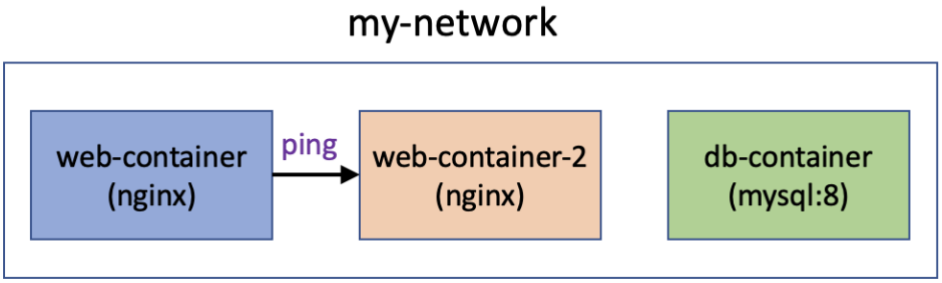
Docker Hands-On: From Beginner to Expert

Lab: Docker Compose

Orchestrate a docker network and containers using docker compose

Overview

In this lab, you are required to follow the same pattern that we discussed for the **docker-compose.yml** file. However, you need to change the network to a different configuration as well as run additional containers.



Steps

1. Download the **docker-compose.yml** file which is an attachment in the resources section of this lecture
2. **Change network name:** Change the network name from **app-network** to **my-network**
3. **Add a second web container:** Add a second web container
    a. Use service name **web-2** (the first container is using service name web)
    b. This second web container should be added to the network **my-network**
    c. Name this second container as **web-container-2**
    d. Expose this new web container on **port 8081** (the first one is exposed on 8080)

4. **Change the database:** Replace the postgres database with **mysql:8**
   Set the environment variables for this new database as follows:

```
    - MYSQL_ROOT_PASSWORD=mypassword
```

5. Launch the infrastructure/containers using docker compose in **detached mode**
6. Ping to verify that you can ping one container from another within the same network:
    a. Get the ip address of the **web-container-2**
    b. Open an interactive session to **web-container**
    c. Do apt-get update and apt-get install **iputils-ping** within that session
    d. Ping the ip address of **web-container-2,** basically you are pinging:
    web-container **-----ping-→** **web-container-2**

(Solution discussed in next lecture)