

Lab Exercise 2- 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:
      - "8080:80"
    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:5.7
    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:

```

> cat << EOF > docker-compose.yml
version: '3.8'

services:
  wordpress:
    image: wordpress:latest
    ports:
      - "8080:80"
    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:5.7
    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:
EOF
```

Step 2: Start the Containers

1. Run the following command to start the containers:

docker-compose up -d

```


> docker-compose up -d

[+] Running 35/35
✓ wordpress Pulled
✓ 6d29a096dd42 Already exists
✓ 29e9756e7bfc Pull complete
✓ 77e27785ead7 Pull complete
✓ 27a00cfa6daf Pull complete
✓ ca35e1d28ad7 Pull complete
✓ 410639cb967e Pull complete
✓ 1f9efafdf219 Pull complete
✓ a7946ba9a569 Pull complete
✓ 67f1de0deede Pull complete
✓ d96ecd01e3f5 Pull complete
✓ c470e029cbda Pull complete
✓ 77cbd2f3c900 Pull complete
✓ 646aa471737e Pull complete
✓ 4f4fb700ef54 Pull complete
✓ 3ab30a6e19b4 Pull complete
✓ e1635648fee7 Pull complete
✓ 721605ec8cbc Pull complete
✓ 6bf2a3e9ff28 Pull complete
✓ 3dce276ad38f Pull complete
✓ fce7fd52b7bb Pull complete
✓ 3d27decb1554 Pull complete
✓ 7a759b92dfbc Pull complete
✓ db Pulled
✓ d0164e3ac7ac Pull complete
✓ 7bb8c6c53fd8 Pull complete
✓ 9c31f49f8fe3 Pull complete
✓ 4af3af4e8f76 Pull complete
✓ e65be80e519a Pull complete
✓ 4ccb4fbac127 Pull complete
✓ 23ac9411b2f7 Pull complete
✓ 7f5b19b98e13 Pull complete
✓ 9b744ce874ce Pull complete
✓ ce5f8bfef834 Pull complete
✓ 6dd3a178e40b Pull complete
[+] Running 4/4
✓ Network ansh_default Created
✓ Volume "ansh_db_data" Created
✓ Container ansh-db-1 Started
✓ Container ansh-wordpress-1 Started
```

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:8080>.
2. Follow the WordPress installation steps to set up your site.



English (United States)

Afrikaans

አማርኛ

Aragonés

العربية

العربية المغربية

অসমীয়া

گۆنئی آذربایجان

Azərbaycan dili

Беларуская мова

Български

বাংলা

བོད་སྐད་

Bosanski

Català

Cebuano

Čeština

Cymraeg

Dansk

Deutsch (Schweiz)

Deutsch (Schweiz, Du)

Deutsch (Sie)

Deutsch

Deutsch (Österreich)

Dolnoserbscina

Continue

Welcome

Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.

Information needed

Please provide the following information. Do not worry, you can always change these settings later.

Site Title

Ansh_website

Username

ansh1234

Username can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password

••••••••

Medium

Show

Important: You will need this password to log in. Please store it in a secure location.

Your Email

ansh.105272@stu.upes.ac.in

Double-check your email address before continuing.

Search engine visibility

☐ Discourage search engines from indexing this site

It is up to search engines to honor this request.

Install WordPress



Success!

WordPress has been installed. Thank you, and enjoy!

Username

ansh1234

Password

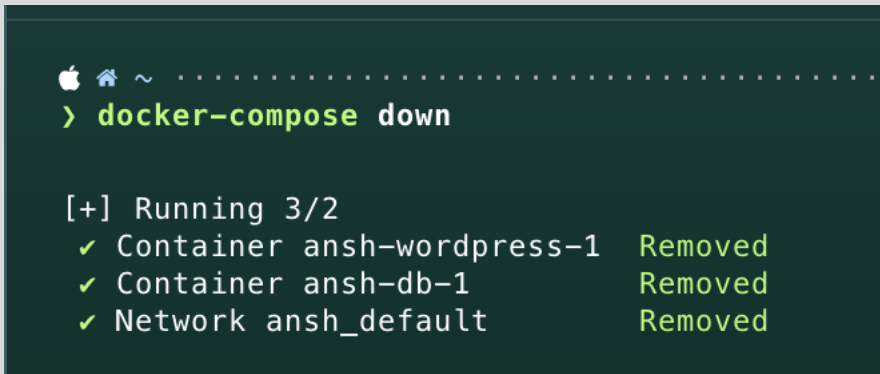
Your chosen password.

[Log In](#)

Step 5: Stop and Remove Containers

To stop the containers and remove the associated resources, run:

```
docker-compose down
```

A terminal window with a dark green background and white text. The prompt is a green '>' followed by the command 'docker-compose down' in green. The output shows a progress bar '[+] Running 3/2' followed by three lines: '✓ Container ansh-wordpress-1 Removed', '✓ Container ansh-db-1 Removed', and '✓ Network ansh_default Removed'.

```
> docker-compose down

[+] Running 3/2
✓ Container ansh-wordpress-1 Removed
✓ Container ansh-db-1 Removed
✓ Network ansh_default Removed
```

Explanation of docker-compose.yml:

- **wordpress:** Sets up the WordPress container, mapping port 80 inside the container to port 8080 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.