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LAB EXERCISE 6- DOCKER-COMPOSE FILE

OBJECTIVE:

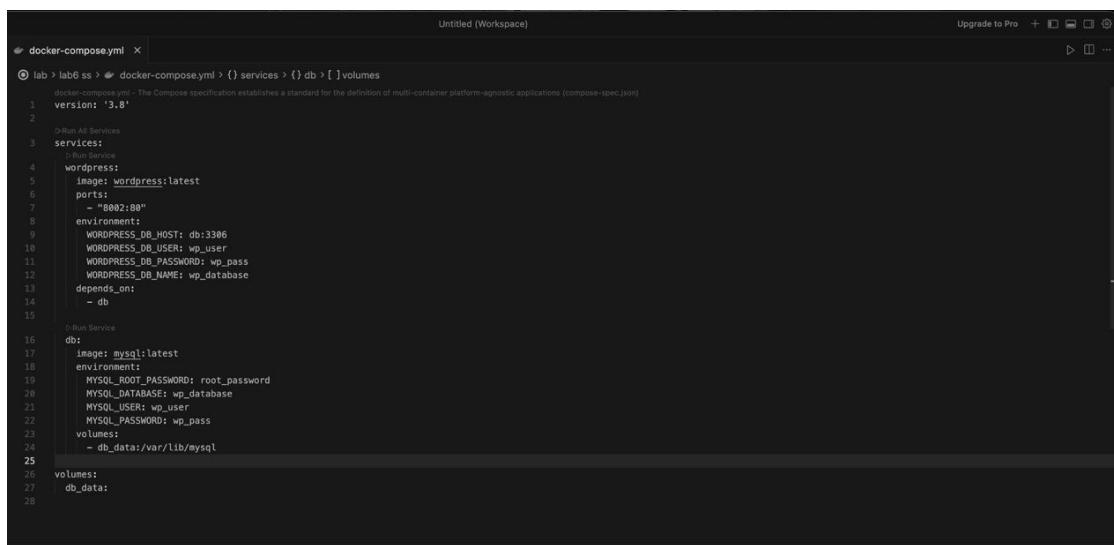
SET UP A WORDPRESS ENVIRONMENT USING DOCKER COMPOSE, INCLUDING A MYSQL DATABASE AS THE BACKEND.

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:

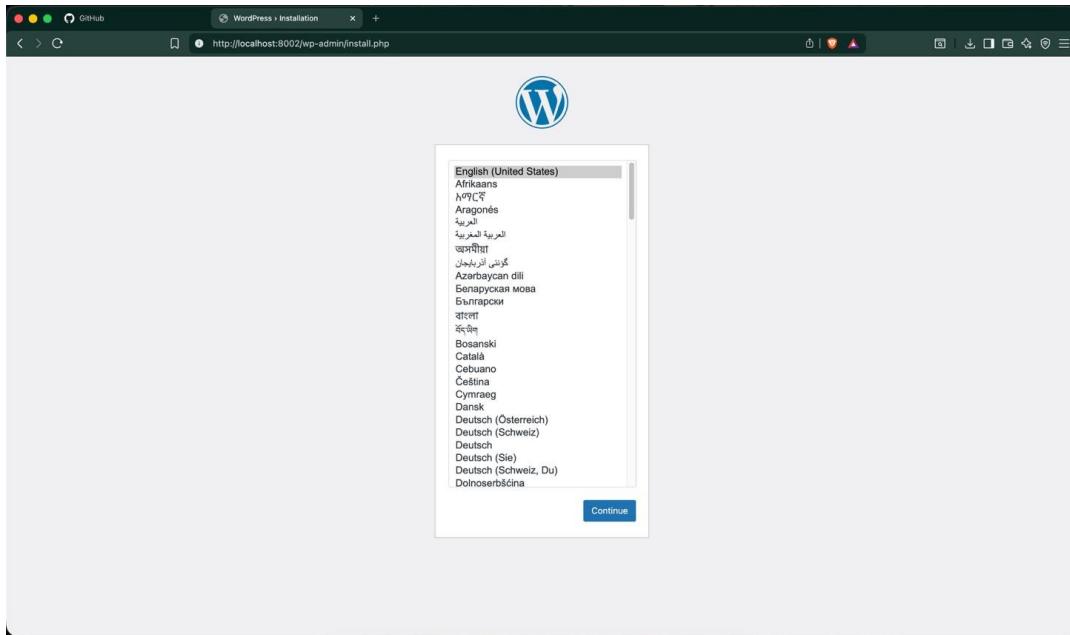
```
docker-compose up -d
```

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

```
confusion
[+] up 39/39
[+] up 43/43sql:latest Pulled
✓ Image mysql:latest Pulled
✓ Image wordpress:latest Pulled
✓ Volume labbss-data Created
✓ Container labbss-db-1 Created
✓ Container labbss-wordpress-1 Created
147.7s
147.7s
0.0s
0.0s
0.4s
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
  ✓ 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.