

Assessment - 26 Setting up PHP Application

Trainee Name: Arun Parmar

Mentor Name: Ravi Kumar

College: UPES

Q1)Setup Wordpress with Apache + php fpm.

link: https://www.digitalocean.com/community/tutorials/how-to-install-wordpress-with-lamp-on-ubuntu-18-04

*Install a LAMP stack: WordPress will need a web server, a database, and PHP in order to correctly function. Setting up a LAMP stack (Linux, Apache, MySQL, and PHP) fulfills all of these requirements.

STEP 1: Creating a MySQL Database and User for WordPress

```
mysql -u root -p

mysql> CREATE DATABASE wordpress DEFAULT CHARACTER SET utf8 COLLATE
utf8_unicode_ci;
Query OK, 1 row affected (0.01 sec)

mysql>
mysql> GRANT ALL ON wordpress.* TO 'wordpressuser'@'localhost' IDENTIFIED
BY 'password';
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.01 sec)

mysql> EXIT;
Bye
```

STEP 2: Installing Additional PHP Extensions

```
sudo apt install php-curl php-gd php-mbstring php-xml php-xmlrpc php-soap
php-intl php-zip
```

STEP 3:We will restart Apache to load these new extensions in the next section.

STEP 4: Open the Apache configuration file for your website:

```
sudo nano /etc/apache2/sites-available/wordpress.conf
```

STEP 5:To allow .htaccess files, we need to set the AllowOverride directive within a Directory block pointing to our document root. Add the following block of text inside the VirtualHost block in your configuration file, being sure to use the correct web root directory:

```
<Directory /var/www/wordpress/>
AllowOverride All
</Directory>
```

STEP 6: Enabling the Rewrite Module:Next, we can enable mod_rewrite so that we can utilize the WordPress permalink feature:

```
sudo a2enmod rewrite
```

STEP 7: Downloading and Configuring the WordPress Directory

We'll start by giving ownership of all the files to the www-data user and group. This is the user that the Apache webserver runs as, and Apache will need to be able to read and write WordPress files in order to serve the website and perform automatic updates.

```
sudo chown -R www-data:www-data /var/www/wordpress
```

```
sudo nano /var/www/wordpress/wp-config.php
```

STEP 8 Create wordpress.conf file in /etc/apache2/sites-available

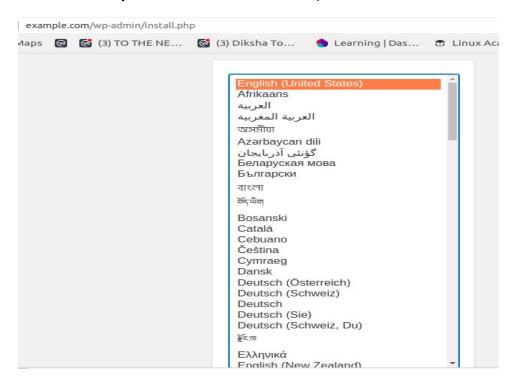
```
<VirtualHost *:80>
    ServerAdmin admin@example.com
    DocumentRoot /var/www/wordpress
    ServerName example.com
     ServerAlias www.example.com
     <Directory /var/www/wordpress/>
          Options FollowSymlinks
          AllowOverride All
          Require all granted
     </Directory>
     ErrorLog ${APACHE_LOG_DIR}/error.log
     CustomLog ${APACHE_LOG_DIR}/access.log combined
     <Directory /var/www/wordpress/>
            RewriteEngine on
            RewriteBase /
            RewriteCond %{REQUEST_FILENAME} !-f
```

```
RewriteRule ^(.*) index.php [PT,L]

</Directory>
</VirtualHost>
"/etc/apache2/sites-available/wordpress.conf" 23L, 620C written

8,25 All
```

STEP 9: Check your server name for the wordpress.



Q 2) Setup Drupal with Nginx and Perform FPM Configuration

STEP 1: Install Nginx
Install PHP-5.3.29 with PHP-FPM
Install MySQL

STEP 2: To create a database named "drupal" that is accessible by user "drupaluser" with password "drupalpassword".

```
mysql -u root -p
```

```
mysql> create database drupal;
mysql> create user 'drupaluser'@'localhost' identified by 'drupalpassword';
mysql> use drupal;
mysql> grant all on drupal.* to 'drupaluser'@'localhost';
```

STEP 3: Install and configure Drupal

```
cd /tmp && wget
https://ftp.drupal.org/files/projects/drupal-8.3.7.tar.gz
```

```
sudo tar -xvzf drupal*.gz -C /var/www/html
sudo mv /var/www/html/drupal-8.3.7/ /var/www/html/drupal
```

STEP 4: Configure nginx

```
server {
   listen 80;
   listen [::]:80;
   root /var/www/html/drupal;
   index index.php index.html index.htm;
    server_name drupal.com;
    location / {
    try_files $uri /index.php?$query_string;
    }
    location @rewrite {
              rewrite ^/(.*)$ /index.php?q=$1;
        }
    location \sim [^/] \cdot php(/|\$)  {
         include snippets/fastcgi-php.conf;
         fastcgi_pass unix:/var/run/php/php7.4-fpm.sock;
         fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
         include fastcgi_params;
    }
    location ~ ^/sites/.*/files/styles/ { # For Drupal >= 7
```

```
try_files $uri @rewrite;
}

location ~ ^(/[a-z\-]+)?/system/files/ { # For Drupal >= 7
    try_files $uri /index.php?$query_string;
   }
}
```

STEP 4:

