Exercise Worksheet

www.vomtom.at

From the Course:
Understanding Docker Run, Dockerfile, Docker-Compose for Beginners

Understanding the Basic Docker Bridge and Host Network

By default, docker creates an overlay network over all containers. A bridge. It's called "docker0".

From the previous lectures there should be some networks left:

```
docker network ls
```

- Brings up a list of all networks

```
docker network prune
```

- Should delete all networks
- Just to clean up – you don't *have* to do this, but sometimes it's good to start fresh

```
docker network ls
```

- Should now just list the necessary networks for docker to function
- A bridge
- A host
- A null

```
docker run --rm --name my-webserver -d httpd
```

- Start an apache webserver (httpd container)

```
docker inspect my-webserver
```

- Check the IP address of the container

Open http://172.17.0.2 (or the IP address of your container)

- It won't let you connect to it
- Unless you forward a port to your host with -p 8080:80 or so…

```
docker run --rm tomw1808/mycurl my-webserver
```

- Should download and run an image called "tomw1808/curl" which is just an ubuntu alpine with curl installed
- And curl "my-webserver"
    - Basically, the same as executing "curl my-webserver" on any Linux
- It will end in an error

```
docker run --rm tomw1808/mycurl 172.17.0.2
```

- Will output you the HTML of the Webserver
- "It Works!"

```
docker stop my-webserver
```

- Stops the webserver container

```
docker network create simple-network
```

- Creates a new bridge network called “simple-network”

```
docker run --rm -d --name my-webserver --network simple-network
httpd
```

- Start the webserver again attaching it to the “simple-network” we created earlier

```
docker run --rm --network simple-network appropriate/curl my-
webserver
```

- Now the name binding works
- “It Works!”

```
docker inspect my-webserver
```

- Get the IP Address of your webserver
- It should be 172.22.0.2 (or so – copy the IP of your container here)

```
docker run --rm tomw1808/mycurl 172.22.0.2
```

- Run curl without the network, on the docker0 network
- You won’t be able to connect to the webserver
- It’s segregated from the other network
- Ctrl-c to stop

```
docker stop my-webserver
```

- Stop the container again

```
docker network rm simple-network
```

- Cleanup: remove the simple-network again