Lab Exercise 6- Docker-Compose file

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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

```yaml
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

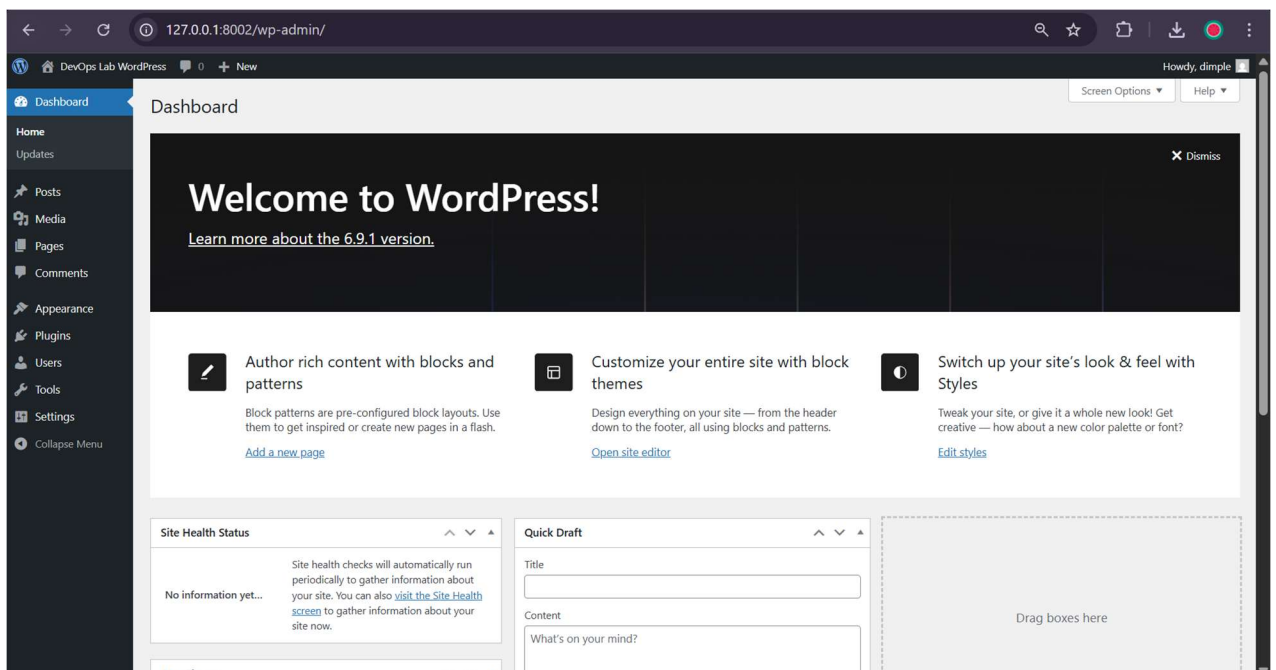1. Run the following command to start the containers:

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

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

    start both services.

```
PS C:\Users\dimpl> cd wordpress-docker
PS C:\Users\dimpl\wordpress-docker> docker compose up -d
time="2026-02-22T14:35:04+05:30" level=warning msg="C:\\Users\\d
impl\\wordpress-docker\\docker-compose.yml: the attribute `versi
on` is obsolete, it will be ignored, please remove it to avoid p
otential confusion"
[+] Running 22/36
[+] Running 22/36] Pulling                                    13.6s
[+] Running 22/36] Pulling                                    13.7s
[+] Running 22/36] Pulling                                    13.8s
[+] Running 22/36] Pulling                                    13.9s
[+] Running 22/36] Pulling                                    14.0s
[+] Running 22/36] Pulling                                    14.1s
[+] Running 22/36] Pulling                                    14.2s
[+] Running 22/36] Pulling                                    14.3s
[+] Running 22/36] Pulling                                    14.4s
[+] Running 22/36] Pulling                                    14.5s
```

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

```
wordpress-docker-db-1
PS C:\Users\dimpl\wordpress-docker> docker-compose down
time="2026-02-22T14:45:32+05:30" level=warning msg="C:\\Users\\d
impl\\wordpress-docker\\docker-compose.yml: the attribute `versi
on` is obsolete, it will be ignored, please remove it to avoid p
otential confusion"
[+] Running 3/3
 ✔Container wordpress-docker-wordpress-1   Removed        1.7s
 ✔Container wordpress-docker-db-1          Removed        1.6s
 ✔Network wordpress-docker_default         Removed        0.5s
```

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.