Deploy WordPress and MySQL with Docker Compose

\*\*Step 1: Install Docker and Docker Compose\*\*

- Ensure Docker and Docker Compose are installed and running on your system.

\*\*Step 2: Create a Project Directory\*\*

1. Open a terminal and create a new directory for this setup:

```bash

mkdir wordpress-docker

cd wordpress-docker

```

\*\*Step 3: Create the Docker Compose File\*\*

1. In the `wordpress-docker` directory, create a file named `docker-compose.yml` with the following content:

version: '3.8'

services:

db:

image: mysql:latest

container\_name: wordpress-mysql

restart: always

environment:

MYSQL\_ROOT\_PASSWORD: password

MYSQL\_DATABASE: wordpress

MYSQL\_USER: user

MYSQL\_PASSWORD: password

volumes:

- db\_data:/var/lib/mysql

wordpress:

image: wordpress:latest

container\_name: wordpress

restart: always

depends\_on:

- db

ports:

- "8080:80"

environment:

WORDPRESS\_DB\_HOST: db:3306

WORDPRESS\_DB\_NAME: wordpress

WORDPRESS\_DB\_USER: user

WORDPRESS\_DB\_PASSWORD: password

volumes:

- wordpress\_data:/var/www/html

volumes:

db\_data:

wordpress\_data:

\*\*Explanation of docker-compose.yml\*\*

- \*\*db service\*\*:

- Uses the `mysql:latest` image for MySQL.

- Sets environment variables for MySQL root password, database name, user, and password.

- Maps the database data to the `db\_data` volume for data persistence.

- \*\*wordpress service\*\*:

- Uses the `wordpress:latest` image.

- Depends on the `db` service, ensuring MySQL starts first.

- Maps port `8080` on the host to port `80` in the WordPress container (access WordPress at `http://localhost:8080`).

- Configures WordPress to connect to the MySQL database with the provided credentials.

\*\*Step 4: Start the Docker Compose Setup\*\*

1. In the terminal, start the services with:

```bash

docker-compose up -d

```

- This command downloads necessary images, creates containers, and starts them in detached mode (`-d` flag).

\*\*Step 5: Access the WordPress Frontend\*\*

1. Open a web browser.

2. Go to `http://localhost:8080`.

- This should open the WordPress installation page. Follow the on-screen instructions to complete the setup.

\*\*Step 6: Verify the Containers are Running\*\*

1. To check if both containers are running, use:

```bash

docker-compose ps

```

- You should see both `wordpress` and `wordpress-mysql` containers listed and marked as "Up".

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