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# MeetForSport: Adaptation Concept

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# App Idea

# MeetForSport

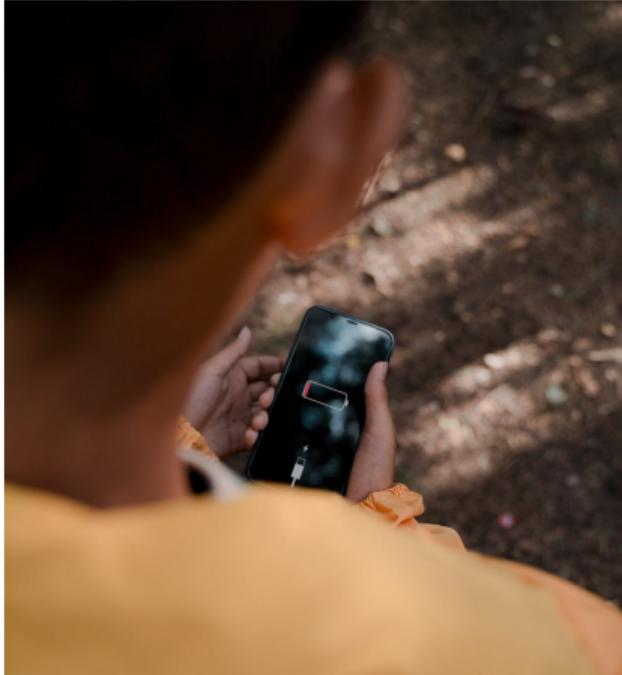
This app will allow users to join group activities (i.e. football) or join ongoing events. Targeting mostly active persons, this small social network will allow users to find new friends/persons with the same interests and therefore allow these people to become more active.

# Problematic Situations

# Situation 1: No internet connection



## Situation 2: low battery



# Situation 1: Offline Challenge

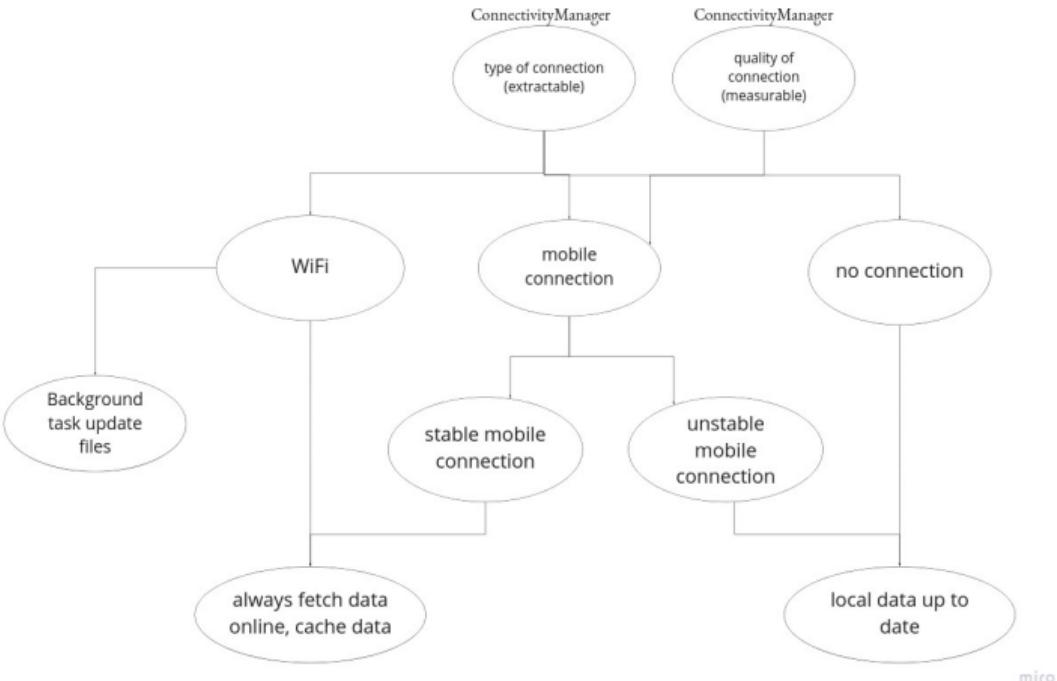
# Situation 1: Storyboard

- 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: Network state == mobile Network & package loss > 5% & bandwidth < threshold
  - Case 2: Network state == WiFi & package loss < 5% & bandwidth > threshold
  - Case 3: Network state == mobile Network & package loss < 5% & bandwidth > threshold
- Plan:
  - Case 1: use cached data
  - Case 2: update data
  - Case 3: ask for updates, fetch only important information
- Execute:
  - Case 1: load cached data, ignore online messages
  - Case 2: send requests for updates, fetch only web data
  - Case 3: ask for updates, fetch only important information
- Knowledge: Store behavior model in Android Preferences

# Situation 2: Energy Challenge

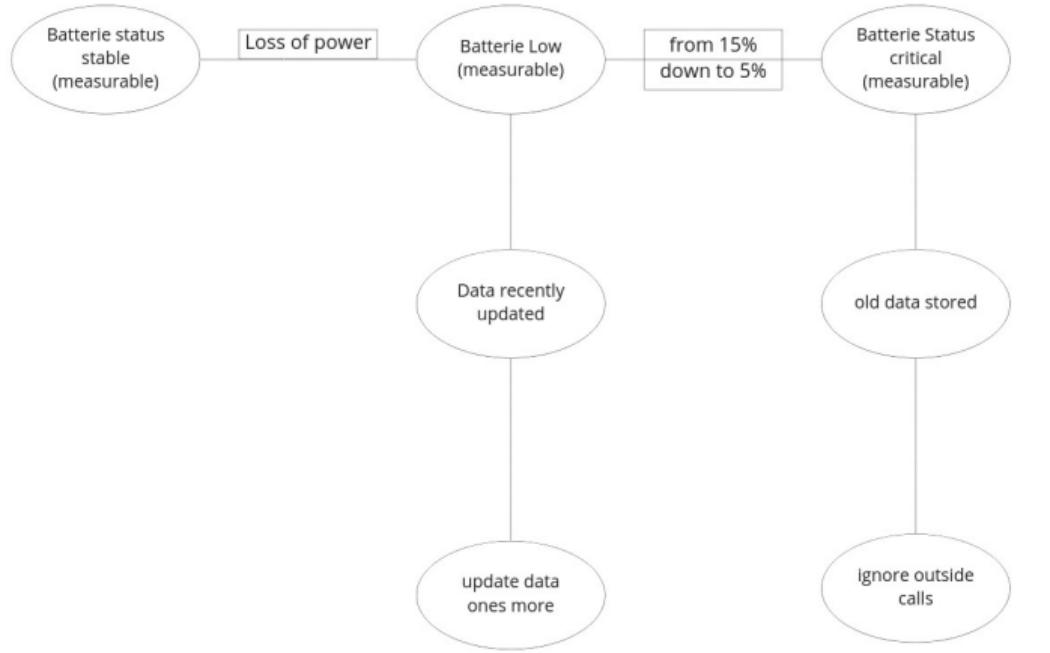
# Situation 2: Storyboard

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



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## Situation 2: Context Model

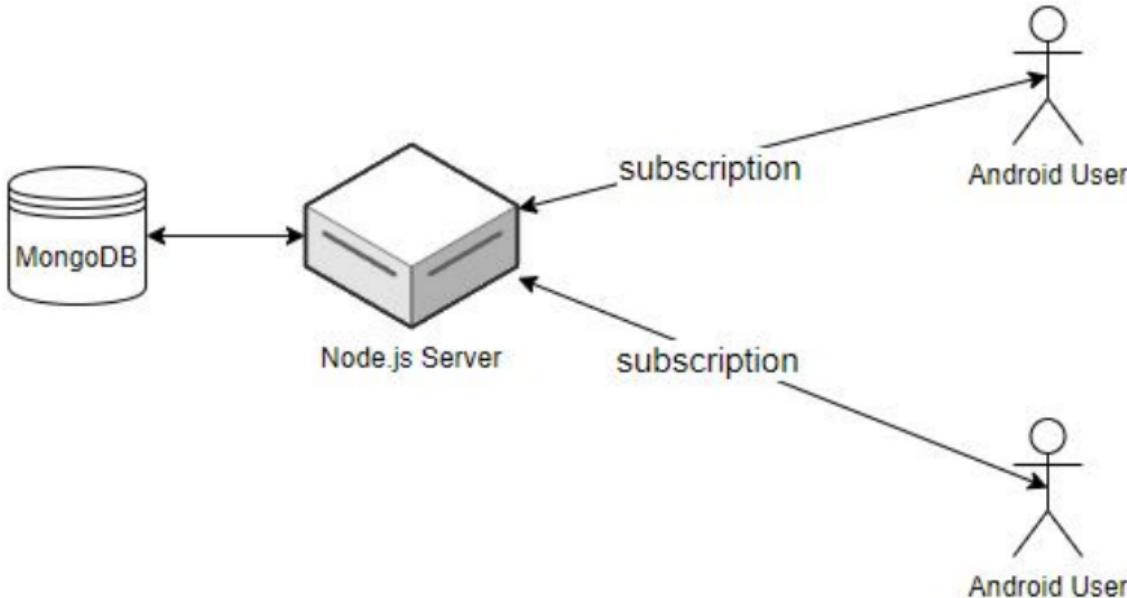


# Situation 1: MAPE-K

- 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

