

## Task :

### 1. Run a WordPress website in Docker Compose

- Nginx As Frontend and Proxy Server in web tier (Mount nginx configuration files and code on host)
- PHP-FPM in Web tier (Mount Code on host)
- MariaDB Database with persistence in db tier (use docker volume to store MariaDB database)

Must have 3 containers - in 1 networks

Must have 1 docker volume

### Solutions :

#### Code of this task :

[https://github.com/techay-mihir-simform/docker\\_copose\\_task/tree/master/task\\_1](https://github.com/techay-mihir-simform/docker_copose_task/tree/master/task_1)

### Step 1:

Create docker-compsoe file

```
#Version of docker-compose file
version : '3'
services:

#Create mariadb container
mariadb:
  image: mariadb
  #Use mysql volume for persistence database .
  volumes:
    - mysql:/var/lib/mysql
  # Environment variable use for run mariadb container
  environment:
    MYSQL_ROOT_PASSWORD: ${MYSQL_ROOT_PASSWORD}
    MYSQL_DATABASE: ${MYSQL_DATABASE}
    MYSQL_USER: ${MYSQL_USER}
```

```
    MYSQL_PASSWORD: ${MYSQL_PASSWORD}
    restart: always
#Create wordpress container

wordpress:
    image: wordpress:php7.3-fpm-alpine
    #Mount code on host
    volumes:
        - ./data/html:/var/www/html
    environment:
        WORDPRESS_DB_HOST: ${WORDPRESS_DB_HOST}
        MYSQL_ROOT_PASSWORD: ${MYSQL_ROOT_PASSWORD}
        WORDPRESS_DB_NAME: ${WORDPRESS_DB_NAME}
        WORDPRESS_DB_USER: ${WORDPRESS_DB_USER}
        WORDPRESS_DB_PASSWORD: ${WORDPRESS_DB_PASSWORD}
        WORDPRESS_TABLE_PREFIX: ${WORDPRESS_TABLE_PREFIX}
        # - WORDPRESS_DEBUG=1
    #Here wordpress service is communicate with mariadb
    links:
        - mariadb
    #Wordpress is depends on mariadb container
    depends_on:
        - mariadb
    restart: always

#Create nginx container
nginx:
    image: nginx:alpine
    volumes:
        - ./nginx:/etc/nginx/conf.d
        - ./data/html:/var/www/html
    #Port mapping to 8084 , so we can access by host machine .
    ports:
```

```
- 8084:80
links:
  - wordpress

#Create volumes
volumes:
mysql:
```

Step 2: Create .env file environment variable and nginx configuration file

.env :

```
#Environment variable for database
MYSQL_ROOT_PASSWORD=root
MYSQL_DATABASE=db1
MYSQL_USER=mariadb
MYSQL_PASSWORD=mariadb

#Environment variable for wordpress
WORDPRESS_DB_HOST=mariadb
WORDPRESS_DB_NAME=db1
WORDPRESS_DB_USER=mariadb
WORDPRESS_DB_PASSWORD=mariadb
WORDPRESS_TABLE_PREFIX=wp_
```

Nginx.conf in nginx folder :

```
server {
    listen 80;
    listen [::]:80;
    access_log off;
    root /var/www/html;
    index index.php;
    server_name example.com;
    server_tokens off;
```

```
location / {
    # First attempt to serve request as file, then
    # as directory, then fall back to displaying a 404.
    try_files $uri $uri/ /index.php?$args;
}
# pass the PHP scripts to FastCGI server listening on
wordpress:9000
location ~ /\.php$ {
    fastcgi_split_path_info ^(.+\.(php))(/.+)$;
    fastcgi_pass wordpress:9000;
    fastcgi_index index.php;
    include fastcgi_params;
    fastcgi_param SCRIPT_FILENAME
$document_root$fastcgi_script_name;
    fastcgi_param SCRIPT_NAME $fastcgi_script_name;
}
}
```

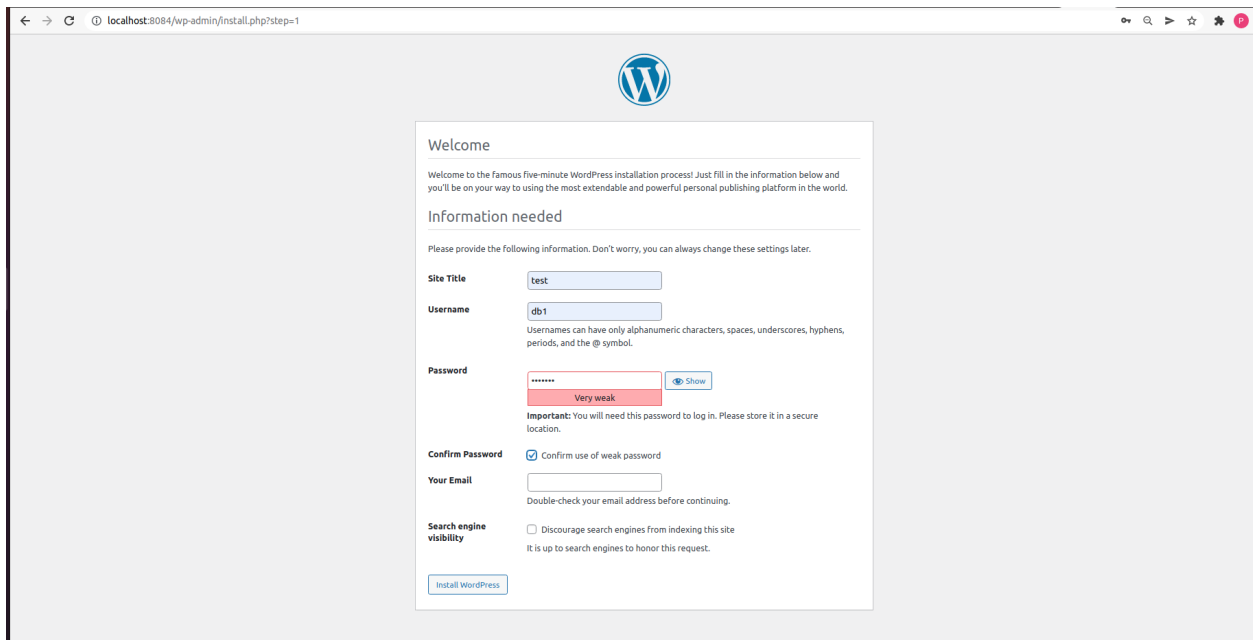
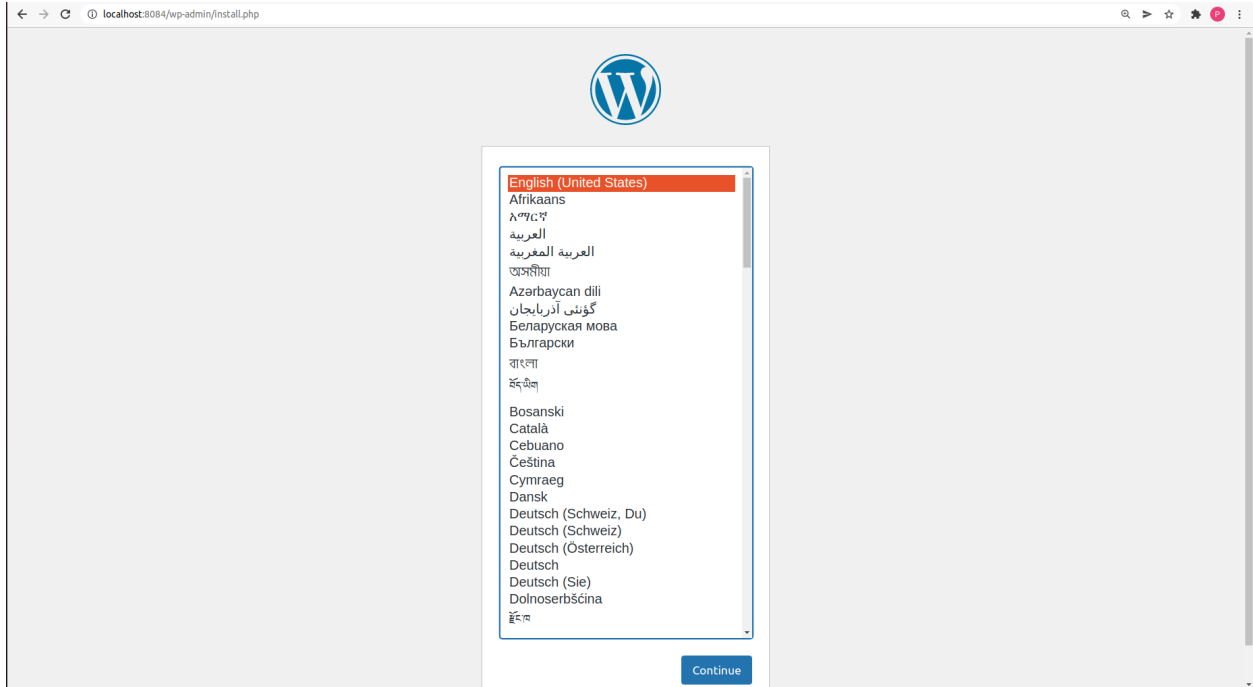
Step 3: Run docker-compose file

**# docker-compose up --build**

Down container by

**#docker-compose down**

Step 4: screenshot



← → ↻ localhost:8084/wp-admin/index.php

test + New

Howdy, db1

Screen Options Help

Dashboard

Home

Updates

Posts

Media

Pages

Comments

Appearance

Plugins

Users

Tools

Settings

Collapse menu

# Welcome to WordPress!

Learn more about the 5.9 version.

Author rich content with blocks and patterns

Block patterns are pre-configured block layouts. Use them to get inspired or create new pages in a flash.  
[Add a new page](#)

Customize your entire site with block themes

Design everything on your site — from the header down to the footer, all using blocks and patterns.  
[Open site editor](#)

Switch up your site's look & feel with Styles

Tweak your site, or give it a whole new look! Get creative — how about a new color palette or font?  
[Edit styles](#)

Site Health Status

No information yet...

Site health checks will automatically run periodically to gather information about your site. You can also [visit the Site Health screen](#) to gather information about your site now.

Quick Draft

Title

Content

What's on your mind?

Save Draft

WordPress Events and News

Attend an upcoming event near you. [Select location](#)

There aren't any events scheduled near you at the moment. Would you like to [organize a WordPress event](#)?

WP Briefing: Episode 25: Five Cents on Five for the Future

A New WordPress News

At a Glance

1 Post

1 Page

1 Comment

WordPress 5.9 running [Twenty Twenty-Three](#) theme.

Activity

Recently Published

Today, 9:00 am

Hello world!

Recent Comments

Drag boxes here

Drag boxes here