

Autonomous Robots: Assignment 1

Erik Norlin

April, 2023

1c

To run the microservice you have to run the docker image in two different terminals. This is to set up a receiver that can send back the message that is intended in this task. The docker image is run with the following command:

```
docker run --rm -ti --net=host registry.git.chalmers.se/norliner/opencv-logic-norliner:1.3
```

It should now look something like fig. 1.

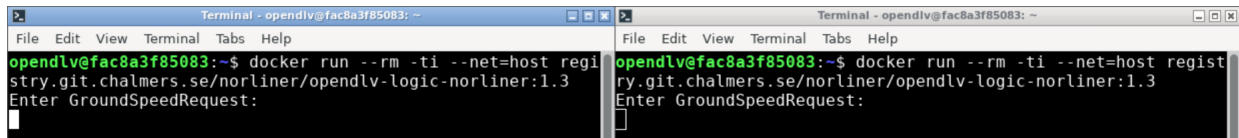


Figure 1

Type any **number** you wish in any terminal. Inputting "2" in the first terminal looks like fig. 2

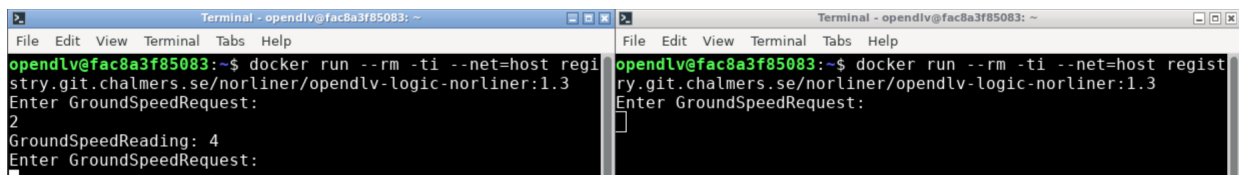


Figure 2

The first terminal sends a message of type **GroundSpeedRequest**. The second terminal acts as a server and receives this message and multiplies it with a float 2.0, converts the new number to a message of type **GroundSpeedReading**, and sends it. The first terminal acts now as a server and receives the message of type **GroundSpeedReading**, and prints the message. This is why two terminals are needed even though the second terminal remains unaffected at sight.

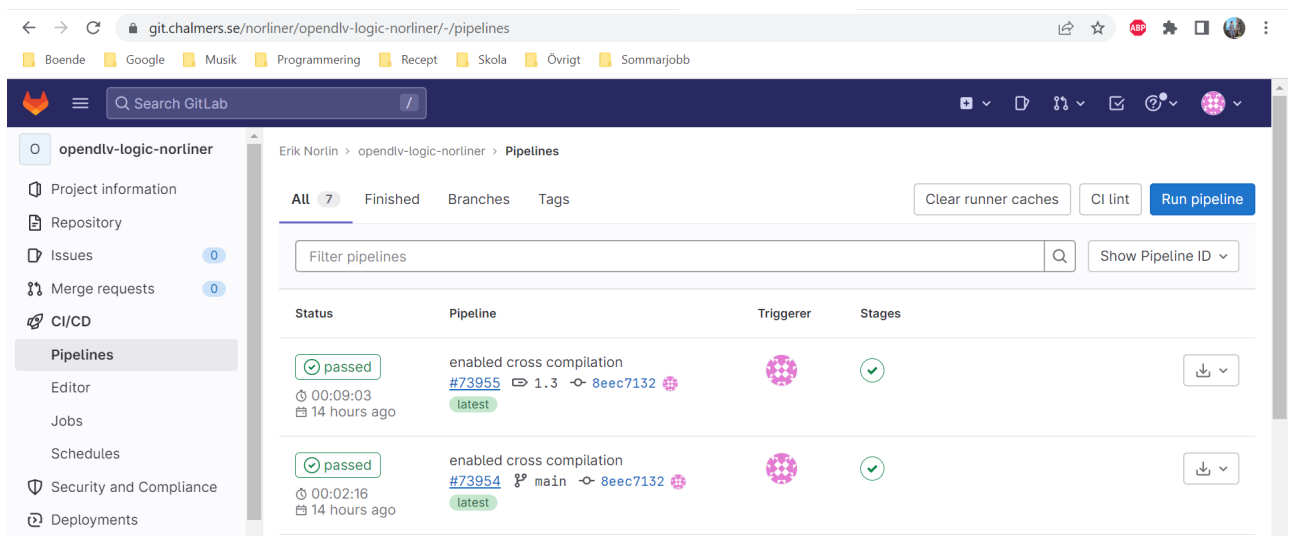


Figure 3: Status and pipeline of the docker image on git.chalmers.se.

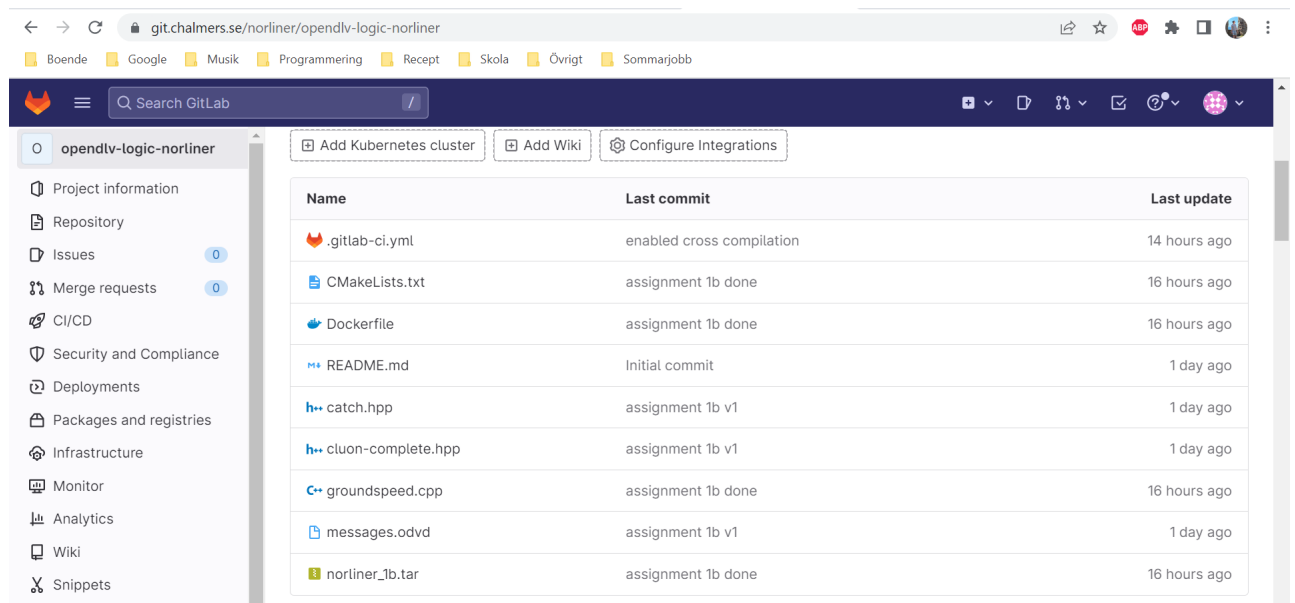


Figure 4: Repository on `git.chalmers.se`. The first file `".gitlab-ci.yml"` in the repository is automating CI+CD. The third file is the Dockerfile.