

Mattis Lahr, Felix Fischer

Institute of Systems Architecture

# MeetForSport: Adaptation Concept

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# App Idea

# MeetForSport

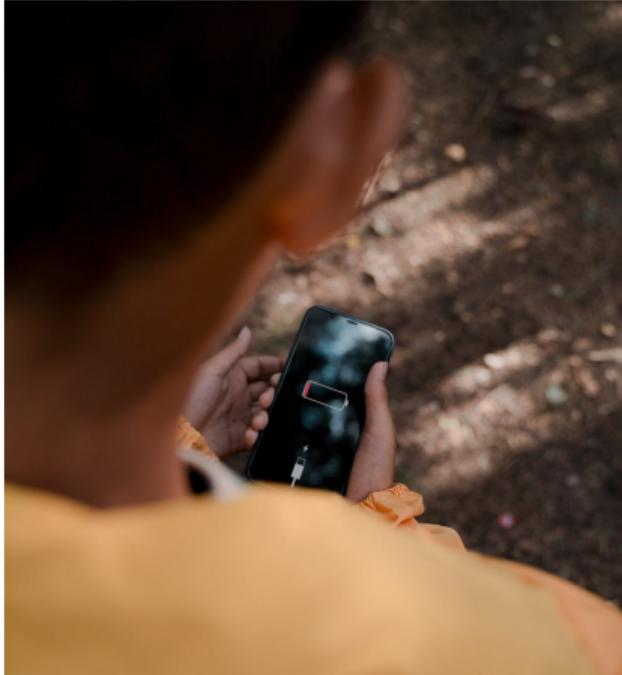
This app will allow users to join group activities (i.e. football) or join ongoing events. Targeting mostly active persons, this small social network will allow users to find new friends/persons with the same interests and therefore allow these people to become more active.

# Problematic Situations

# Situation 1: No internet connection



## Situation 2: low battery



# Situation 1: Offline Challenge

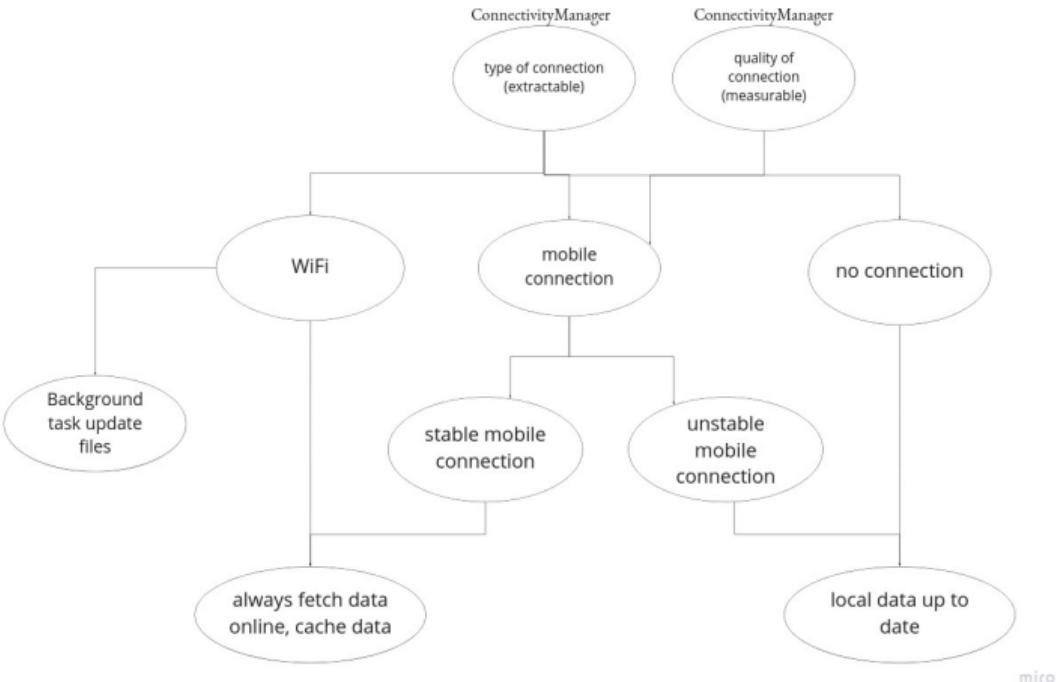
# Situation 1: Storyboard

- Persona: Fred Flintstone, Student
- Scenario: Check event information on the go



mir

# Situation 1: Context Model



miro

# Situation 2: Energy Challenge

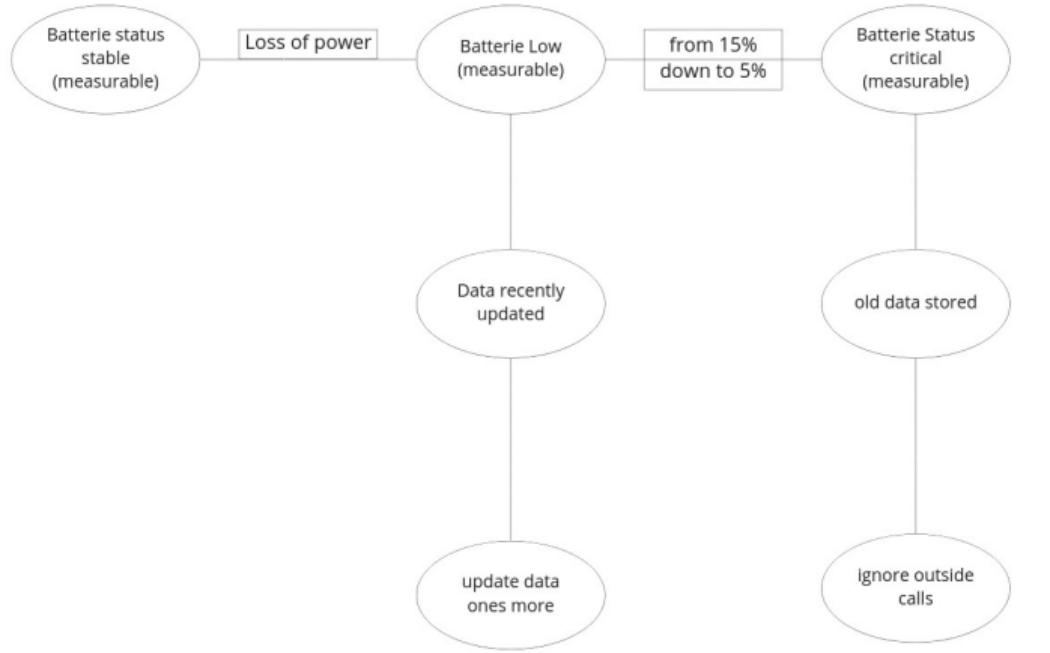
# Situation 2: Storyboard

- Persona: Martina Rina, Car Mechanic
- Scenario: Low battery status



mirra

## Situation 2: Context Model



# Adaptation Mechanisms

# Adaptation Mechanisms

- Adapt Data Transfer, instead of sending complete information, only send necessary parts, lazy evaluation of data
- Store events you participate in locally, create event hash for synchronization (should be smaller than complete object, however, it will interfere with energy challenge to some degree (complexe calculation <-> less data to transfer))

# MAPE-K

# MAPE-K

- Monitor - Sensor Data (of gps and internet connection) only when needed, limited background processes
- Analyze - check event information like time and day
- Plan - if  $\text{current\_time} + \text{threshold} \geq \text{event\_time}$  => check for updates on event
- Execute - ask server for new hash of event -> if same, do nothing, else fetch data again
- Knowledge - store personal and event information locally

# Detailed Architecture and Technology Choice

# Detailed architecture and technology choice

