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MeetForSport: Adaptation Concept

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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