

Lab Exercise 6- Docker-Compose file

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Objective:

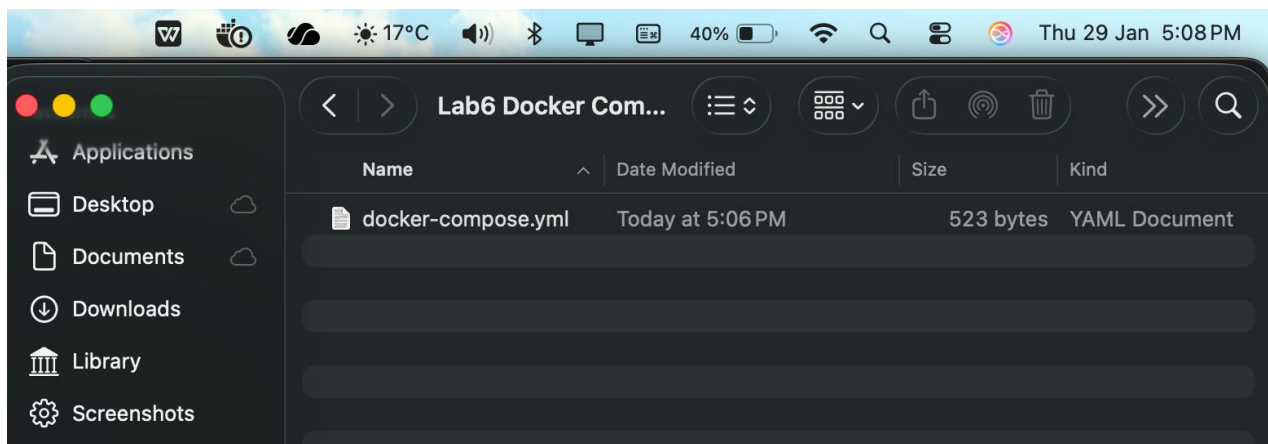
Set up a WordPress environment using Docker Compose, including a MySQL database as the backend.

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:



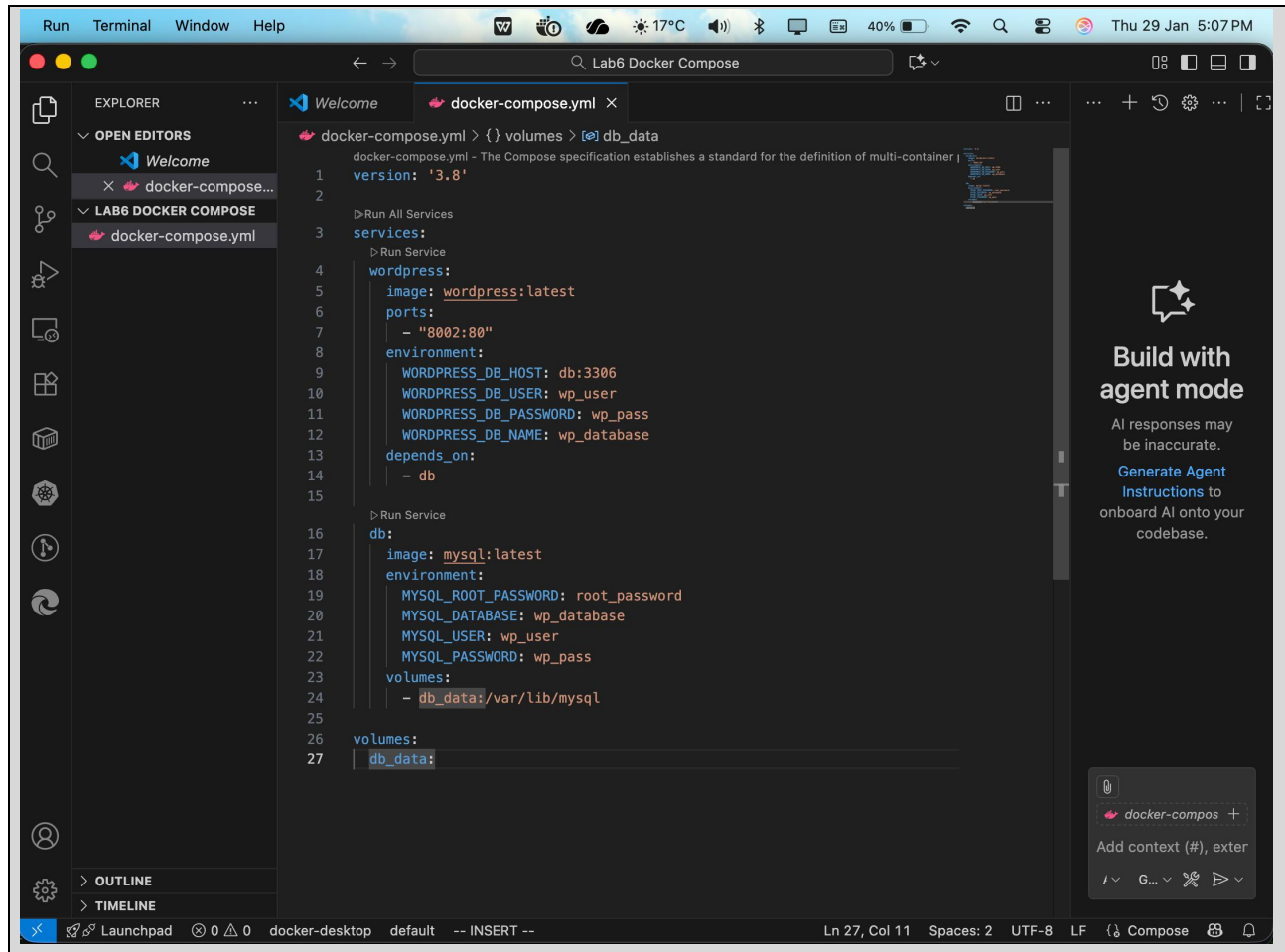
docker-compose.yml

```
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:
```



Step 2: Start the Containers

1. Run the following command to start the containers:

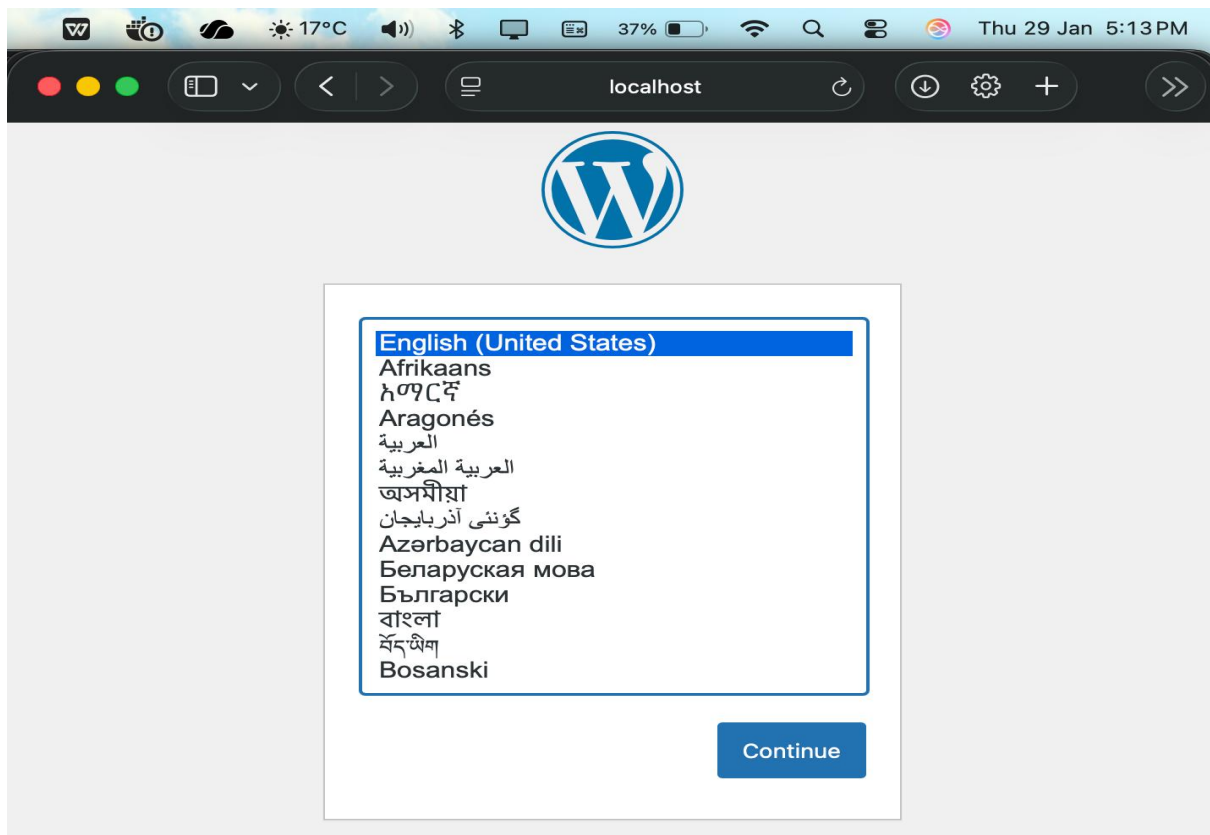
```
docker-compose up -d
```

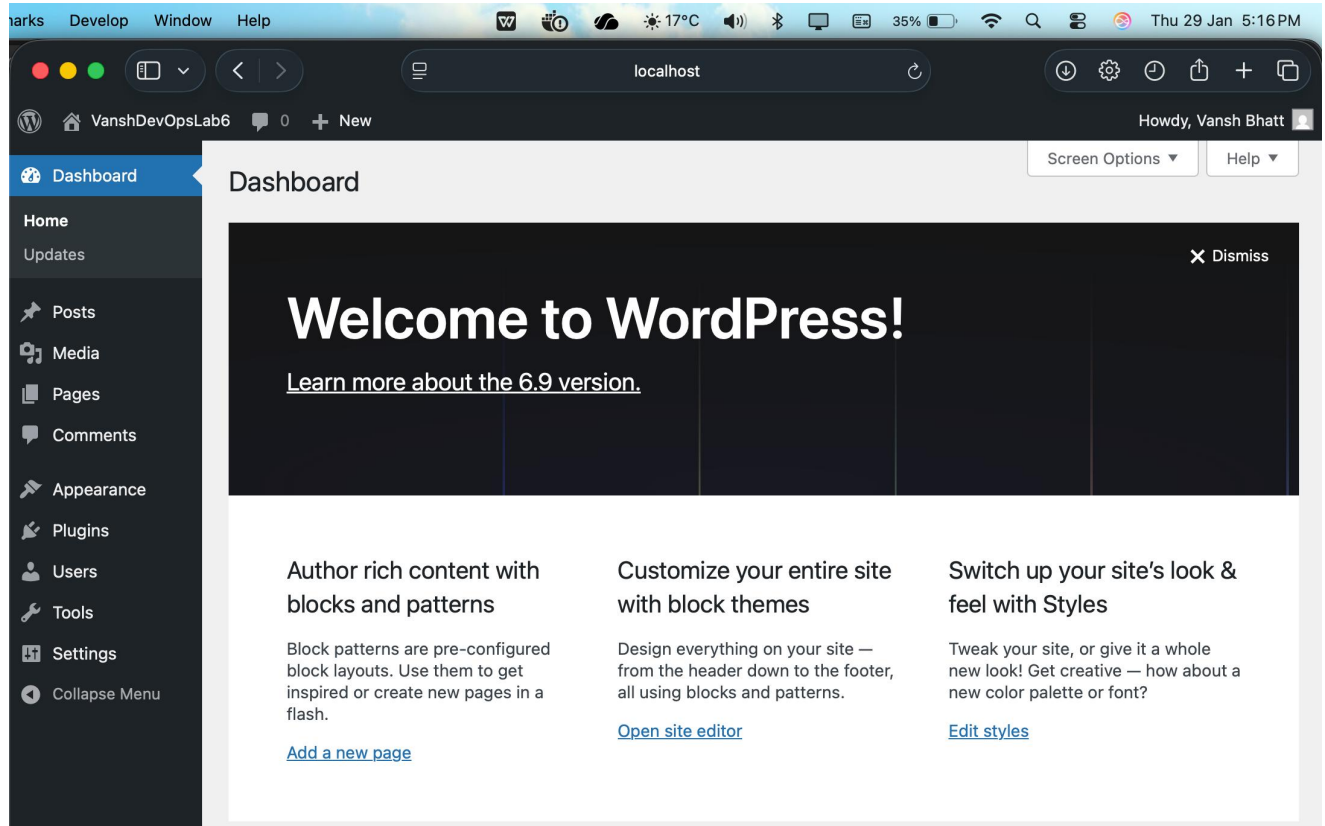
2. Docker Compose will download the necessary images (WordPress and MySQL) and start both services.

```
-zsh
WARN[0000] /Users/vanshssupermac/DevSecOps Lab Sem-6/Lab6 Docker Compose/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
[+] Running 39/39
  ✓ db Pulled 27.3s
  ✓ a6b304c02e4c Pull complete 1.2s
  ✓ 738f62f1d599 Pull complete 1.4s
  ✓ 67e56a90a835 Pull complete 1.4s
  ✓ 006f7f7ff6e4 Pull complete 9.9s
  ✓ 8faa10d9d71c Pull complete 11.3s
  ✓ 31b9f6336eda Pull complete 1.4s
  ✓ b843a2959b2f Pull complete 1.9s
  ✓ e77567d6b6a5 Pull complete 10.2s
  ✓ da467ea611ce Pull complete 1.4s
  ✓ 5cb7744a65c8 Pull complete 17.9s
  ✓ 2d0d0e147255 Download complete 0.0s
  ✓ ce8d5de6470f Download complete 0.5s
  ✓ wordpress Pulled 27.4s
  ✓ ba090e6166a5 Pull complete 15.0s
  ✓ a4543249b36f Pull complete 1.4s
```

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`

A screenshot of a terminal window on a Mac. The prompt is 'vanshssupermac@Vanshs-MacBook-Air Lab6 Docker Compose %'. The command 'docker-compose down -v' has been executed. The output shows a warning about the 'version' attribute in the 'docker-compose.yml' file, followed by a progress bar '[+] Running 4/4'. Below this, a list of resources being removed is shown: 'Container lab6dockercompose-wordpress-1' (1.3s), 'Container lab6dockercompose-db-1' (1.0s), 'Network lab6dockercompose_default' (0.2s), and 'Volume lab6dockercompose_db_data' (0.0s). The terminal window has a title bar with standard Mac window controls and a system status bar at the top showing '17°C' and '34%' battery.

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.

Thank You