Deploying 'awesomeweb' Website on Localhost with Apache or Nginx

Step 1: Download and Install the Required Software

Choose between Apache or Nginx as your web server:

For Apache:

1. Download WampServer from the website:
   https://httpd.apache.org/docs/current/platform/windows.html#down.

2. Install WampServer following the instructions provided on below website:

   https://www.w3resource.com/php/installation/install-wamp.php

For Nginx:

1. Download the stable version of Nginx from the website:

   http://nginx.org/en/download.html

2. Unzip the downloaded file from downloaded folder and

   move the Nginx folder (ex . nginx-1.24.0) to your C: drive.
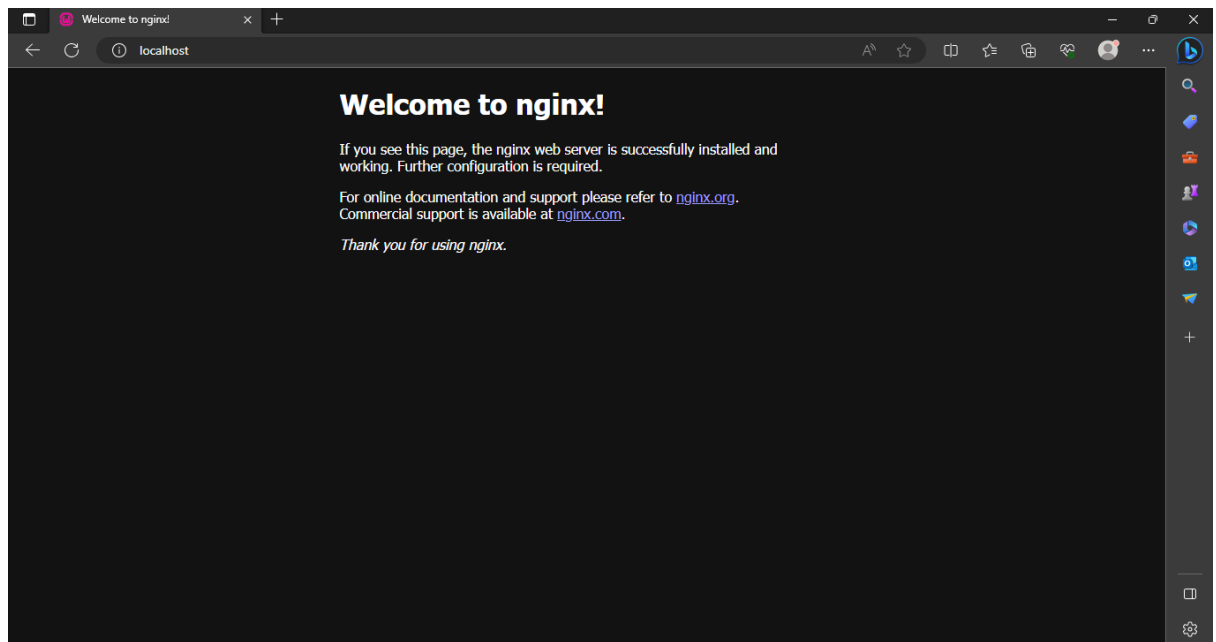
Step 2: Verify Server Installation

For Apache (WampServer):

1. Launch WampServer and ensure the W icon is green in the system tray.

2. Open any web browser and go to http://localhost url. You should see the WampServer homepage if everything is set up correctly.
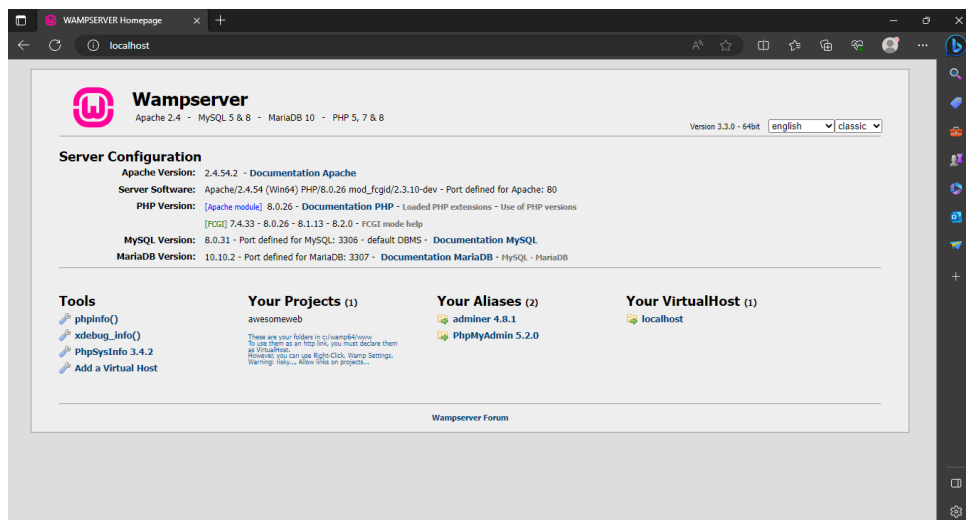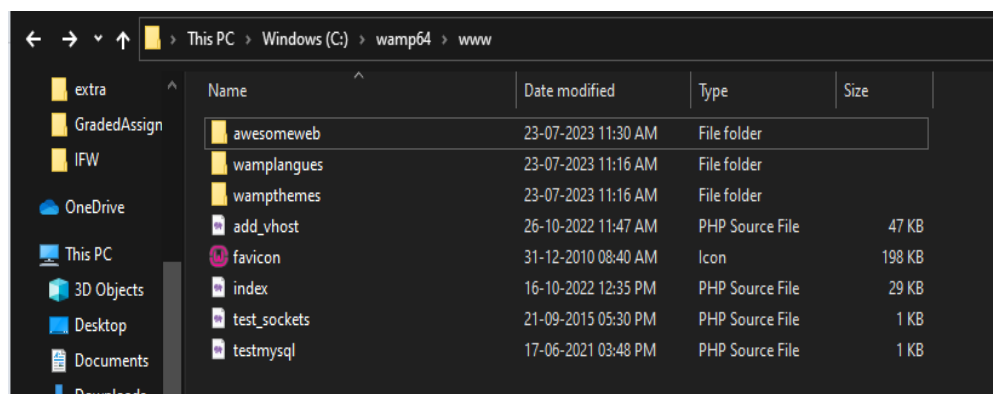
For Nginx:

1. Open a command prompt(CMD) and navigate to the Nginx folder for C Drive (ex. C:\nginx-1.24.0\nginx-1.24.0).

2. For Start the Nginx the command: nginx.exe.

3. Open any web browser and go to http://localhost url. You should see the Nginx welcome page if the server is running correctly.
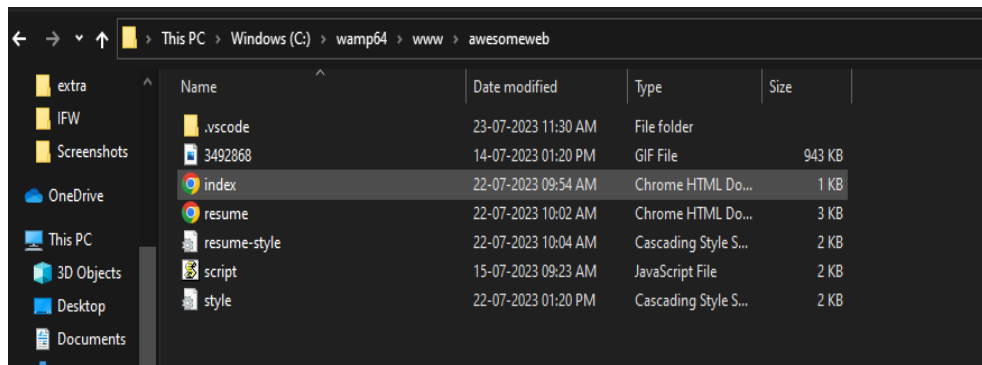

Step 3: Deploy 'awesomeweb' Website

1. **For Apache (WampServer):**

    -   Navigate to the www directory in the WampServer installation folder (e.g., C:\wamp64\www).

    -   Create a new folder named 'awesomeweb' in the www directory.

    -   Place your website files (HTML, CSS, JS, etc.) inside the 'awesomeweb' folder.

2. **For Nginx:**

   - Create a new folder named 'awesomeweb' into the Nginx installation folder (ex. C:\nginx-1.24.0\nginx-1.24.0).

   - Place your website files (HTML, CSS, JS, etc.) inside the 'awesomeweb' folder.

Step 4: Server/File Configure

1. **For Apache (WampServer):**

Option 1: Configure Virtual Host From UI (WampServer - Apache)

1. Open a web browser and type http://localhost/. You should see the WampServer homepage.
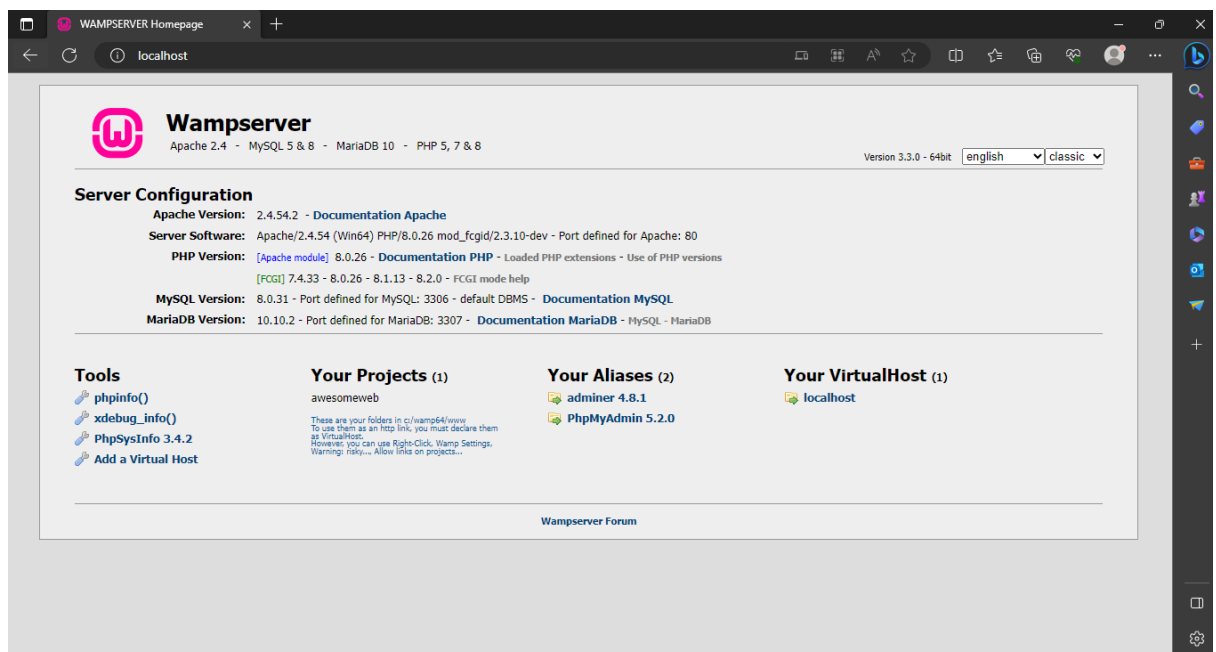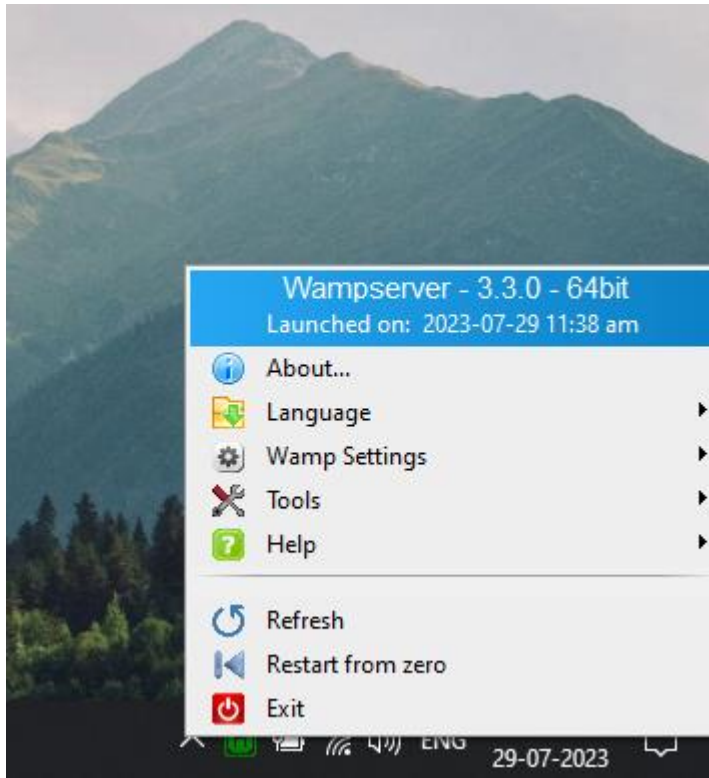

2. go to Tools > click on the Add a Virtual Host.

3. Enter 'awesomeweb' as the Server Name and provide the path to your 'awesomeweb' website folder (e.g., C:\wamp64\www\awesomeweb).

4. Click on the "Start the creation/modification of the VirtualHost" button.
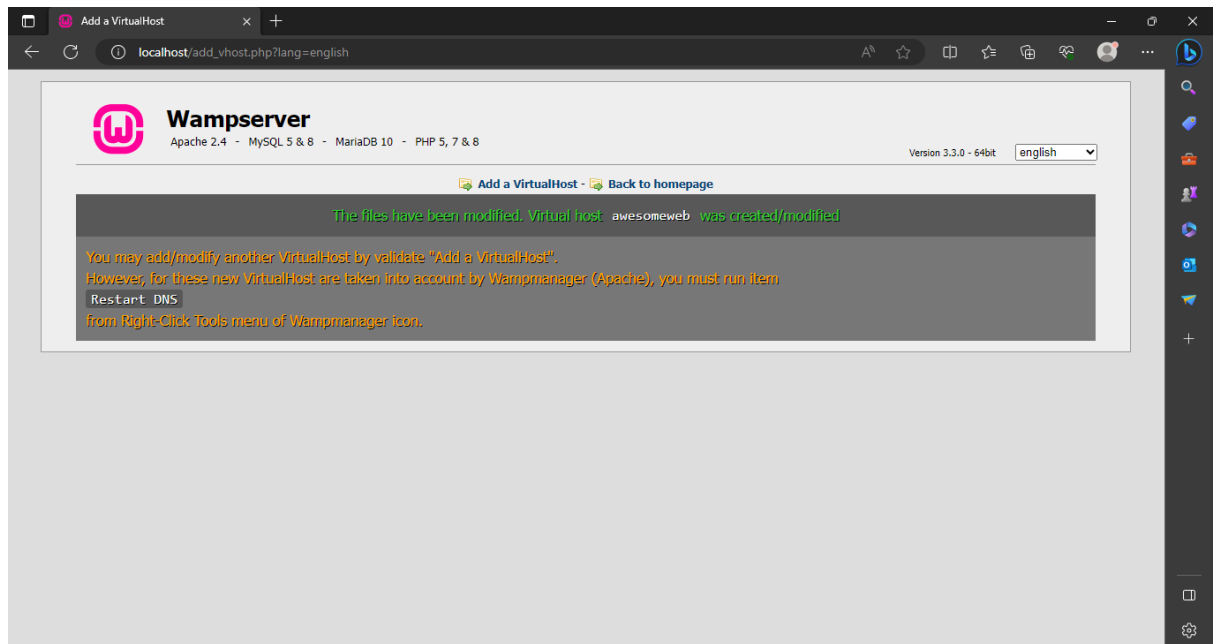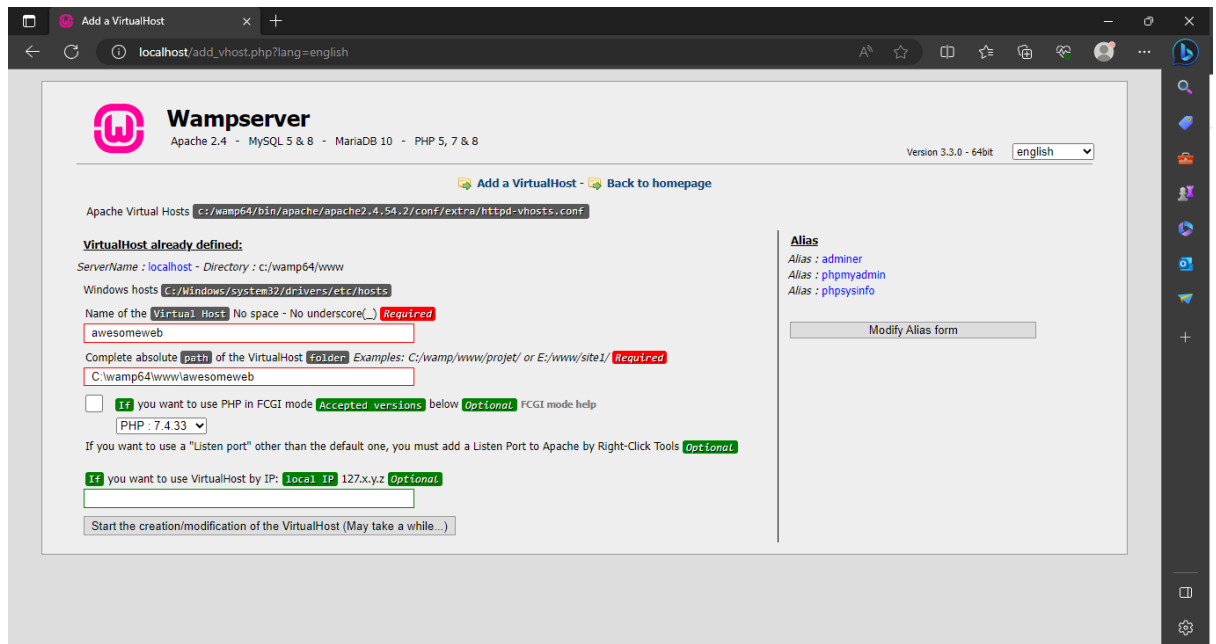
5. After the configuration is complete, right-click on the WampServer icon and select "Refresh" option.
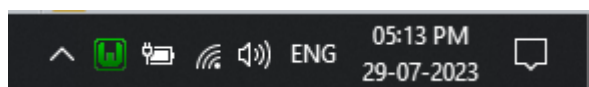
Option 2: Configure Virtual Host Manually (WampServer - Apache)

1. Navigate to the Apache configuration directory ex: C:\wamp64\bin\apache\apache2.4.54.2\conf\extra.

2. Open httpd-vhosts.conf file with notepad.

3. Add the following VirtualHost configuration:

```
#

<VirtualHost *:80>

        ServerName awesomeweb

        DocumentRoot "c:/wamp64/www/awesomeweb"

        <Directory  "c:/wamp64/www/awesomeweb/">

                Options +Indexes +Includes +FollowSymLinks +MultiViews

                AllowOverride All

                Require local

        </Directory>

</VirtualHost>

#
```
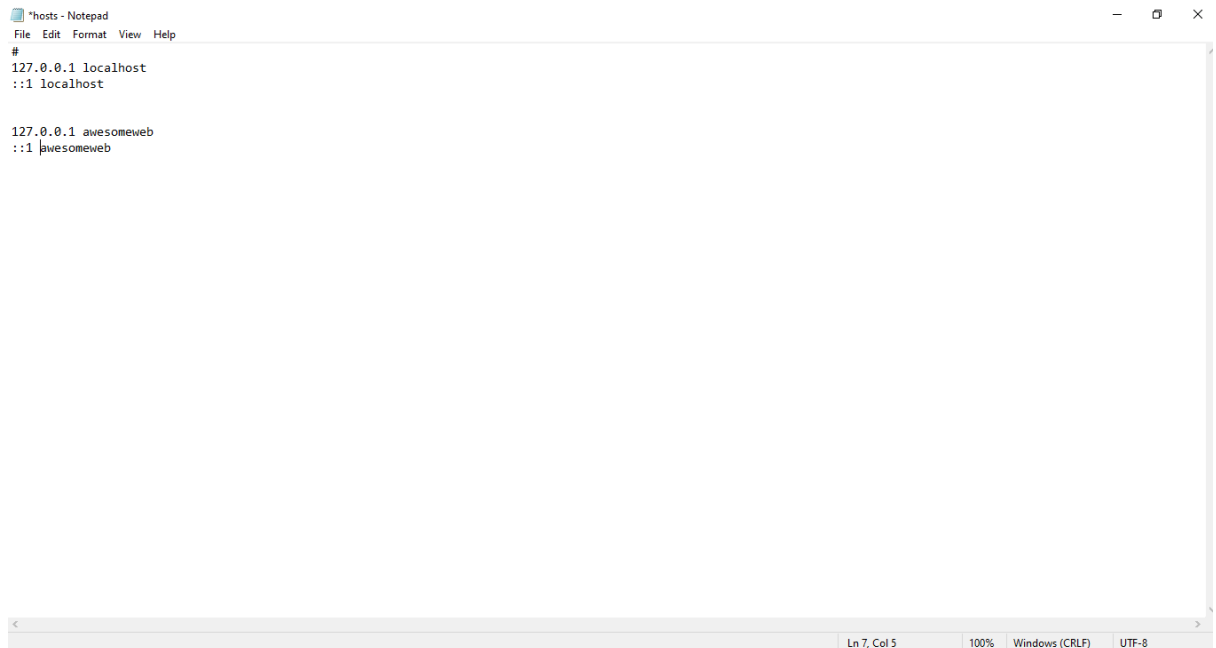
```
httpd-vhosts - Notepad                                                      –  □  ×
File  Edit  Format  View  Help
# Virtual Hosts
#
<VirtualHost *:80>
  ServerName localhost
  ServerAlias localhost
  DocumentRoot "${INSTALL_DIR}/www"
  <Directory "${INSTALL_DIR}/www/">
    Options +Indexes +Includes +FollowSymLinks +MultiViews
    AllowOverride All
    Require local
  </Directory>
</VirtualHost>
#
<VirtualHost *:80>
        ServerName awesomeweb
        DocumentRoot "c:/wamp64/www/awesomeweb"
        <Directory  "c:/wamp64/www/awesomeweb/">
                Options +Indexes +Includes +FollowSymLinks +MultiViews
                AllowOverride All
                Require local
        </Directory>
</VirtualHost>
#
                                         Ln 1, Col 1     100%  Windows (CRLF)   UTF-8
```

4. Save the changes.

5. Open the hosts file with a notepad running in administrator. The hosts file is located at "C:\Windows\System32\drivers\etc" .

6. Add the below line in the hosts file :

   127.0.0.1 awesomeweb

   ::1 awesomeweb


```
*hosts - Notepad                                                            –  □  ×
File  Edit  Format  View  Help
#
127.0.0.1 localhost
::1 localhost


127.0.0.1 awesomeweb
::1 awesomeweb
                                         Ln 7, Col 5     100%  Windows (CRLF)   UTF-8
```

7. Save the changes.

8. To apply the changes, go to the WampServer icon in the system tray and click "Refresh."

Now, you have configured the virtual host for 'awesomeweb' both through the UI and manually.

2. For Nginx:
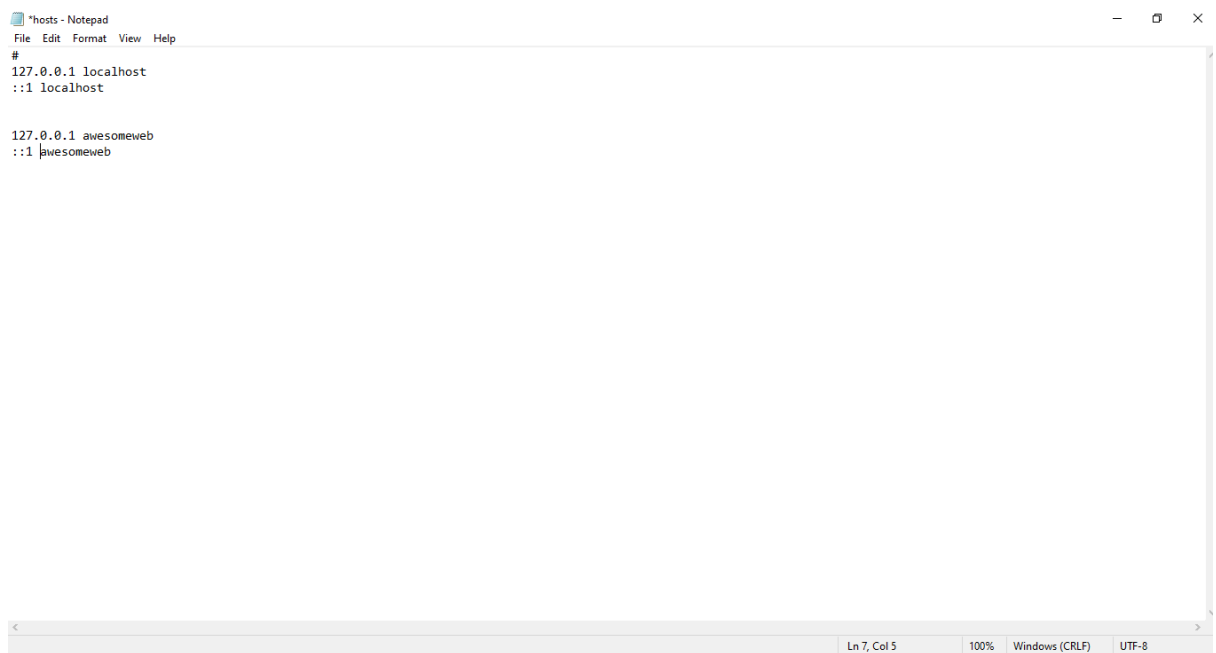
1. Navigate to the Nginx configuration directory ex:

C:\nginx-1.24.0\nginx-1.24.0\conf.

2. Open nginx.conf file with notepad.

3. Add the following Server configuration:

server {

       listen   80;

       server_name awesomeweb;

       location / {

       root   awesomeweb;

       index index.html index.htm;

       }

}

4. Save the changes.

5. Open the hosts file with a notepad running in administrator. The hosts file is located at "C:\Windows\System32\drivers\etc" .

6. Add the below line in the hosts file :

127.0.0.1 awesomeweb

::1 awesomeweb

7. Save the changes.
8. Open a command prompt in C:\nginx-1.24.0\nginx-1.24.0 this location and use the following command to reload Nginx and apply the changes : nginx -s reload
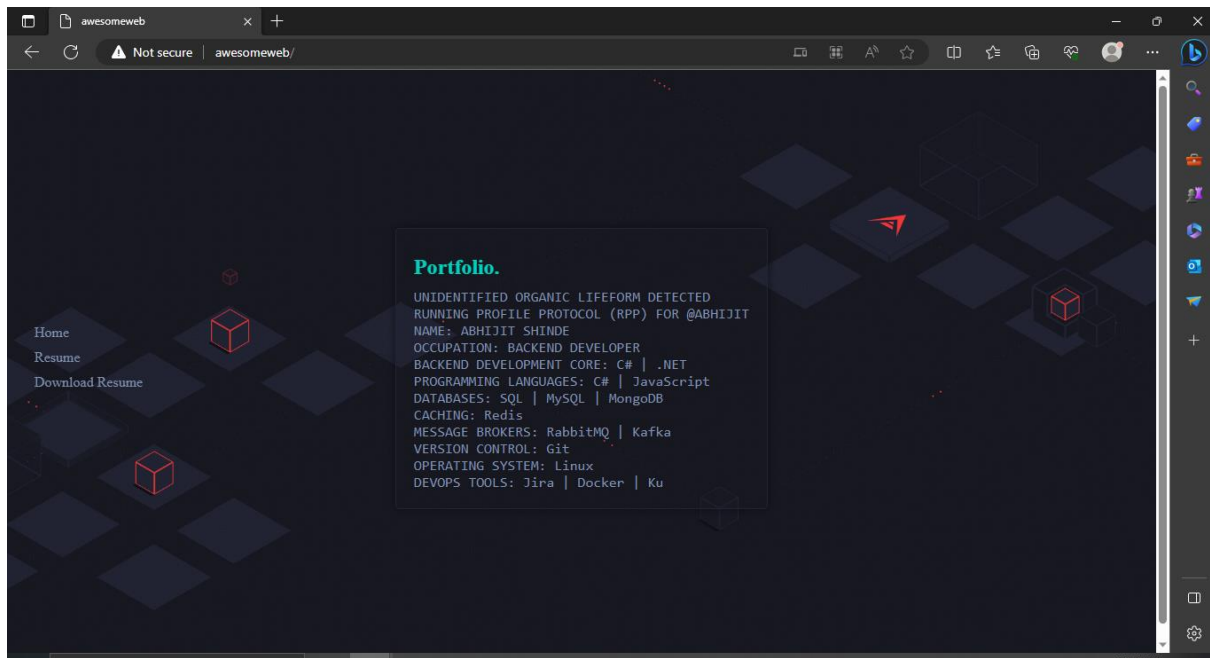
Step 6: Access Your Website

1. **For Apache (WampServer):**

   - Open a web browser and navigate to http://awesomeweb/. You should now see your 'awesomeweb' website.

2. **For Nginx:**

   - Open a web browser and navigate to http://awesomeweb/. You should now see your 'awesomeweb' website.

Congratulations! You have successfully deployed your 'awesomeweb' website on localhost using either Apache or Nginx and assigned it a DNS name. You can access your website locally using the specified DNS name.