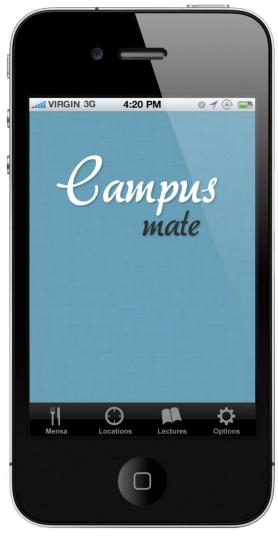
# Seminar Task First Presentation

GroupNo. 23 Florian Dornbusch



# Campus mate

- Is a modular structured app
- Contains useful tools and gadgets for your everyday life in a university
- Should be easy (and fun!) to use
- For example:
  - Mensa organizer
  - GPS location of university buildings
  - Lecture organizer
  - Tasks organizer
  - . . .
- Starting with GPS locations





#### Locations:

Quickly store a nice location (1-Button-Solution)





Save

₽

#### Locations:

- Quickly store a nice location (1-Button-Solution)
- Manage locations: e.g. add a photo, description, category, retake GPS location, . . .







### **Application Scenario**

View locations as a list

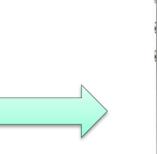




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- View locations as a list
- or on GoogleMaps
  - Apply certain filters to the view
  - See own location and direction









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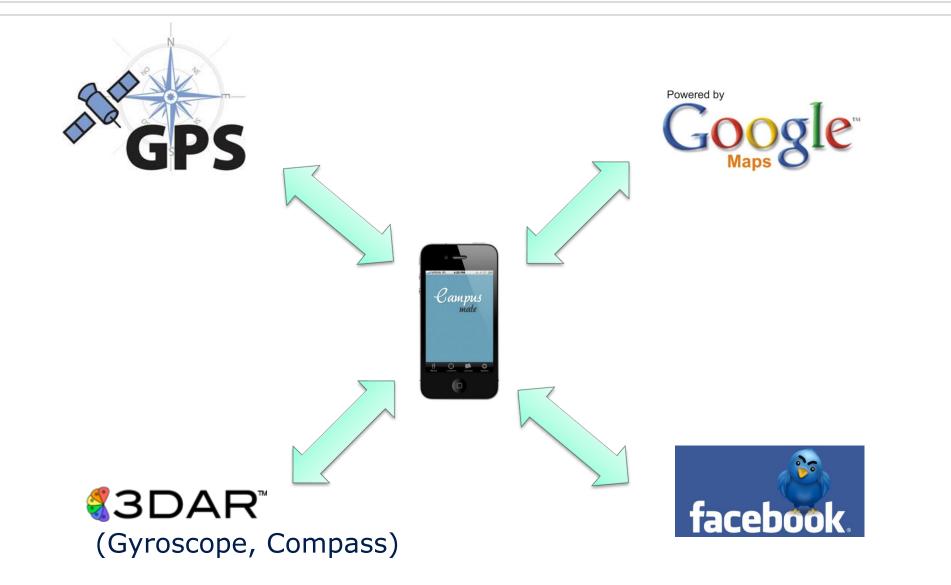






- View locations as a list or on GoogleMaps
  - Apply certain filters to the view
  - See own location and direction
- Also:
  - export information via Email
- Possible additions:
  - Twitter & Facebook integration
  - Augmented Reality







**Platform:** iOS 5

**IDE:** Xcode 4.2

Framework:

Cocoa Framework

**Programming Language:** Objective-C



- Customer Sastisfaction
  - Usabilty!!!
- Ressource restrictions
  - Small display → no cluttering, not too much information per view
  - GPS energy consumption
  - Bandwidth  $\rightarrow$  scraping information from the mensa site
- Heterogeneity
  - of user preferences → individualize as much as possible without giving up simplicity
  - of output  $\rightarrow$  different views on the same model



- Learn about Objective C and its commonly used design patterns
- Implement the view controllers
- Learn about MKMapView to integrate GoogleMaps and how to deal with GPS information
- Possibly look at Augmented Reality Integration too
- For the Mensa submenu: learn how to retrieve information from the web site and visualize it in the app
- Twitter / Facebook integration?
- • •