



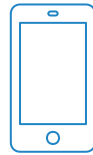
# FINAL PRESENTATION

## STUDENT CLUB FINDER

Jasmin Delling, Julian Striegl  
Dresden, 27.01.2017

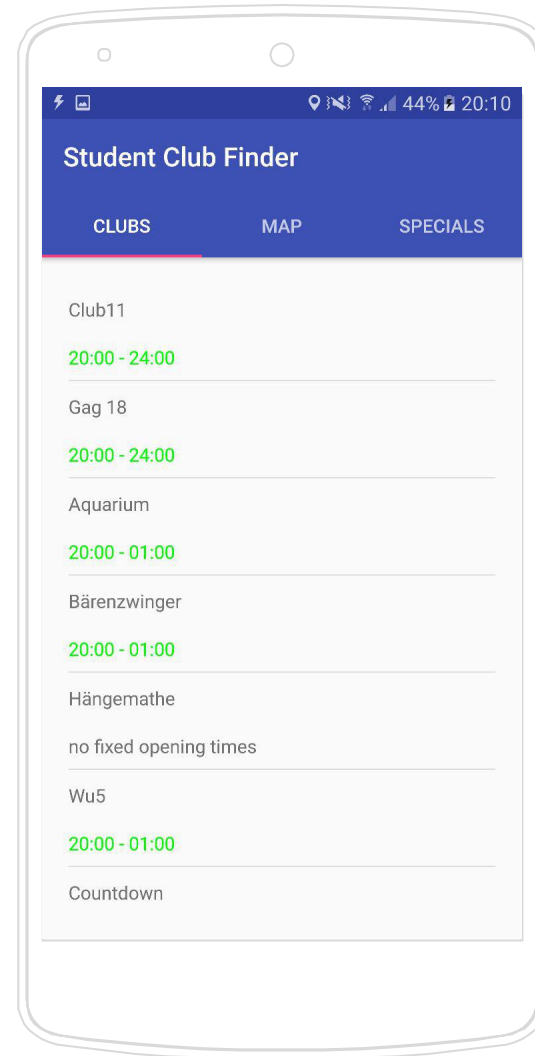
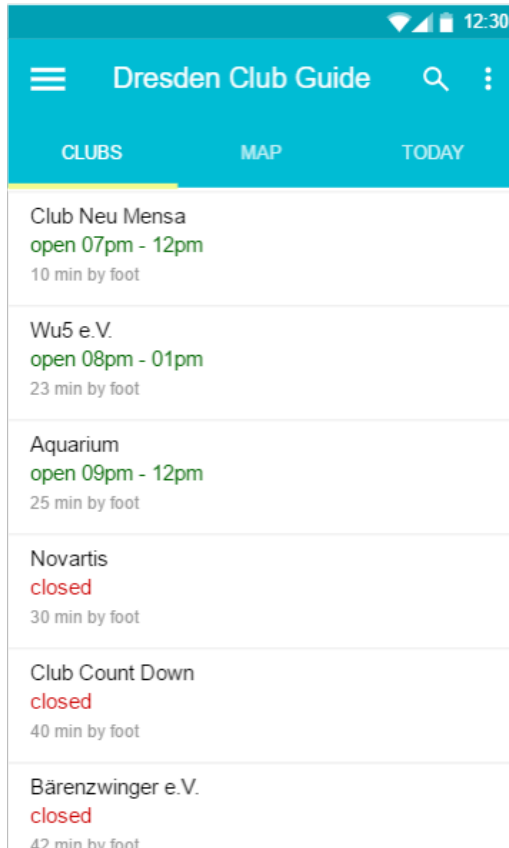
# STRUCTURE

1. THE APPLICATION
2. ARCHITECTURE AND TECHNOLOGIES
3. ADAPTATION MECHANISMS
  - ❑ Context Information
  - ❑ Challenges
    - ❑ Location based Push Notification
    - ❑ Power Saving Mode
1. SUMMARY

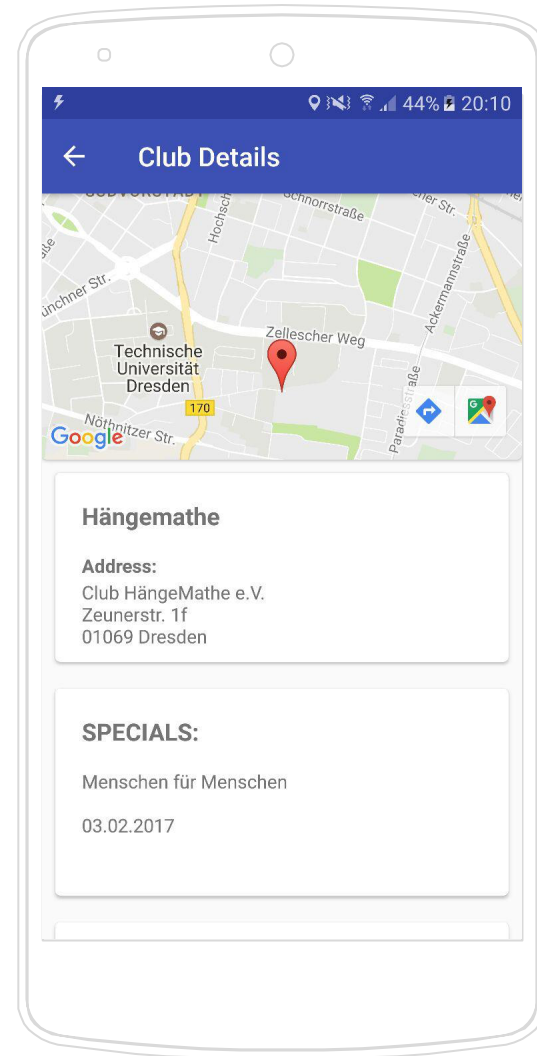
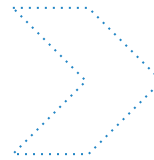
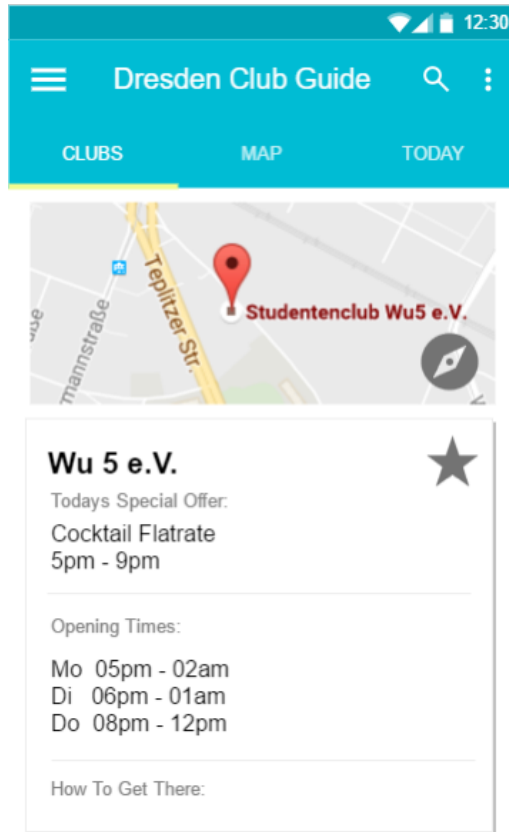


# *The Application*

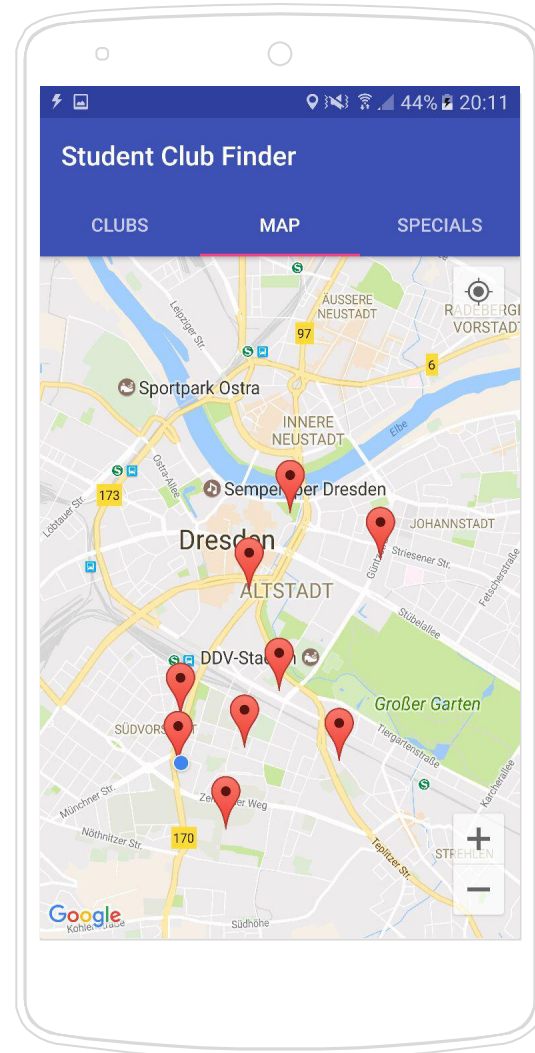
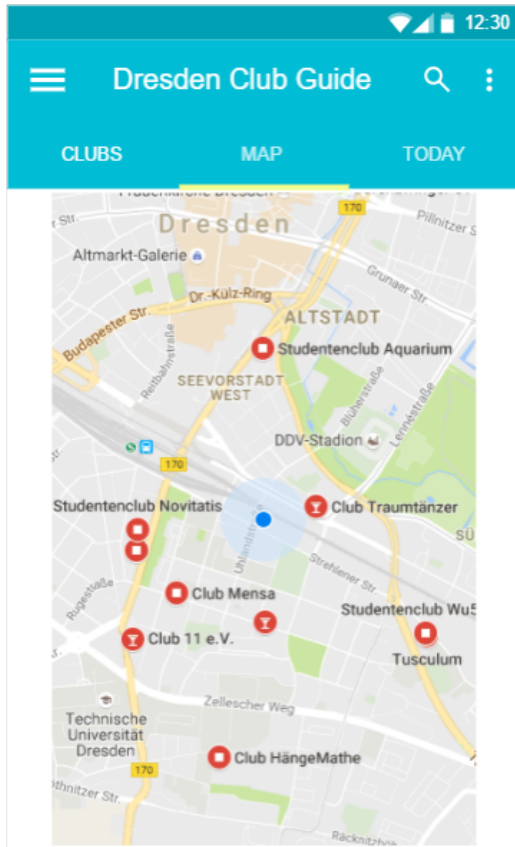
# Home Screen



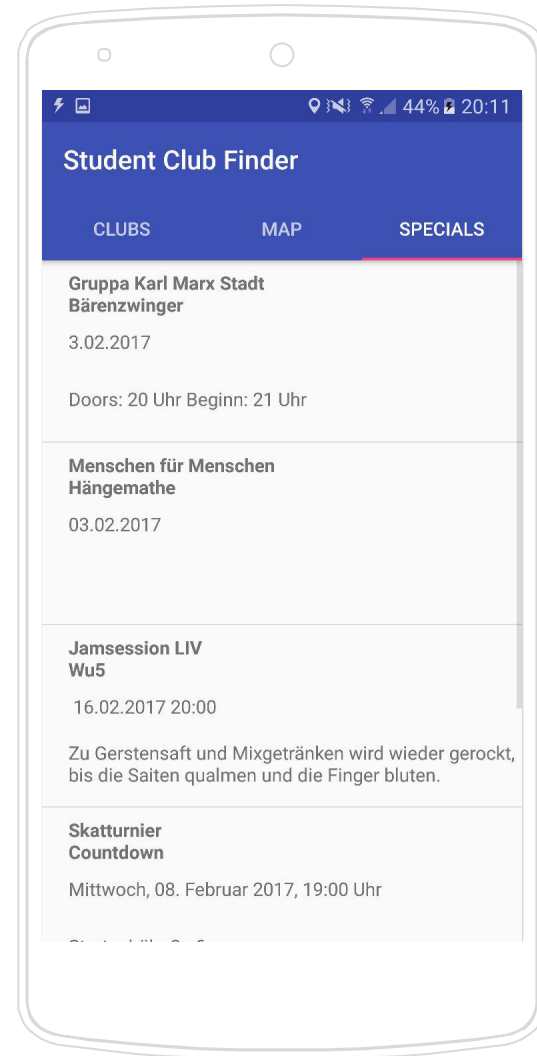
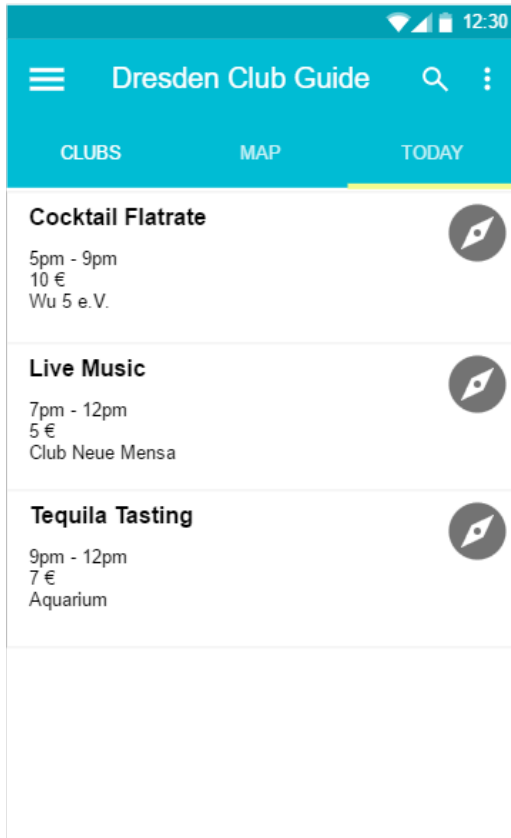
# Detail Screen

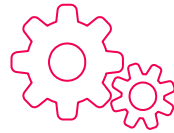


# Map Screen



# Special Screen

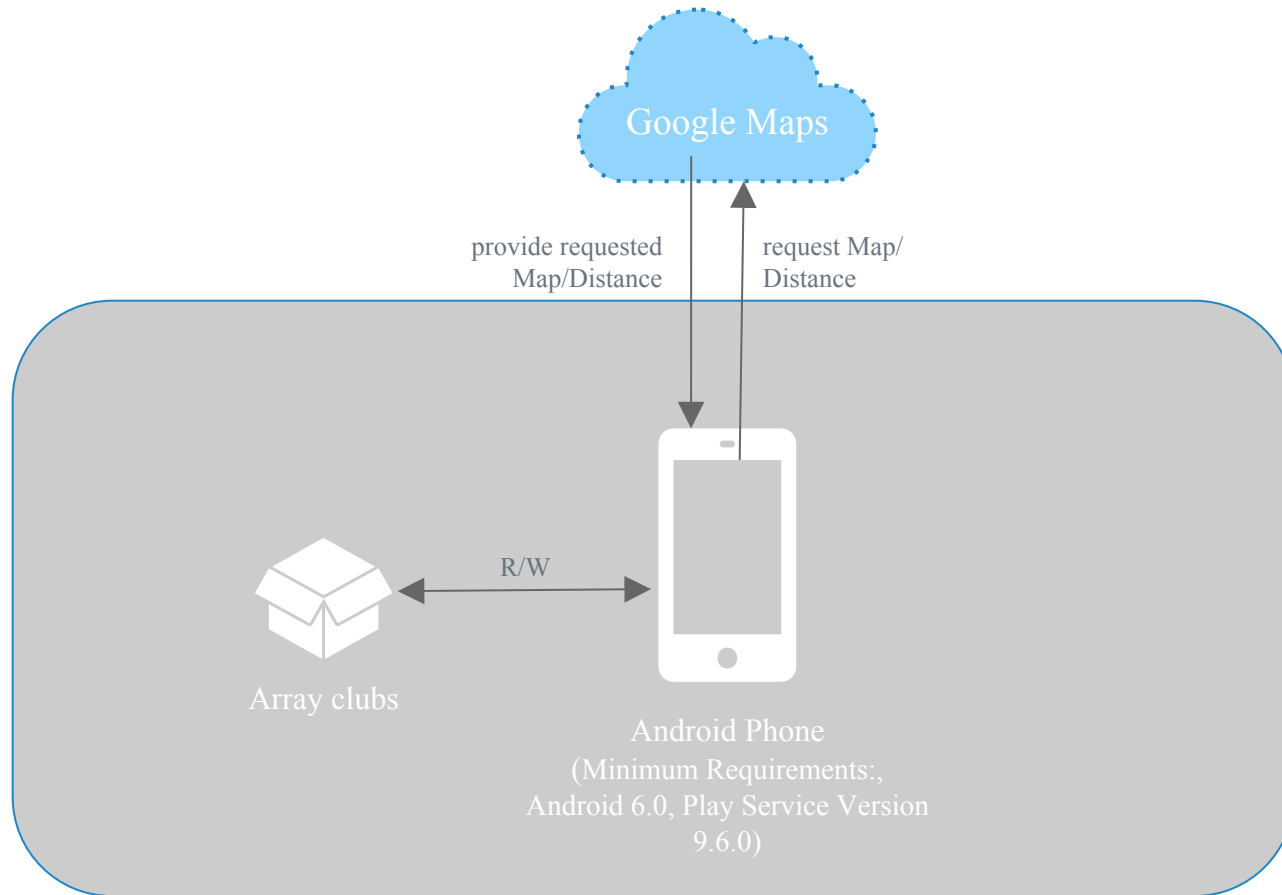




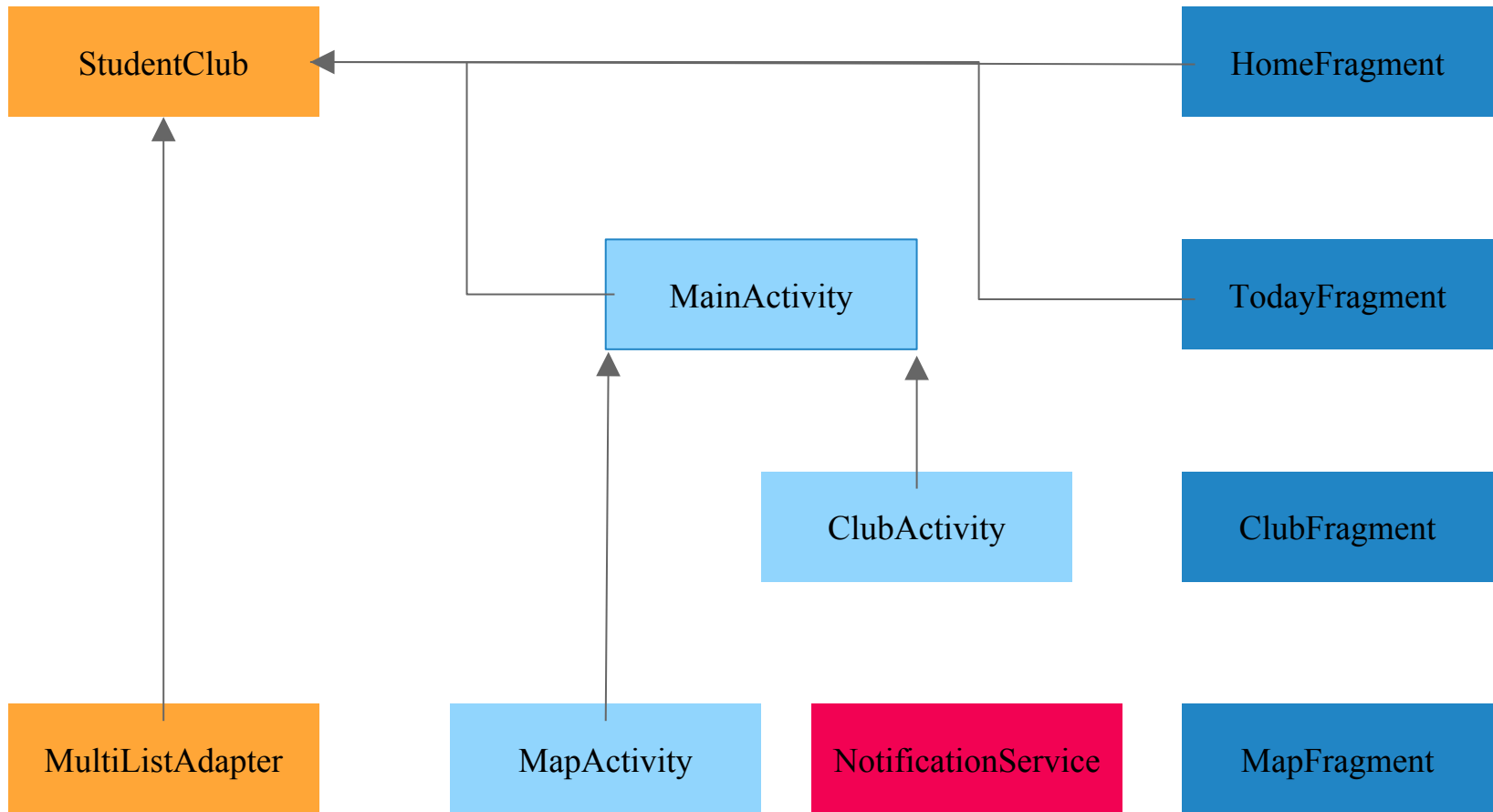
# *Architecture and Technologies*



# Technologies



# Class Diagram





# *Adaptation Mechanisms*

# Involved Context Information



## **Time**

Depending on the current date and time the list of clubs displays different strings and colors



## **Location**

Localization based notifications tell the user, whether he is next to a student club



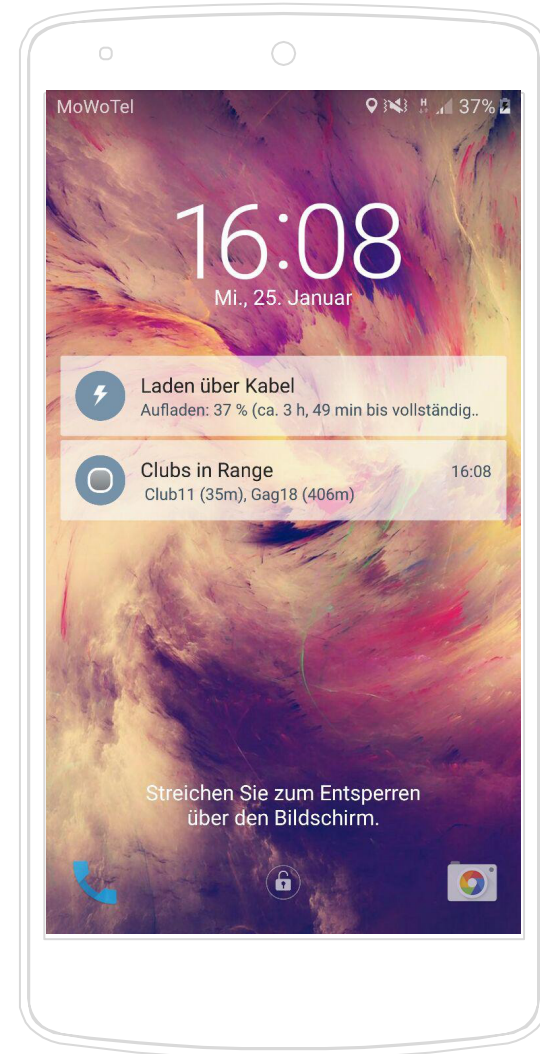
## **Battery State**

The app theme and the frequency of localization requests change based on the smartphone's battery state

# Location based Push Notification

## NotificationService

- ▷ Started in MainActivity
- ▷ Timer with TimerTask  
period: 1 minute  
if Clubs in Range changed  
=> send Notification
- ▷ LocationListener  
onChangeLocation



# Power Saving Mode

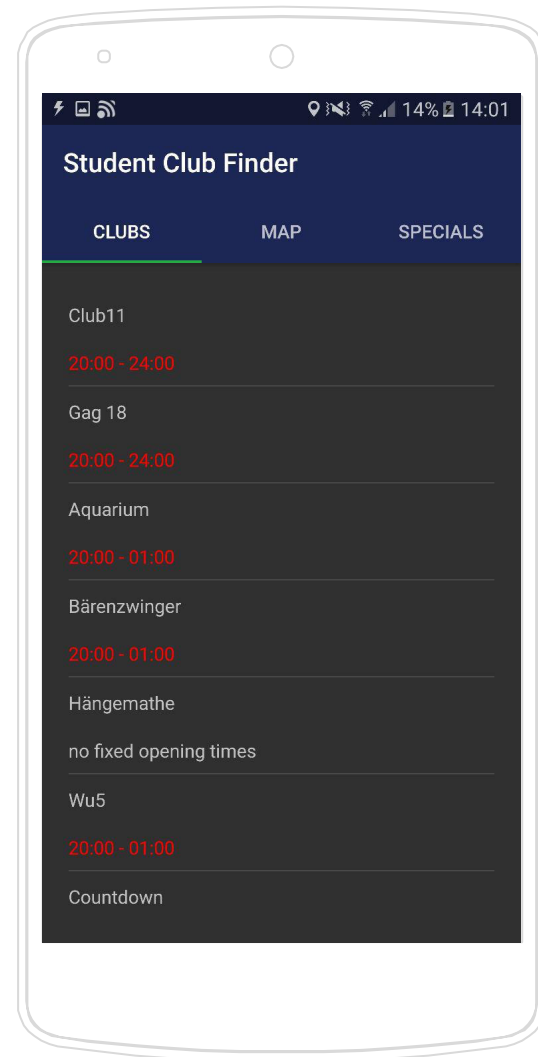
Battery State is checked

```
context.registerReceiver
```

```
Intent.ACTION_BATTERY_CHANGED
```

Battery State < 30 %

- ▷ Dark App Theme
- ▷ Fewer Localization Requests





## *Summary*

# Problems

- ▷ Getting started...
- ▷ Integration of Google Maps
- ▷ Different Activities into a ViewPager

# Lessons learned

- ▷ Integration of Google Maps (Full and Lite Version)
- ▷ Usage of
  - ViewPagers
  - Intents
  - Fragments
  - Services
  - GitHub Desktop App
  - Code Iris
- ▷ Debug via LogEntries and Notifications

# Open Issues

- ▷ Service
  - write LogEntries
  - change App Theme
- ▷ TimerTask
  - cancel and reschedule



Thanks!

**Any questions?**