

Lab Exercise 6- Docker-Compose file

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Batch-2

Objective:

Set up a WordPress environment using Docker Compose, including a MySQL database as the backend.

Prerequisites:

- Docker and Docker Compose installed on your system.

Step 1: Create a docker-compose.yml File

1. In the project directory, create a file named docker-compose.yml.
2. Add the following content to docker-compose.yml:

docker-compose.yml

```
version: '3.8'

services:
  wordpress:
    image: wordpress:latest
    ports:
      - "8002:80"
    environment:
      WORDPRESS_DB_HOST: db:3306
      WORDPRESS_DB_USER: wp_user
      WORDPRESS_DB_PASSWORD: wp_pass
      WORDPRESS_DB_NAME: wp_database
    depends_on:
      - db
```

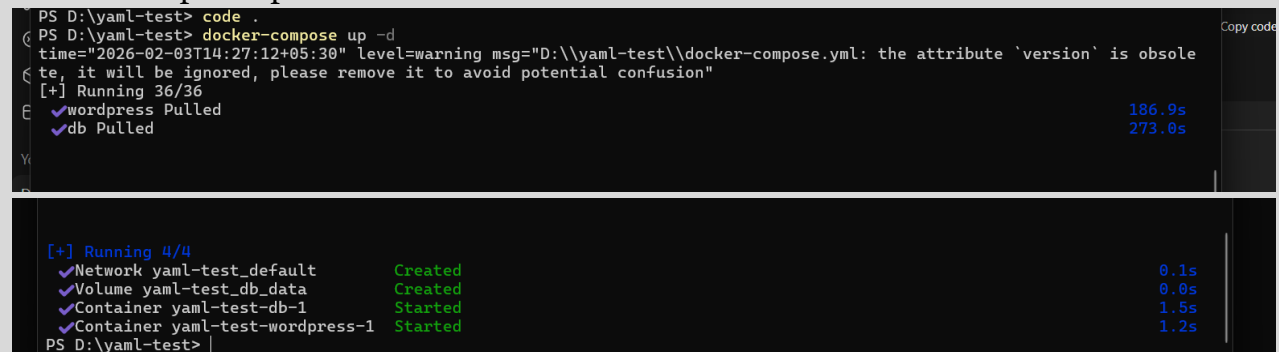
```
db:
  image: mysql:latest
  environment:
    MYSQL_ROOT_PASSWORD: root_password
    MYSQL_DATABASE: wp_database
    MYSQL_USER: wp_user
    MYSQL_PASSWORD: wp_pass
  volumes:
    - db_data:/var/lib/mysql
```

```
volumes:
  db_data:
```

Step 2: Start the Containers

1. Run the following command to start the containers:

```
docker-compose up -d
```



```
PS D:\yaml-test> code .
PS D:\yaml-test> docker-compose up -d
time="2026-02-03T14:27:12+05:30" level=warning msg="D:\\yaml-test\\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 36/36
E   ✓wordpress Pulled                                186.9s
E   ✓db Pulled                                          273.0s
Y
PS D:\yaml-test>

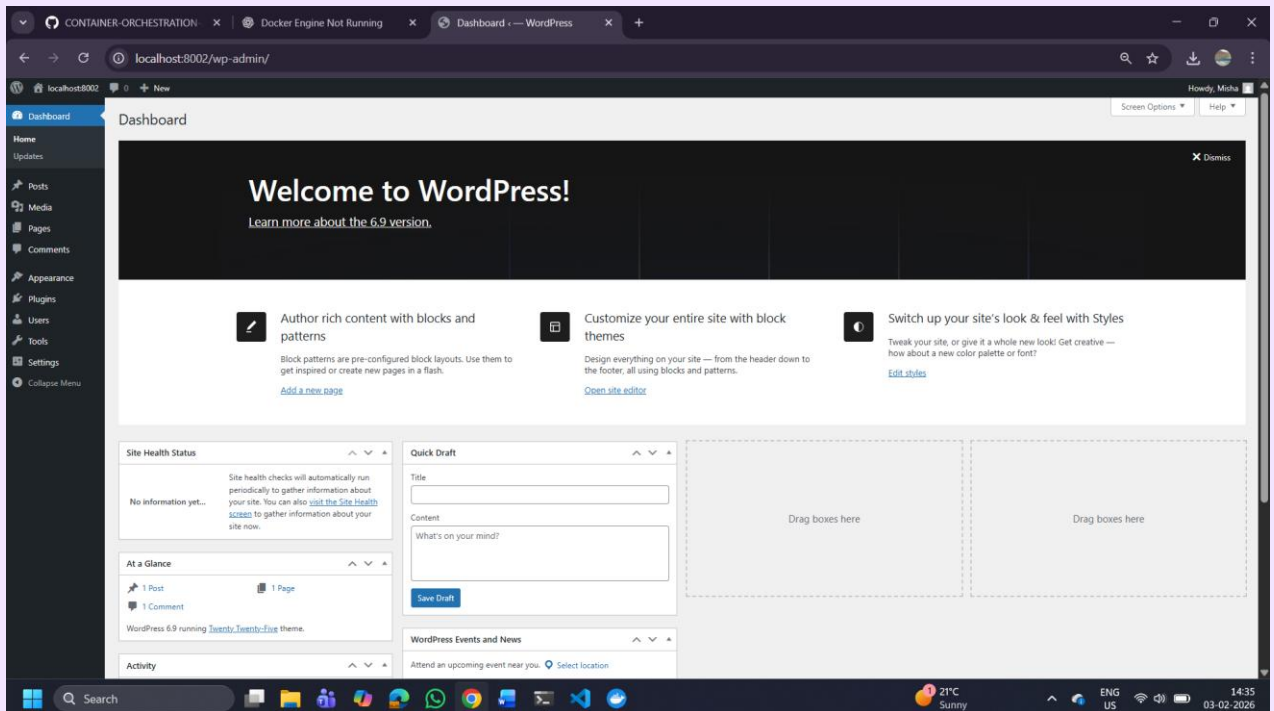
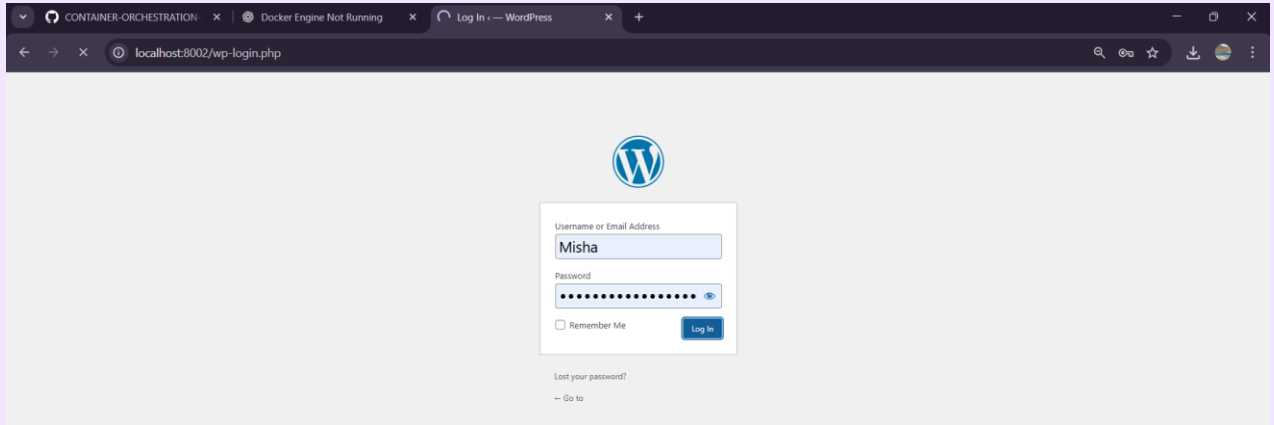
[+] Running 4/4
✓Network yaml-test-default      Created      0.1s
✓Volume yaml-test-db_data      Created      0.0s
✓Container yaml-test-db-1      Started      1.5s
✓Container yaml-test-wordpress-1 Started      1.2s
PS D:\yaml-test> |
```

2. Docker Compose will download the necessary images (WordPress and MySQL) and

2. Docker Compose will download the necessary images (WordPress and MySQL) and start both services.

Step 4: Access WordPress

1. Open your web browser and go to **http://localhost:8002**
2. Follow the WordPress installation steps to set up your site.



Step 5: Stop and Remove Containers

To stop the containers and remove the associated resources, run:

docker-compose down

```
✓Container yaml-test-wordpress-1 Started 1.2s
PS D:\yaml-test> docker-compose down
time="2026-02-03T14:36:23+05:30" level=warning msg="D:\\yaml-test\\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 3/3
✓Container yaml-test-wordpress-1 Removed 1.5s
✓Container yaml-test-db-1 Removed 0.8s
✓Network yaml-test_default Removed 0.4s
PS D:\yaml-test> |
```

This setup allows you to quickly start a WordPress site locally and experiment with

Explanation of docker-compose.yml:

- **wordpress:** Sets up the WordPress container, mapping port 80 inside the container to port 8002 on your local machine.
- **db:** Sets up the MySQL container with a volume (db_data) for persistent storage.

Additional Notes:

- Modify the environment variables as needed for different configurations.
- To view logs, use `docker-compose logs -f`.

This setup allows you to quickly start a WordPress site locally and experiment with configurations.