

Wave Industries

Sprint Report

NTNU

Huse Storebø, Gard

Gunapalan, Arunanthi

Bieniek, Rafal

Norheim Nysæther, Henrik

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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:

- readme finilized
- real data connected on fronted
- some graphing on frontend
- sprint report finelized

Issues closed:

- Create API endpoints for frontend
- add description to readme
- write section 2
- setup certs and TLS
- add urea consumption to sim
- create docker image
- create setup script
- write section 3
- connect frontend to REST API

2.0.6 sprint retrospective

In our sprints, we were able to work efficiently and effectively as a team. We were able to quickly prioritize tasks and divide them among the team members, allowing us to make steady progress throughout the semester. However, during the final week, we had to put in a little bit of extra effort to finish all of our tasks on time. Despite the added pressure, we were able to come together as a team and get everything done. Overall, it was a successful project thanks to our ability to work well together and adapt to challenges.