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## LAB EXERCISE 6- DOCKER-COMPOSE FILE

### OBJECTIVE:

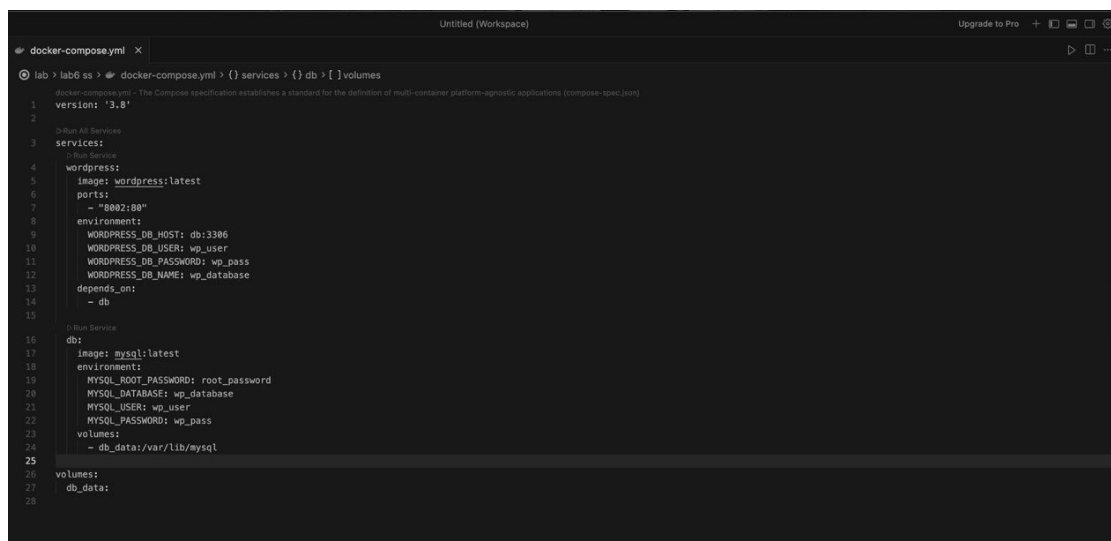
SET UP A WORDPRESS ENVIRONMENT USING DOCKER COMPOSE, INCLUDING A MYSQL DATABASE AS THE BACKEND.

### 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

volumes:
  db_data:
```

### DOCKER-COMPOSE.YML

```
version: '3.8'
```

```
services:
```

```
  wordpress:
```

```
    image: wordpress:latest
```

```
    ports:
```

```
      - "8002:80"
```

```
    environment:
```

```
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:

## STEP 2: START THE CONTAINERS

1. RUN THE FOLLOWING COMMAND TO START THE CONTAINERS:

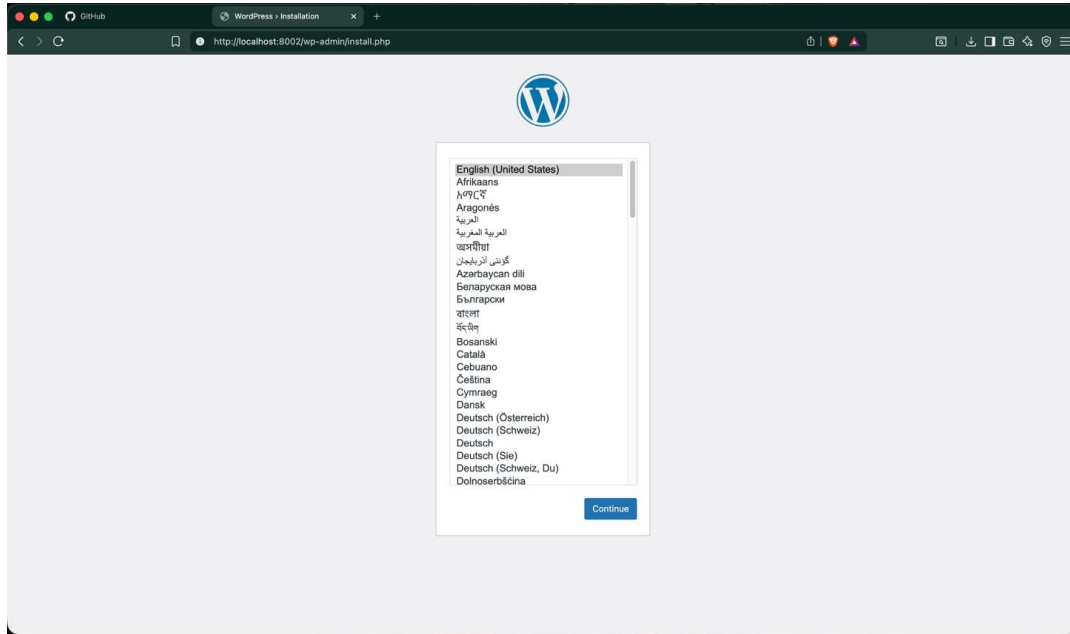
```
docker-compose up -d
```

2. DOCKER COMPOSE WILL DOWNLOAD THE NECESSARY IMAGES (WORDPRESS AND MYSQL) AND START BOTH SERVICES.

```
confusion
[*] up 39/39
✓ Image mysql:latest Pulled 147.7s
✓ Image wordpress:latest Pulled 147.1s
✓ Network lab6ss_default Created 0.0s
✓ Volume lab6ss_db_data Created 0.0s
✓ Container lab6ss-db-1 Created 0.4s
✓ Container lab6ss-wordpress-1 Created 0.1s
```

## 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
```

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