User guide to build and run the Docker image

Comments to the individual steps are marked with a "*"

*This guide expects you to have unpacked the zipfile it came in.

Download Docker

Download Docker for your OS from: (https://docs.docker.com/get-docker/)

*The download guide also provides steps to **Uninstall**, if you are not interested in having Docker installed after this interactive demo. e.g for Windows this is at (https://docs.docker.com/docker-for-windows/install/)

*The guide is only tested on a Windows PC with Docker Desktop

Navigate to correct folder

Open either Windows Powershell/Anaconda Prompt/Windows command prompt

**The examples in this guide are using Windows Powershell

Marked with red on Figure (1) is the *guide* you are reading here.

Mark the *path* marked with blue on Figure (1) and paste it in Windows Powershell with the command cd in front followed by a space like shown on Figure (2).

e.g: cd C:\Users\jacob\Desktop\"Til Bachlorprojekt"\Docker

***NOTE it the *path* that you have just copied contains a space in the folder name you have to manually add quotes around e.g: cd C:\Users\jacob\Desktop\"Til Bachlorprojekt"\Docker
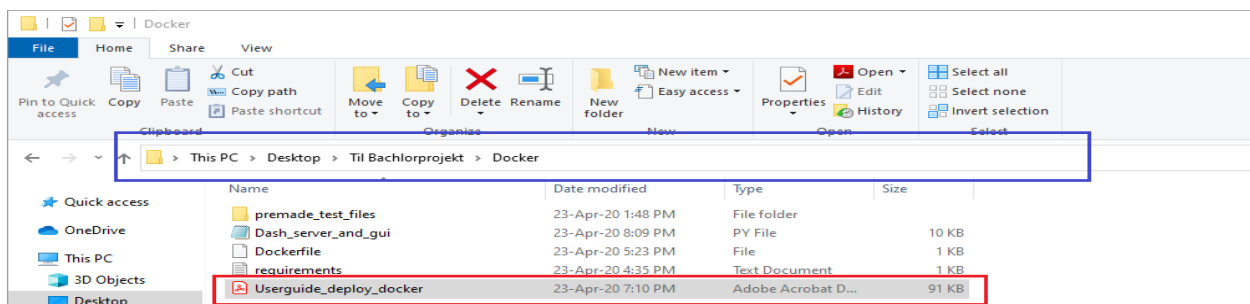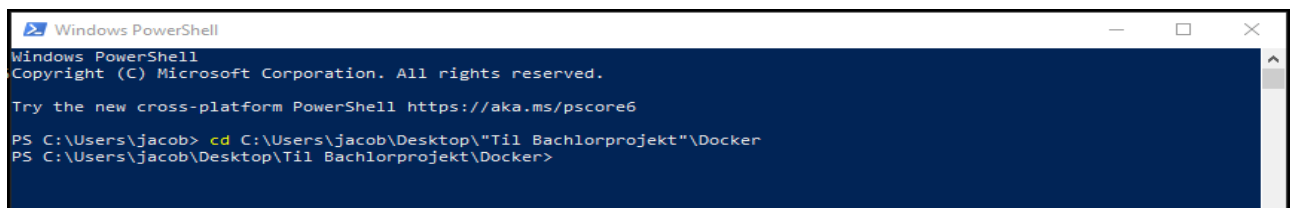

Figure 1: Zip-file unziped to a location

Figure 2: Change directory to DockerFile location

Build Docker Image

Build the Docker image with the following command**(!!Important to remember the ".")**:

docker build --tag ai_on_microcontrollers_evaluationtool .

Run the Docker image

Step 4: To run the docker image made in step 3, execute the command:

docker run --publish 8050:8080 ai_on_microcontrollers_evaluationtool

*This maps the port configured by the dash-Flask-server(8080) to the one exposed from the Dockerfile(8050).

Use the client and enjoy that everything is installed for the application

Step 5: Navigate to the URL in a browser (tested with Google Chrome):

http://127.0.0.1:8050/ or http://localhost:8050/ (same address)

The view that appears in the browser should look like Figure (3) the layout should appear in 5 seconds.

 (Figure frame is from the browser Google Chrome. Also tested In Internet Explore and layout is different, but functionality is the same.)

(Layout could be different as well as its tested on a 13" laptop with a resolution of 1920x1080. And the map is set to 80% of this. Functionality should be the same despite funny layout be the same)

*if the symbol X is clicked by accident on the Dropdown, the application will throw an error. In this case either 1) select a value on the dropdown again and uncomment the errors by clicking the blue circle in the lower right corner (<>) and disable the errors or 2) just refresh the page and it will be functional again.
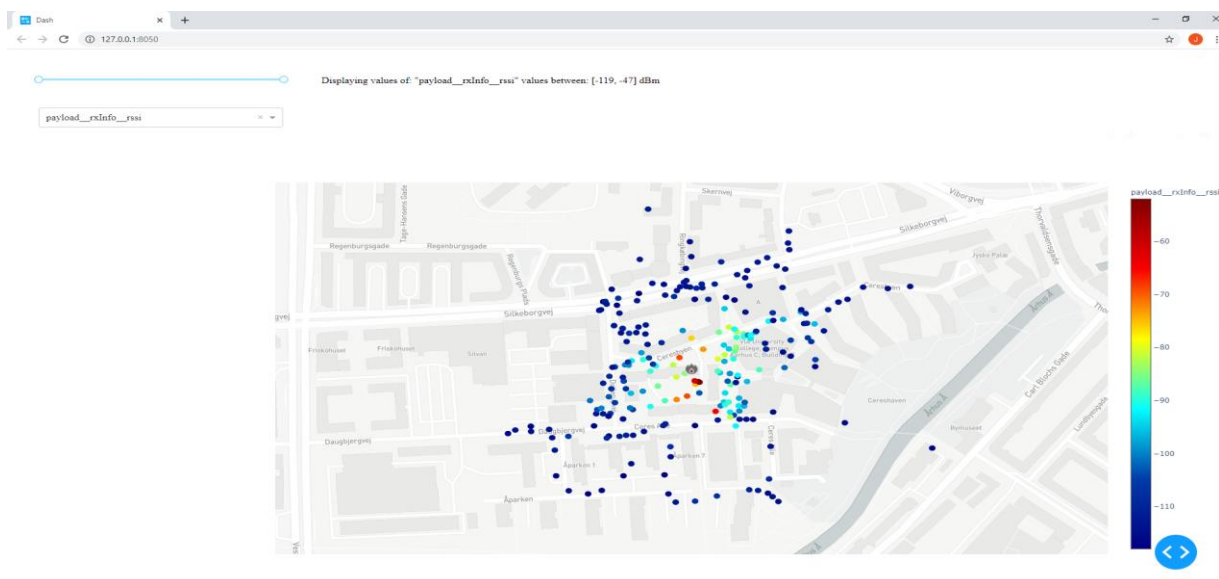

Figure 3: View when Microservice is launched