Weatherstation

NVS - MQTT Garn, Gubesch, Herzog, Kaindl

Gliederung

- Controller
- Sensor
- WebClient
- Mobile Client

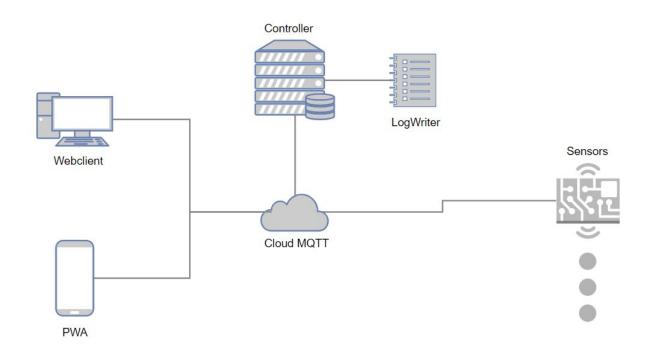








Systemarchitektur



Controller - LogWriter

- Speichert Sensordaten in Datenbank
- Reports für
 - Jahre
 - Monate





Sensor



- Simulator in Java
- Paho Java Client (Mqtt client library)
- Temperatur, Luftdruck, Luftreinheit, Luftverschmutzung, Luftfeuchtigkeit, Windrichtung, Windstärke, Niederschlagsmenge, Niederschlagsart

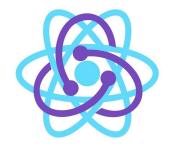




WebClient

- React.js
- Redux
- MQTT.js

- Highcharts
- MDBootstrap







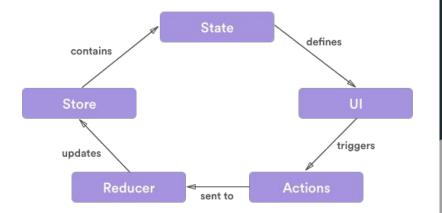




WebClient

Zum darstellen der Daten des Sensors im Webbrowser

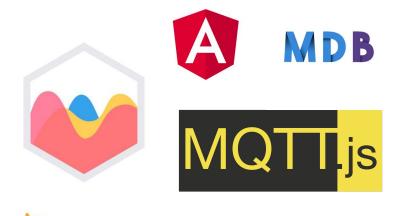
- Homescreen Live Daten + Tagesverlauf
- Monthly Report Monatszusammenfassung
- Yearly Report Jahreszusammenfassung





MobileClient

- Angular PWA
- Bootstrap CSS Framework
- MQTT.js
- Chart.js
- Firebase Hosting
- Lighthouse Testing



Firebase

Hosting

MobileClient

- Homescreen zeigt Livedaten
- Liste aller Sensoren
- Einstellungen

