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1b. <https://github.com/MorningLit/CS3219>

1c. Make sure to pull the latest image of nginx to your docker before trying. Firstly, with my files in the OTOT_Task_A1 folder, run “docker build -t webserver .” in the folder containing all the files, this creates an image called webserver and through the instructions in the Dockerfile, it copies the nginx.conf and the other 2 html files to the respective locations on docker.

Then, run “docker run -p 8234:90 --name web webserver”, this runs the container of the webserver named as web on the host port 8234. This port connects to the docker port of port 90 as demonstrated by the flag “-p 8234:90”. Then in the nginx.conf file, we have 2 servers, one listening on port 8081, another on port 90. Since the server listening on port 90 redirects all traffic to the other server on port 8081 using proxy_pass, we get to see the html webpage of index.html that says “CS3219 Task A1” instead of “AAAAAAAAAAAAAAAAAAAAAAAAAAAAA”.

1d. Docker has their own networking ip addresses and ports. And localhost uses the ip address that it has, thus in this case it would use the docker ip address.