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MeetForSport: Adaptation Concept

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App Idea

MeetForSport

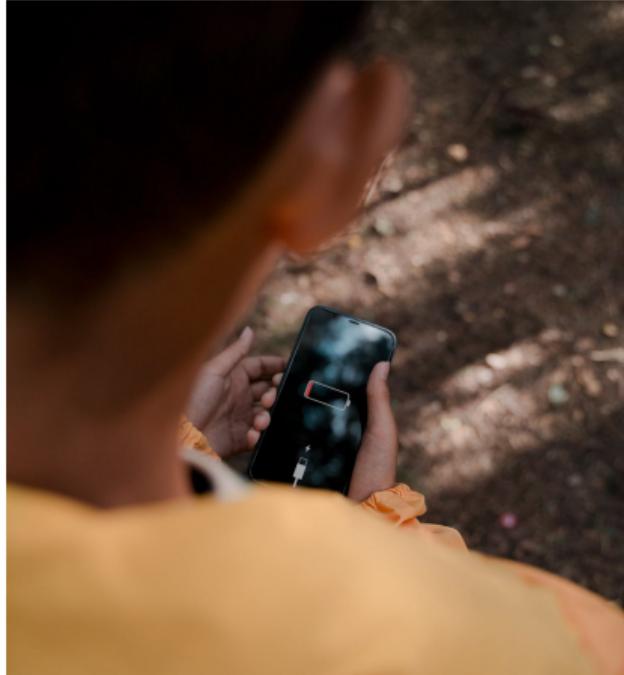
This app will allow users to join group activities (i.e. football) or join ongoing events. Targeting mostly active persons, this small social network will allow users to find new friends/persons with the same interests and therefore allow these people to become more active.

Problematic Situations

Situation 1: No internet connection



Situation 2: low battery



Situation 1: Offline Challenge

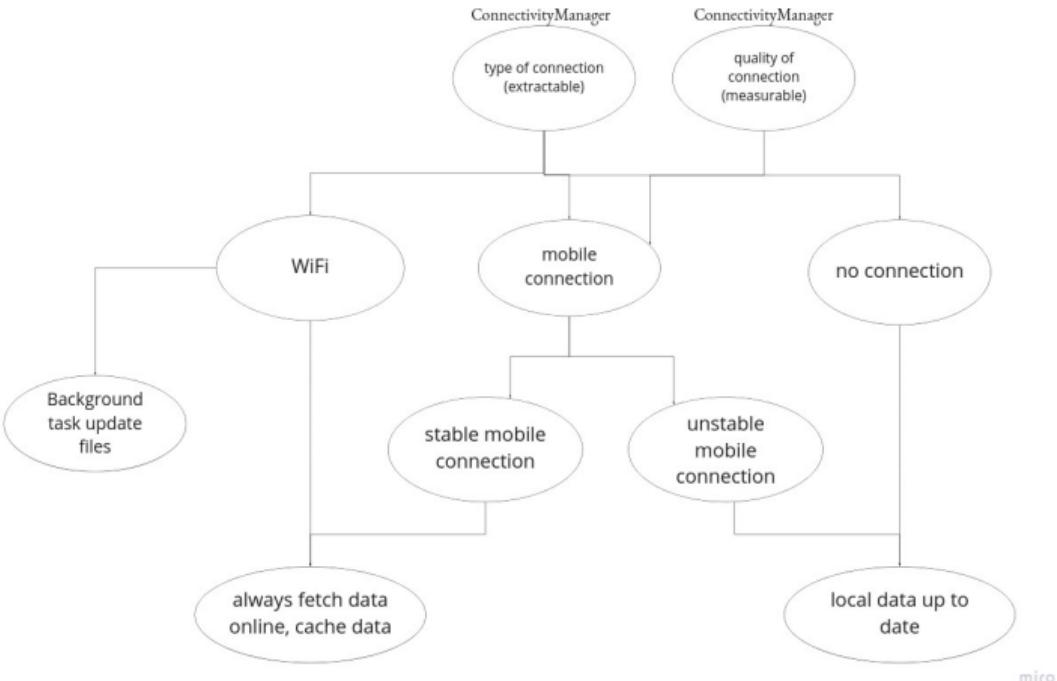
Situation 1: Storyboard

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



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Situation 1: Context Model



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Situation 1: MAPE-K

- Monitor: Network state, Package loss, Bandwidth
- Analyze:
 - Case 1: No connection
 - Case 2: Stable connection
- Plan:
 - Case 1: use cached data
 - Case 2: update data
- Execute:
 - Case 1: load cached data, ignore online messages
 - Case 2: send requests for updates, fetch only web data
- Knowledge: Store behavior model in Android Preferences

Situation 2: Energy Challenge

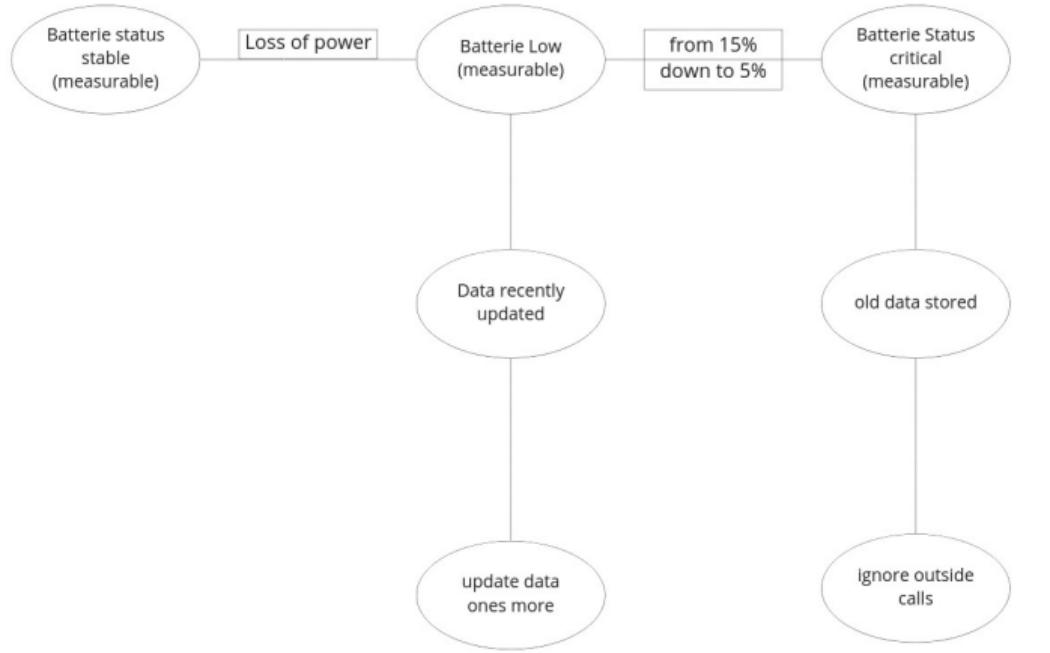
Situation 2: Storyboard

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



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Situation 2: Context Model

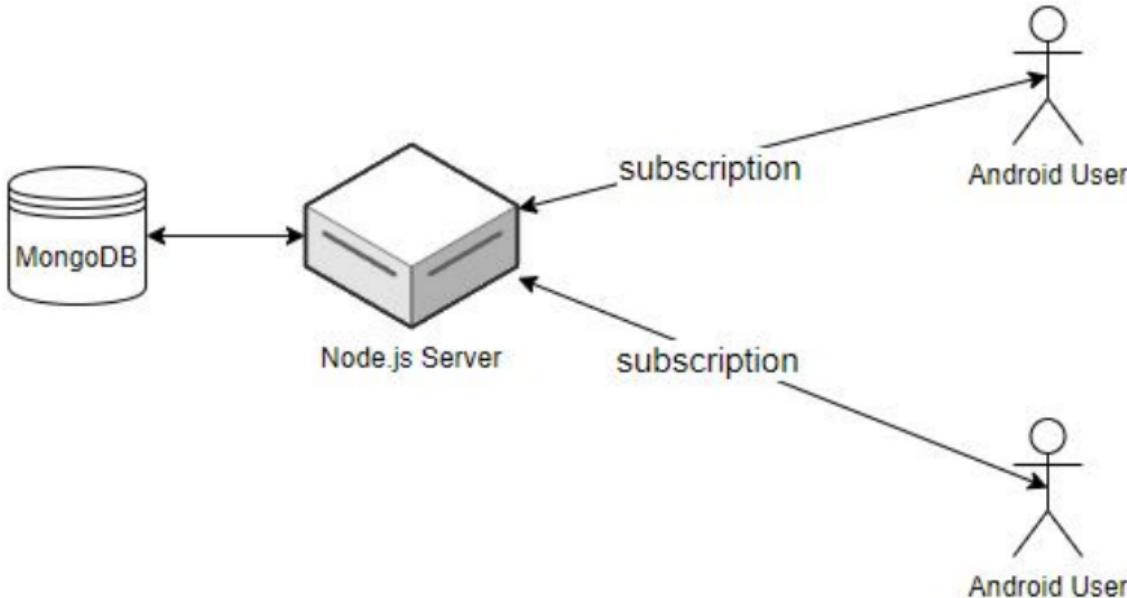


Situation 1: MAPE-K

- Monitor: Batterie state, cpu usage while using it
- Analyze:
 - Case 1: batterie state < LOW && batterie state > CRITICAL
 - Case 1: batterie state < LOW && batterie state < CRITICAL
 - Case 1: batterie state > LOW && batterie state < CRITICAL
- Plan:
 - Case 1: limit gps, fetch only important data
 - Case 2: no gps, only cached data
 - Case 3: use ACCESS_FINE_LOCATION for GPS, fetch data if possible
- Execute:
 - Case 1: set permission to ACCESS_COARSE_LOCATION, use cached data for unimportant things
 - Case 2: revoke permissions
 - Case 3: set ACCESS_FINE_LOCATION for GPS, grant every Internet permission
- Knowledge: Store permissions in user preferences

Detailed Architecture and Technology Choice

Detailed architecture and technology choice



Detailed architecture and technology choice

