

# Lab Exercise 6- Docker-Compose file

## 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:

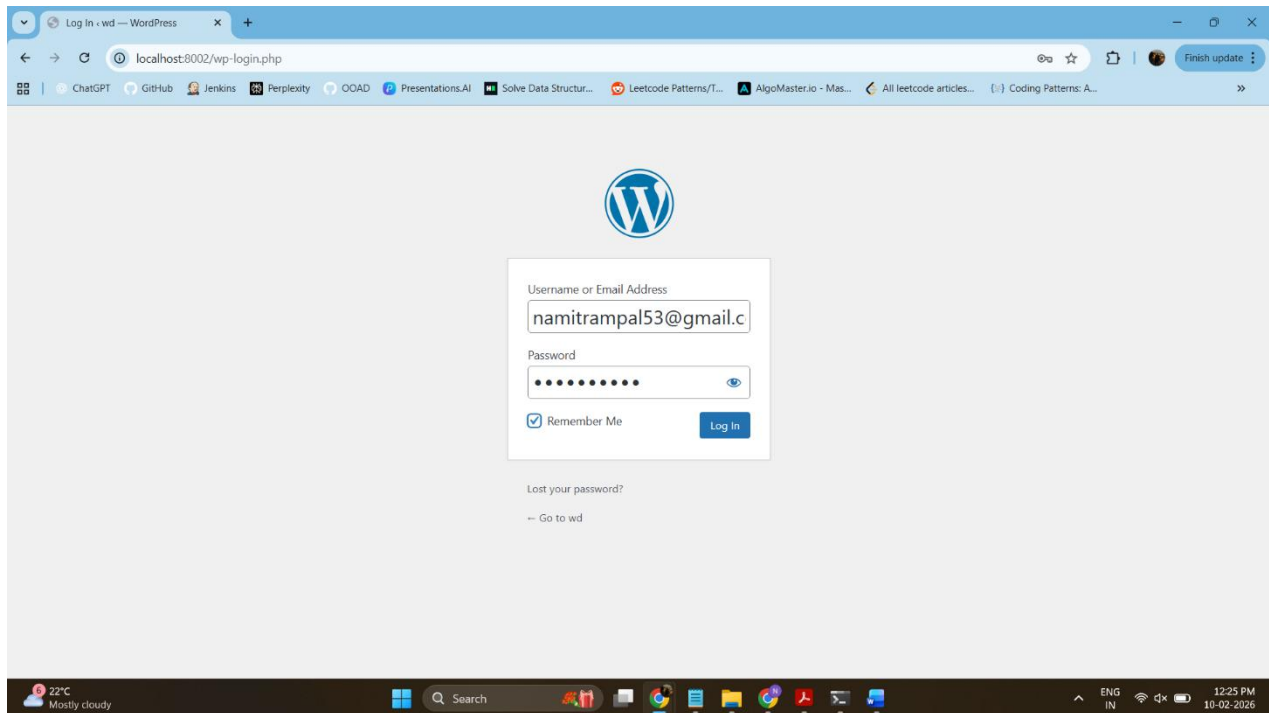
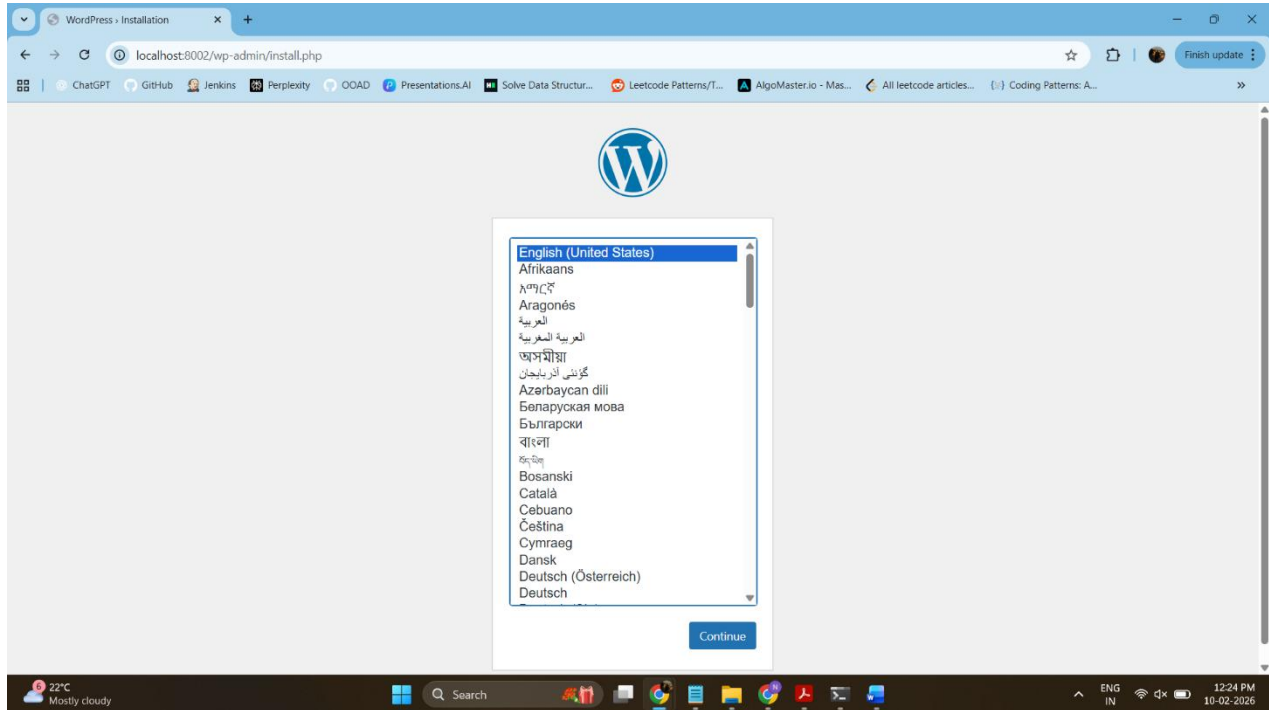
```
docker-compose up -d
```

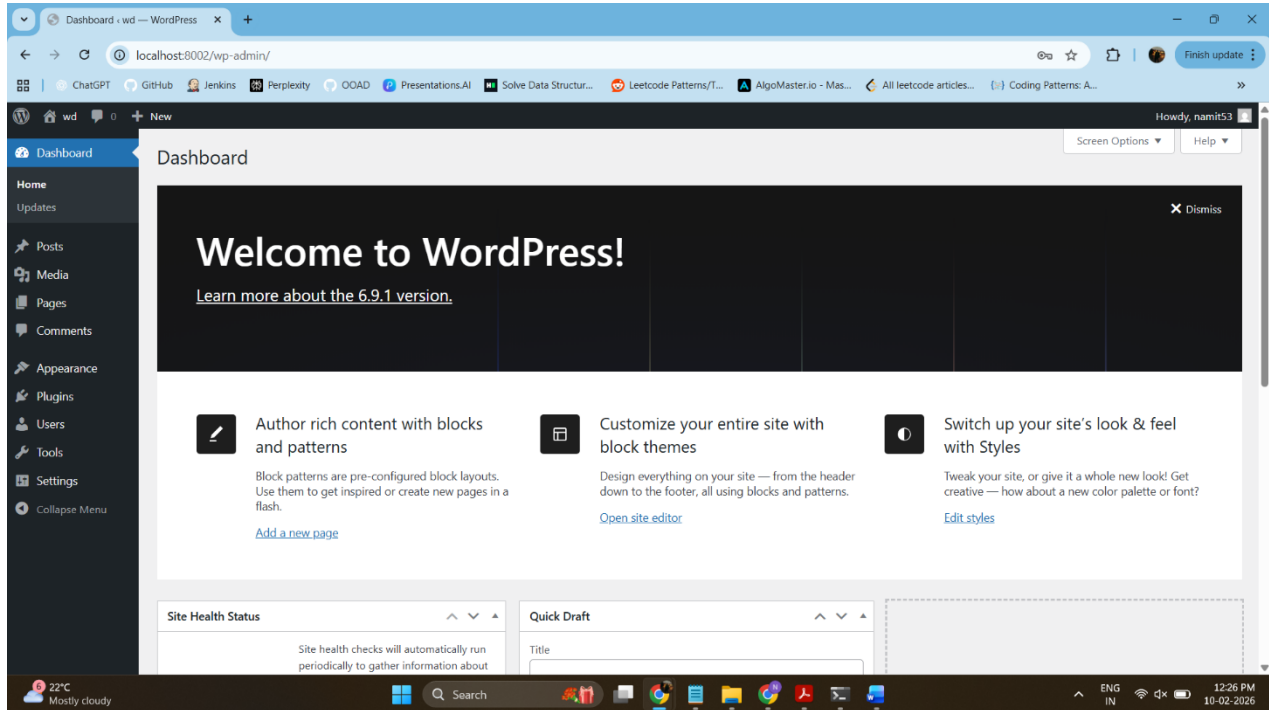
```
Command Prompt
C:\Users\namit\docker-compose-lab>docker-compose up -d
time="2026-02-10T12:20:19+05:30" level=warning msg="C:\\Users\\namit\\docker-compose-lab\\docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 36/36
  ✓wordpress Pulled
    ✓e24598f8ce57 Pull complete 54.7s
    ✓0c8d55a45c0d Pull complete 40.6s
    ✓927120e36889 Pull complete 18.7s
    ✓466b7d277689 Pull complete 41.5s
    ✓5c5b43c27ddc Pull complete 1.9s
    ✓615510a9094d Pull complete 1.9s
    ✓3670ec7d2246 Pull complete 2.2s
    ✓0062c4fcb2c2 Pull complete 42.4s
    ✓4d8bc193e0d0 Pull complete 2.3s
    ✓64133ee529eb Pull complete 42.6s
    ✓2e9fade0540e Pull complete 2.2s
    ✓1ef348da7165 Pull complete 2.3s
    ✓b653b146e793 Pull complete 45.8s
    ✓adf09e671c52 Pull complete 48.6s
    ✓db5c301a6945 Pull complete 48.5s
    ✓f42ce3872b1f Pull complete 2.2s
    ✓4f4fb700ef54 Pull complete 45.6s
    ✓16b69d6f3818 Pull complete 0.0s
    ✓27e4a7ec2970 Pull complete 2.3s
    ✓e92ad73a645a Pull complete 1.9s
    ✓10ecd2cd73b5 Pull complete 44.1s
    ✓8cb331d7a7d9 Pull complete 41.1s
    ✓9046ed4332b7 Pull complete 2.2s
    ✓26c27d12a90a Pull complete 2.3s
  ✓db Pulled 65.1s
    ✓fe44c8bf49c1 Pull complete 0.7s
    ✓7a3034072b44 Pull complete 34.0s
    ✓85e7dc27e1dd Pull complete 34.6s
    ✓e5a384f12fc1 Pull complete 1.8s
    ✓4f37333d1be6 Pull complete 33.9s
    ✓c07617e6f14b Pull complete 34.5s
    ✓c3c2157be11c Pull complete 37.2s
    ✓74e9390a4418 Pull complete 1.7s
    ✓a5b1ba019080 Pull complete 1.8s
    ✓93b95dea6553 Pull complete 59.1s
[+] Running 4/4
  ✓Network docker-compose-lab_default Created 0.2s
  ✓Volume "docker-compose-lab_db_data" Created 0.0s
  ✓Container docker-compose-lab-db-1 Started 2.3s
  ✓Container docker-compose-lab-wordpress-1 Started 1.4s
C:\Users\namit\docker-compose-lab>
```

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
```

```
C:\Users\namit\docker-compose-lab>docker-compose down
time="2026-02-10T12:26:59+05:30" level=warning msg="C:\\Users\\namit\\docker-compose-lab\\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Running 3/3
✔ Container docker-compose-lab-wordpress-1   Removed    1.6s
✔ Container docker-compose-lab-db-1          Removed    2.0s
✔ Network docker-compose-lab_default         Removed    0.4s
C:\Users\namit\docker-compose-lab>
```

## 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.