

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

Application Development for Mobile and Ubiquitous Computing

Seminar Task Final Presentation

GroupNo. 8
Team: Stefan Kretzschmar, Philipp Richter
"SelfShelf"



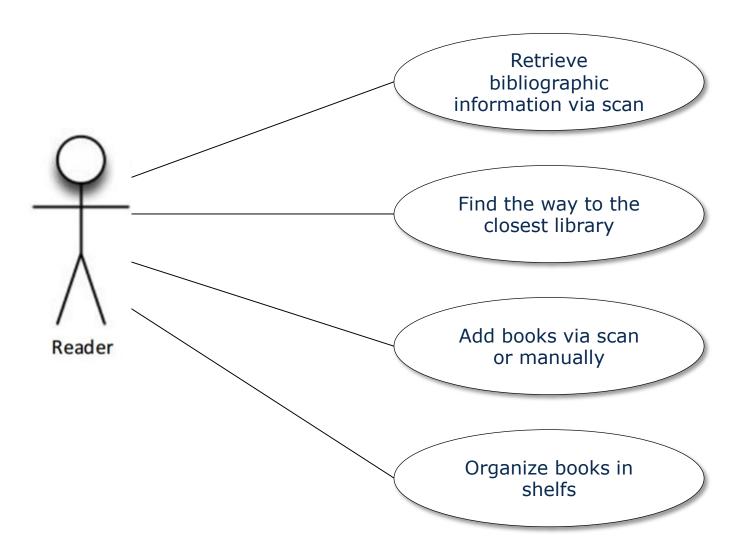


STRUCTURING

- Use Cases
- Screenshots
- Tackled Challenges
- Open Issues
- Lessons Learned



Use Cases





Screenshots (1)

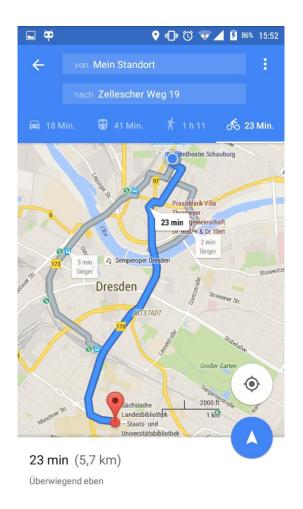




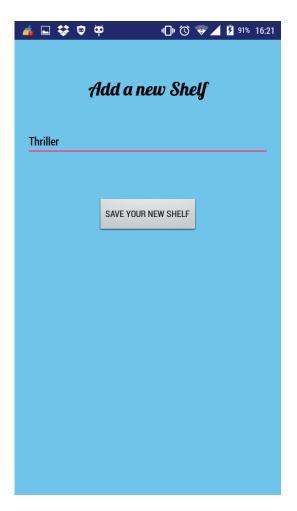




Screenshots (2)



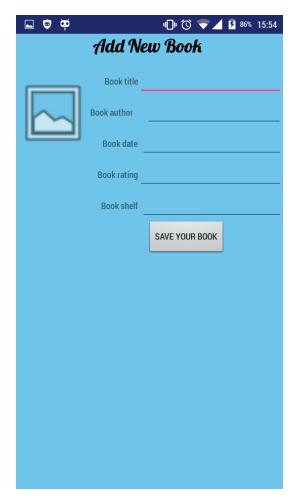






Screenshots (3)









Tackled Challenges

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Connectivity Challenge

- Only ISBN will be sent and small JSON-Object received
- compressed images

Energy Challenge

- GPS only active while on GoogleMaps
- No permanent running processes

Usability Challenge

- Proper display of information (e.g. match_parent)
- Only ISBN barcodes scanable
- Input: as much as needed, as little as possible

Offline Challenge

- Organizing books completely offline
- Storage on the device



Open Issues

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- Slub Search Query
 - Is book lendable?
- Quality of life changes
 - "Save in" instead of typing in the shelf
 - Message Box for redundant entries
 - Improve "your book info"
- Filterable ListView
 - Dynamic filter/search for ListView

27.01.2016 Application SelfShelf Slide 8



Lessons Learned

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Generally

- How to develop an app
- Stackoverflow.com and youtube are your best friends
- → Challenging first project
- → Small bugs can lead to big frustration

Software Engineering

- Working with Android Studio
- Interaction with online services

Project structure

- Need of understanding for app development itself
- → It's getting hard, if you just start programming

27.01.2016 Application SelfShelf Slide 9