

# Wave Industries

## Sprint Report

### NTNU

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## 1 week 42

First week of planning, this week we focused on Sprint planning, and creating documentation: change log:

- Added Readme, GANT chart and Network layout
- Added Prototype dashboard
- Added MQTT client and subscriber for testing

Issues Closed:

- Research and write short document of MQTT setup
- Start work on Prototype dashboard
- Create overview document
- Start work on MQTT client side, create short document of setup

## 2 week 43

This was furthering development, and testing more of what MQTT is capable of  
change log:

- Changed MQTT client and broker to test timing
- Added Database to store values
- Added documentation of building software
- Added broker for local tests
- Discussed security and packet flow

Issues Closed:

- set up database models
- Add, "how to build" section in readme
- setup MQTT broker for messages across web
- Discuss security features of MQTT
- Finish up MQTT client

### 2.0.1 week 44

This week we were at an Equinor sponsored event in Oslo thus did not have a lot of time to work on the sprint

Issues closed:

- Research more security features in MQTT

### 2.0.2 week 45

Started on Api endpoints and MQTT subscriber to push to it

Change log:

- added API endpoints
- added basic client to interact with api

Issues closed:

- create basic api endpoints
- create backend client to store data in database

### 2.0.3 week 46

Creation of simulation data, and finishing up MQTT subscriber

Change log:

- Added Simulator code
- fixed more API code

Issues closed:

- Create a ship simulator
- MQTT HTTP post request

### 2.0.4 week 47

This was one of final software sprints, we focused heavily on getting it ready for demo

Change log:

- Simulator done, and connected to API
- started work on connection between frontend and restAPI
- project report, started work with descriptions and layout
- started script of video

Issues closed:

- integrate mqtt to the ship simulator
- Add speed to simulator
- Add mode switching to simulator
- start work on project report
- create requirements file for python
- Deprecate old MQTT clients
- Set the mqtt publish qos to 2
- add license
- add comments to existing backend code
- connect frontend to REST API
- Start planning of video

### **2.0.5 week 48**

this was the final sprint for the project report, and expected delivery. Change log:

Issues closed:

### **2.0.6 sprint retrospective**

The sprints we performed in this project worked well,