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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: Bad or no internet connection



Situation 2: low battery



Context Features

Context features to control our adaptation

- lokale SQL database
- small and lightweight json get and post requests?
- find efficient way to listen for new events

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

