Cloud Computing Practical 1 Exercise 2

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Exercise 2.

Task 1:

```yaml
docker-compose.yml
1    version: "3.9"
2    services:
3      web:
4        build: .
5        ports:
6          - "8000:5000"
7        environment:
8          - FLASK_APP=app.py
9          - FLASK_RUN_HOST=0.0.0.0
10       command: flask run
11       networks:
12         - mynet
13       volumes:
14         - myvol:/home/app
15     redis:
16       image: "redis:alpine"
17       networks:
18         - mynet
19
20   networks:
21     mynet:
22   volumes:
23     myvol:
```

```
dawidskraba@dhcp-892b01ac Exersize2 % docker compose up -d
 [+] Running 3/3
  ⠿ Network exersize2_mynet      Created
  ⠿ Container exersize2-web-1    Started
  ⠿ Container exersize2-redis-1  Started
```

Above you can see that I made a network called "mynet" and I added both containers to this network, so that they could communicate with each other.

I also created a volume called "myvol" which I attached to the web service so data is not lost when the application is shut down.

I have moved over the environment variables and the command lines to the docker compose files.
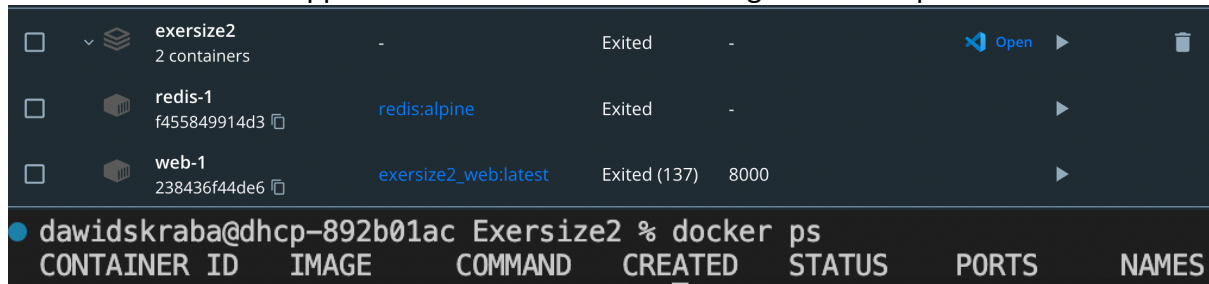
Here I show how the volume works:

First I open the application and show it works.

```
◁  ▷  ⟳              🔖    ❗ localhost:8000
```

Hello World! I have been seen 17 times.

Then I shut down the application and show its down using the docker ps command.

☐ ∨ ⬢	**exersize2** 2 containers	-	Exited	-	◁ Open ►	🗑
☐ ⬡	**redis-1** f455849914d3 ⧉	redis:alpine	Exited	-	►	
☐ ⬡	**web-1** 238436f44de6 ⧉	exersize2_web:latest	Exited (137)	8000	►	

```
● dawidskraba@dhcp-892b01ac Exersize2 % docker ps
  CONTAINER ID    IMAGE        COMMAND      CREATED    STATUS    PORTS      NAMES
```

When I restart the application the counter is saved from when I quit and it added one more enrty as I opened the web page.

◁ ▷ C 🔖 ❗ localhost:8000

Hello World! I have been seen 18 times.

So all works as intended.