

# Water demand forecasting based on weather forecast

Chriss, Santi  
Hilary, Oodo  
Jarvin, Mutatiina





# Datasets and streams

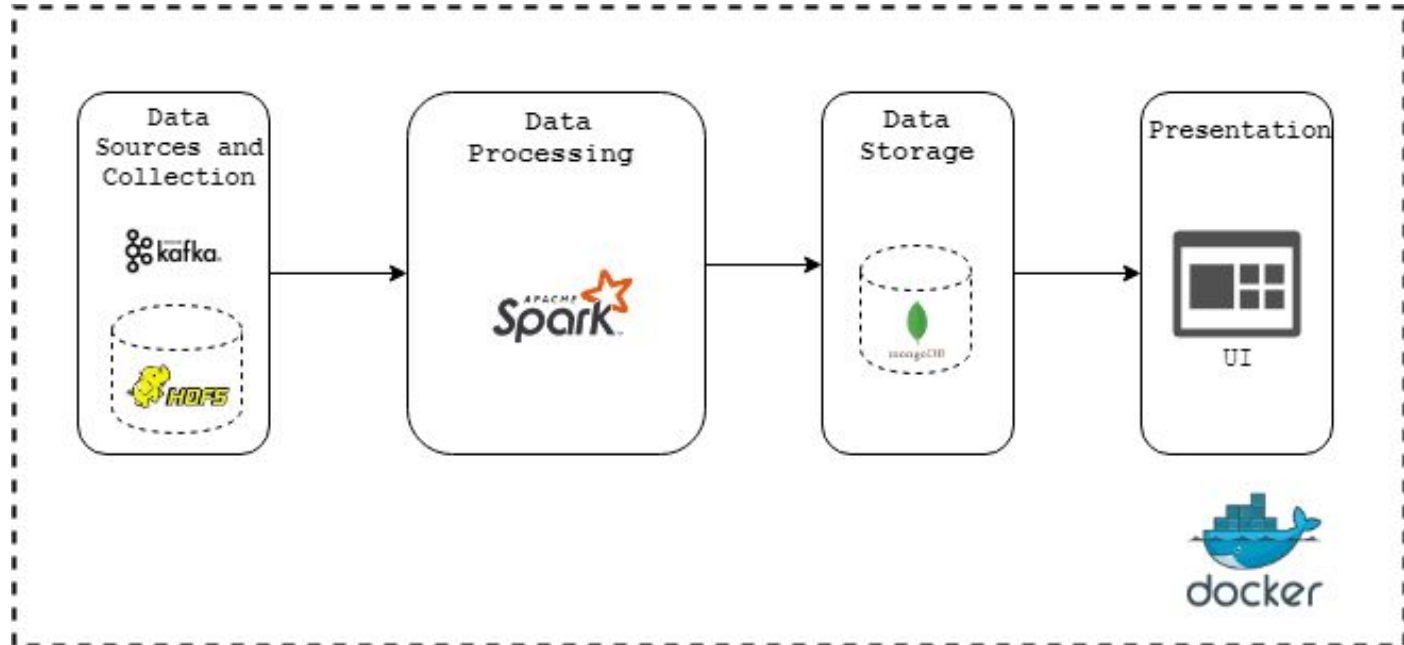
KNMI Dataset - Weather data from the Netherlands

<https://projects.knmi.nl/klimatologie/uurgegevens/selectie.cgi>

CBS - Water Usage data

[https://opendata.cbs.nl/statline/portal.html?\\_catalog=CBS&\\_la=en&tableId=82883ENG&\\_theme=1033](https://opendata.cbs.nl/statline/portal.html?_catalog=CBS&_la=en&tableId=82883ENG&_theme=1033)

# Architecture





# Technology Stack

- Docker - Deployment
- Apache Spark with PySpark
- Kafka - streaming
- MongoDB/ Cassandra - Data storage
- Python and or Java
- HTML & D3.js / chart.js - Visualisation



# Weekly Plan

|        |  |
|--------|--|
| Week 1 | Design project architecture                |
| Week 2 | Build Infrastructure                       |
| Week 3 | Core data processing Algorithm             |
| Week 4 | Expansion to historical and streaming data |