

Docker Part 2 Assignment – 3

1. Create 5 custom container with 5 different default pages

2. Using Docker Compose deploy these 5 containers on port 81, 82, 83, 84 and 85 respectively

- A docker-compose file is created with a manifesting script to create 5 containers on ports 81,82,83,84 & 85
- And default pages are customised by mounting filepaths of customised html files to each container

```
ubuntu@ip-172-31-45-255:~$ vi docker-compose.yml
ubuntu@ip-172-31-45-255:~$ cat docker-compose.yml
version: '3'

services:
  container1:
    image: nginx:latest
    ports:
      - "81:80"
    volumes:
      - ./container1:/usr/share/nginx/html
    container_name: container1

  container2:
    image: nginx:latest
    ports:
      - "82:80"
    volumes:
      - ./container2:/usr/share/nginx/html
    container_name: container2

  container3:
    image: nginx:latest
    ports:
      - "83:80"
    volumes:
      - ./container3:/usr/share/nginx/html
    container_name: container3

  container4:
    image: nginx:latest
    ports:
      - "84:80"
    volumes:
      - ./container4:/usr/share/nginx/html
    container_name: container4

  container5:
    image: nginx:latest
    ports:
      - "85:80"
    volumes:
      - ./container5:/usr/share/nginx/html
    container_name: container5

ubuntu@ip-172-31-45-255:~$
```

- Then the 5 directories are created for hosting each container's html files naming container1 to container5 in the same directory where docker-compose.yml file is created.

```
ubuntu@ip-172-31-45-255:~$ ls
container1  container2  container3  container4  container5  docker-compose.yml  dockerfile  index.html  mountbind  snap
ubuntu@ip-172-31-45-255:~$
```

- Then navigated into each directory and created an customised html file for each container

```
ubuntu@ip-172-31-45-255:~$ cd container1
ubuntu@ip-172-31-45-255:~/container1$ ls
index.html
ubuntu@ip-172-31-45-255:~/container1$ cat index.html
<html>
    <title>"Venkata Narayana"</title>
    <body>"This is container1"</body>
</html>
ubuntu@ip-172-31-45-255:~/container1$
```

- Finally 5 containers are created by running “docker-compose up -d” command

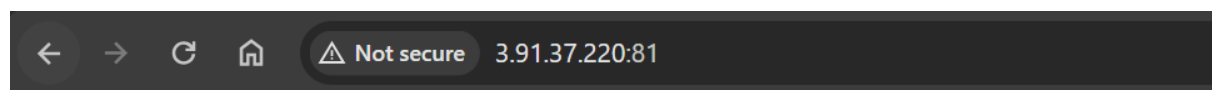
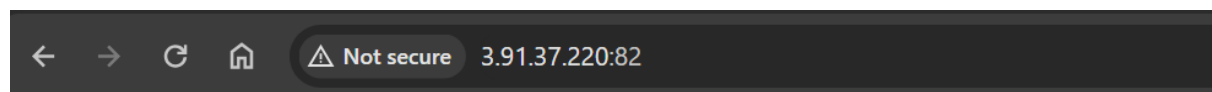
```
ubuntu@ip-172-31-45-255:~/container1$ docker-compose up -d
Creating network "ubuntu_default" with the default driver
Creating container2 ... done
Creating container4 ... done
Creating container3 ... done
Creating container1 ... done
Creating container5 ... done
ubuntu@ip-172-31-45-255:~/container1$
```

- Ensuring the docker compose containers are running successfully and ports are allocated properly to the respective containers

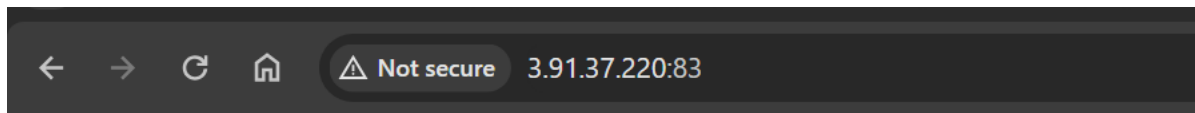
```
ubuntu@ip-172-31-45-255:~/container1$ docker compose ps
```

| NAME | IMAGE | COMMAND | SERVICE | CREATED | STATUS | PORTS |
|------------|--------------|--|------------|----------------|---------------|--------------------|
| container1 | nginx:latest | "/docker-entrypoint.sh nginx -g 'daemon off;'" | container1 | 48 seconds ago | Up 45 seconds | 0.0.0.0:81->80/tcp |
| container2 | nginx:latest | "/docker-entrypoint.sh nginx -g 'daemon off;'" | container2 | 48 seconds ago | Up 46 seconds | 0.0.0.0:82->80/tcp |
| container3 | nginx:latest | "/docker-entrypoint.sh nginx -g 'daemon off;'" | container3 | 48 seconds ago | Up 45 seconds | 0.0.0.0:83->80/tcp |
| container4 | nginx:latest | "/docker-entrypoint.sh nginx -g 'daemon off;'" | container4 | 48 seconds ago | Up 46 seconds | 0.0.0.0:84->80/tcp |
| container5 | nginx:latest | "/docker-entrypoint.sh nginx -g 'daemon off;'" | container5 | 48 seconds ago | Up 45 seconds | 0.0.0.0:85->80/tcp |

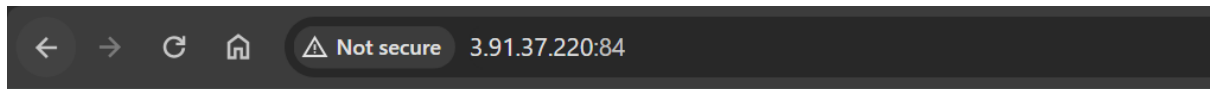
- Created containers are successfully accessible on their respective ports on local browser

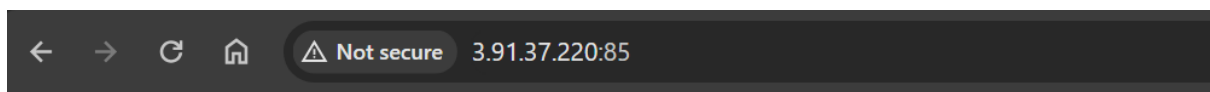
This is container2



"This is container3"



"This is container4"



"This is container5"