

# Lab Exercise 6- Docker-Compose file

## Objective:

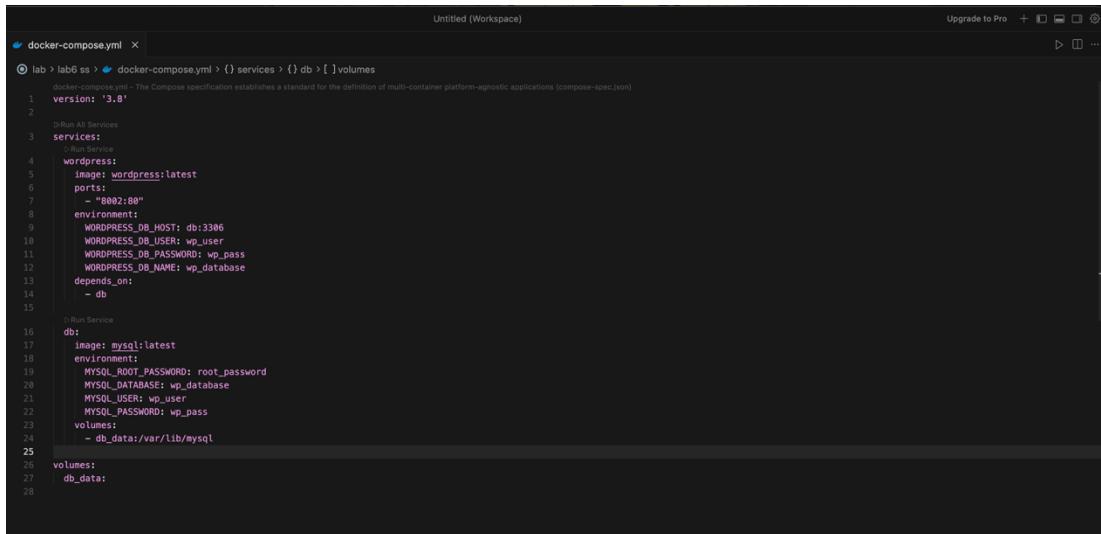
Set up a WordPress environment using Docker Compose, including a MySQL database as the backend.

## 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:



```
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
```

*docker-compose.yml*

```
version: '3.8'

services:
  wordpress:
    image: wordpress:latest
    ports:
      - "8002:80"
    environment:
      WORDPRESS_DB_HOST: db:3306
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```

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

- Run the following command to start the containers:

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

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

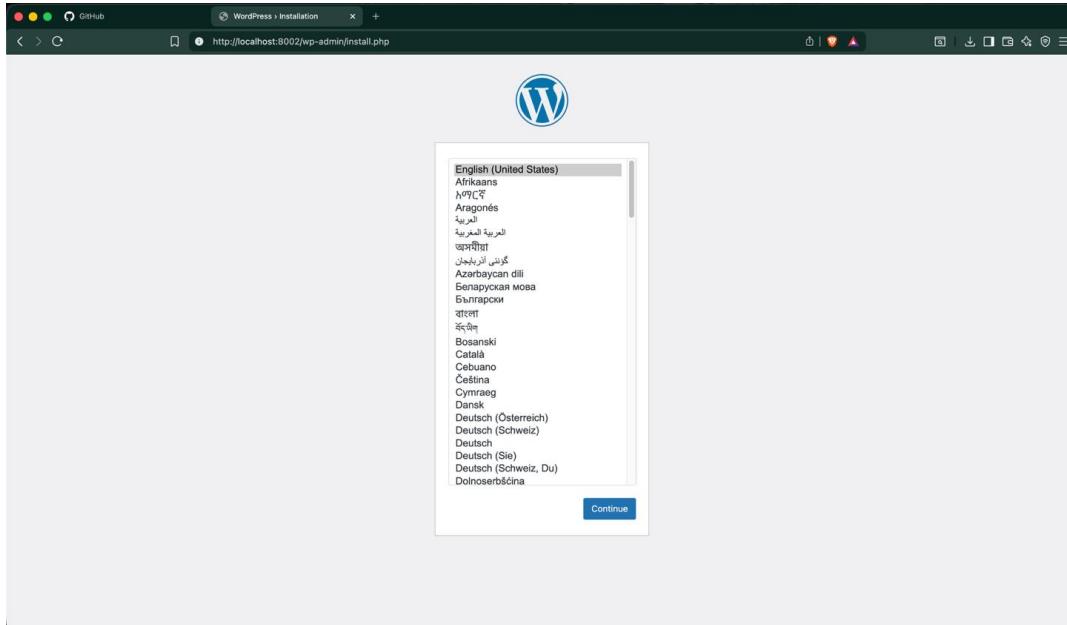
```

confusion
[+] up 39/39
[+] up 43/43
  Pulled
  Image: mysql:latest
  ✓ Image: wordpress:latest
  ✓ Image: lab655/default
  ✓ Network: lab655/default
  ✓ Volume: lab655_db_data
  ✓ Container: lab655-db-1
  ✓ Container: lab655-wordpress-1
                                         147.7s
                                         147.7s
                                         147.1s
                                         0.05
                                         0.05
                                         0.4s
                                         0.1s

```

## Step 4: Access WordPress

- Open your web browser and go to **<http://localhost:8002>**
- 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
```

```
confusion
[+] down 3/3
✓ Container lab6ss-wordpress-1 Removed
✓ Container lab6ss-db-1 Removed
✓ Network lab6ss_default Removed
1.2s
1.2s
0.2s
```

### 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.