Placement Empowerment Program

Cloud Computing and DevOps Centre

Host a Static Website Locally: Set Up a Local Server
Apache and Host a Simple HTML page with your
name

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Introduction and Overview

In this POC, we will show you how to host a static website locally using the Apache HTTP Server. This guide will walk you through setting up the server, configuring it, and hosting a basic HTML page. You'll gain hands-on experience in configuring and running an Apache server, which is key for web hosting and server management

Objective

The goal of this project is to:

1. Set up a local web server using Apache.

2. Configure the server to host static files.

3. Create and host a simple HTML page displaying your name.

Importance of Local Hosting

Local hosting is an essential skill for developers, as it allows them to test and experiment with web applications in a controlled environment. It offers several advantages, such as:

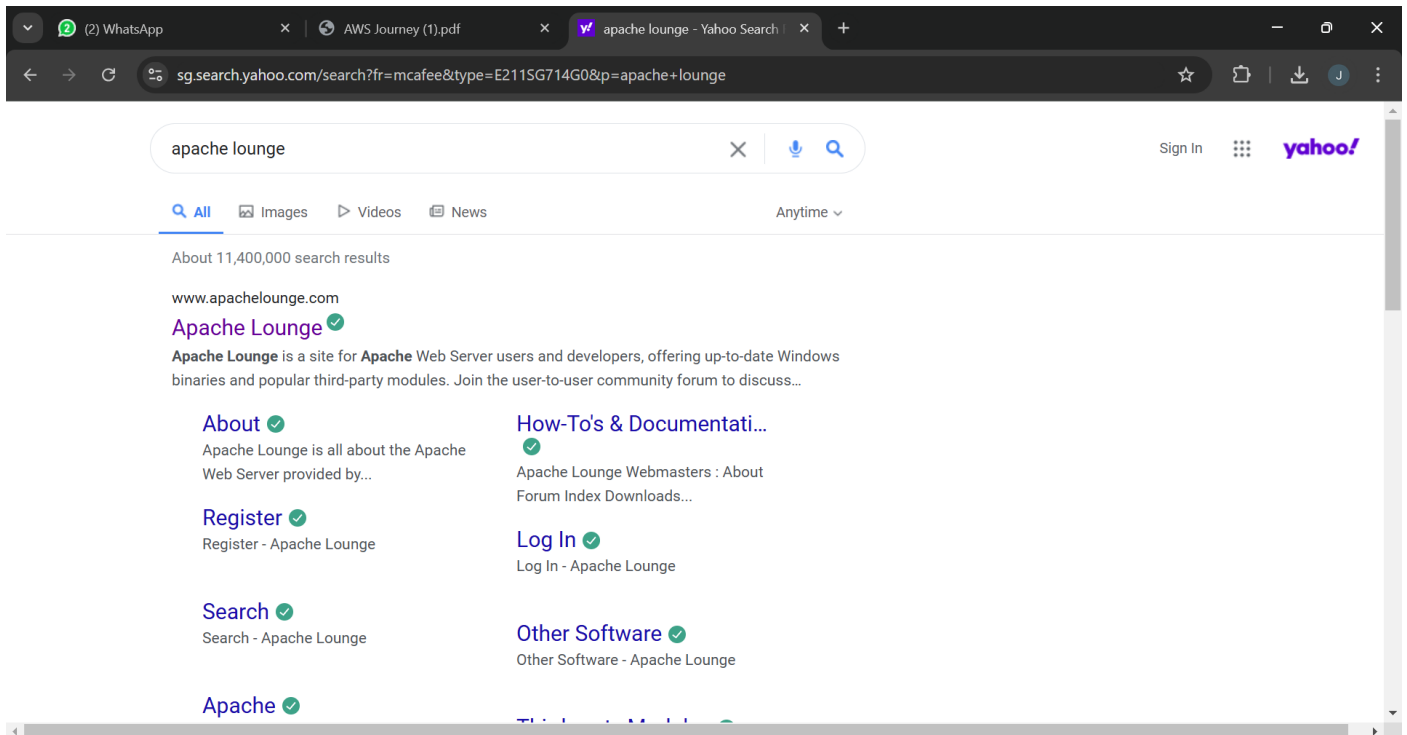**Hands-On Learning:** Gain practical experience with server setup and configuration.

Testing Ground: Safely test and debug websites before deploying them to a live server.

Offline Development: Work on web projects without requiring an active internet connection.
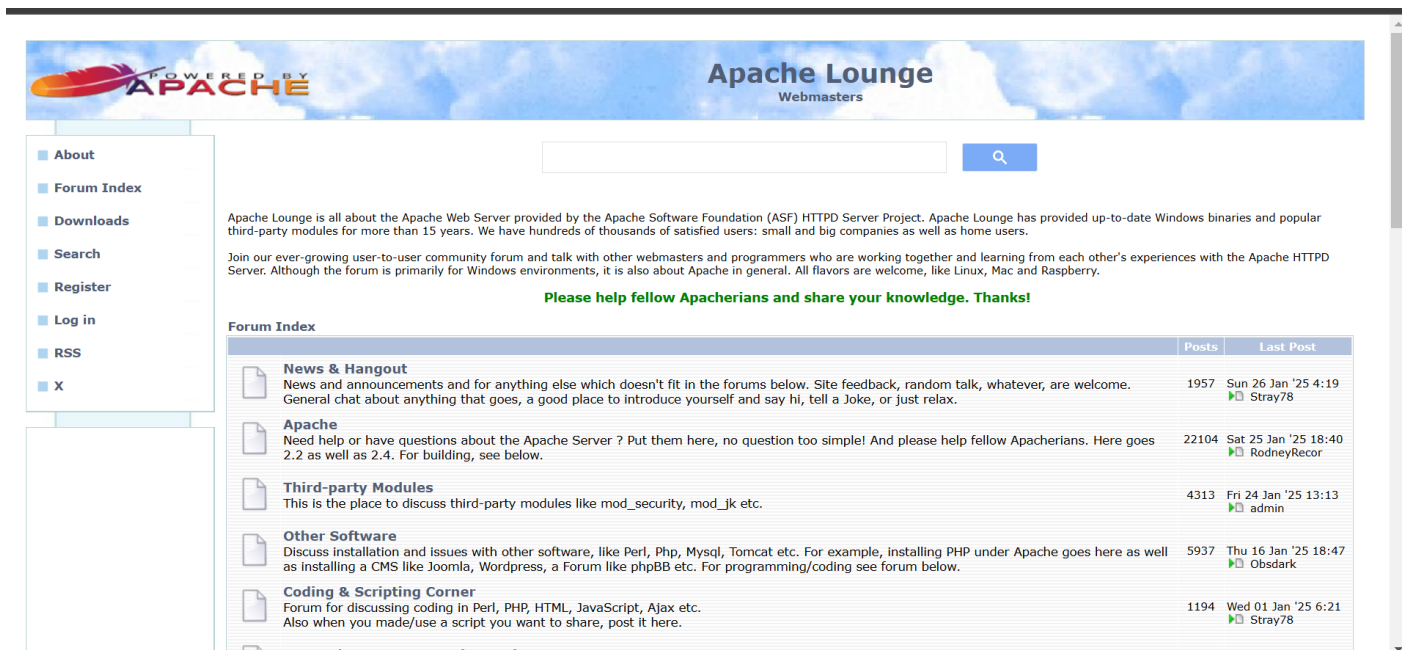
Step-by-Step Overview

Step1:

Search for "Apache Lounge" on Google and click the first link to access the official website.

Step 2 :

Click on the "Downloads" option located on the left-hand side of the Apache Lounge website.

Step 3 :

Click on the link **"Apache 2.4.62-240904 Win64"** (Windows version), download the file, and extract all its contents.

Step 4 :

Open Command Prompt as Administrator (Windows + R, type cmd, right-click and select 'Run as Administrator') and use the command cd C:\path\to\apache\bin to set the path to the Apache bin folder.

Step 5 :

Then Run the installation command :

httpd.exe -k install

```
:\Users\Jeffrina>C:\Users\Jeffrina\Downloads\httpd-2.4.63-250122-win64-VS17 (1).zip\Apache24
C:\Users\Jeffrina\Downloads\httpd-2.4.63-250122-win64-VS17' is not recognized as an internal or external command,
operable program or batch file.

:\Users\Jeffrina>C:\Users\Jeffrina\Downloads\httpd-2.4.63-250122-win64-VS17 (1).zip\Apache24
C:\Users\Jeffrina\Downloads\httpd-2.4.63-250122-win64-VS17' is not recognized as an internal or external command,
operable program or batch file.
```
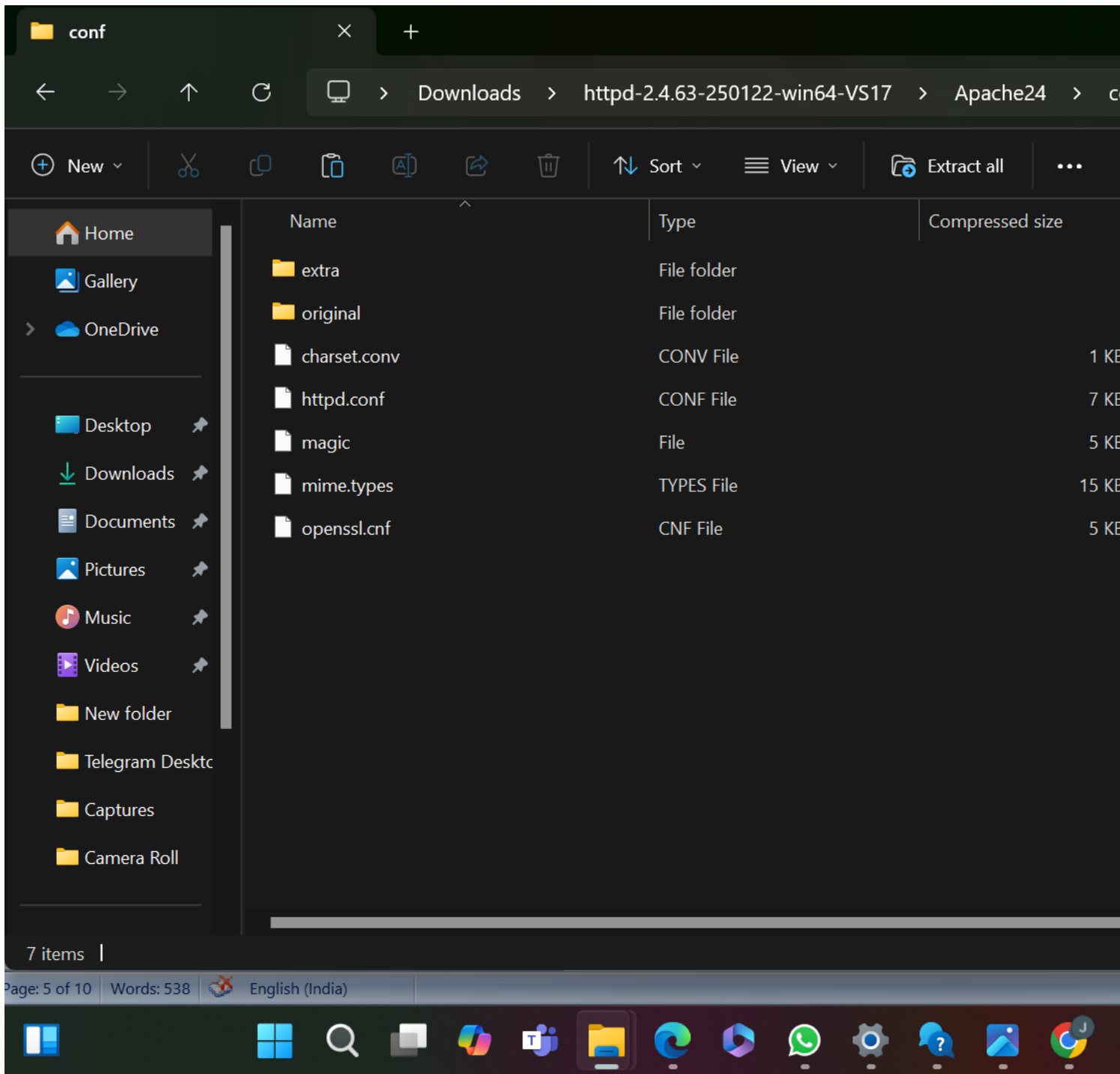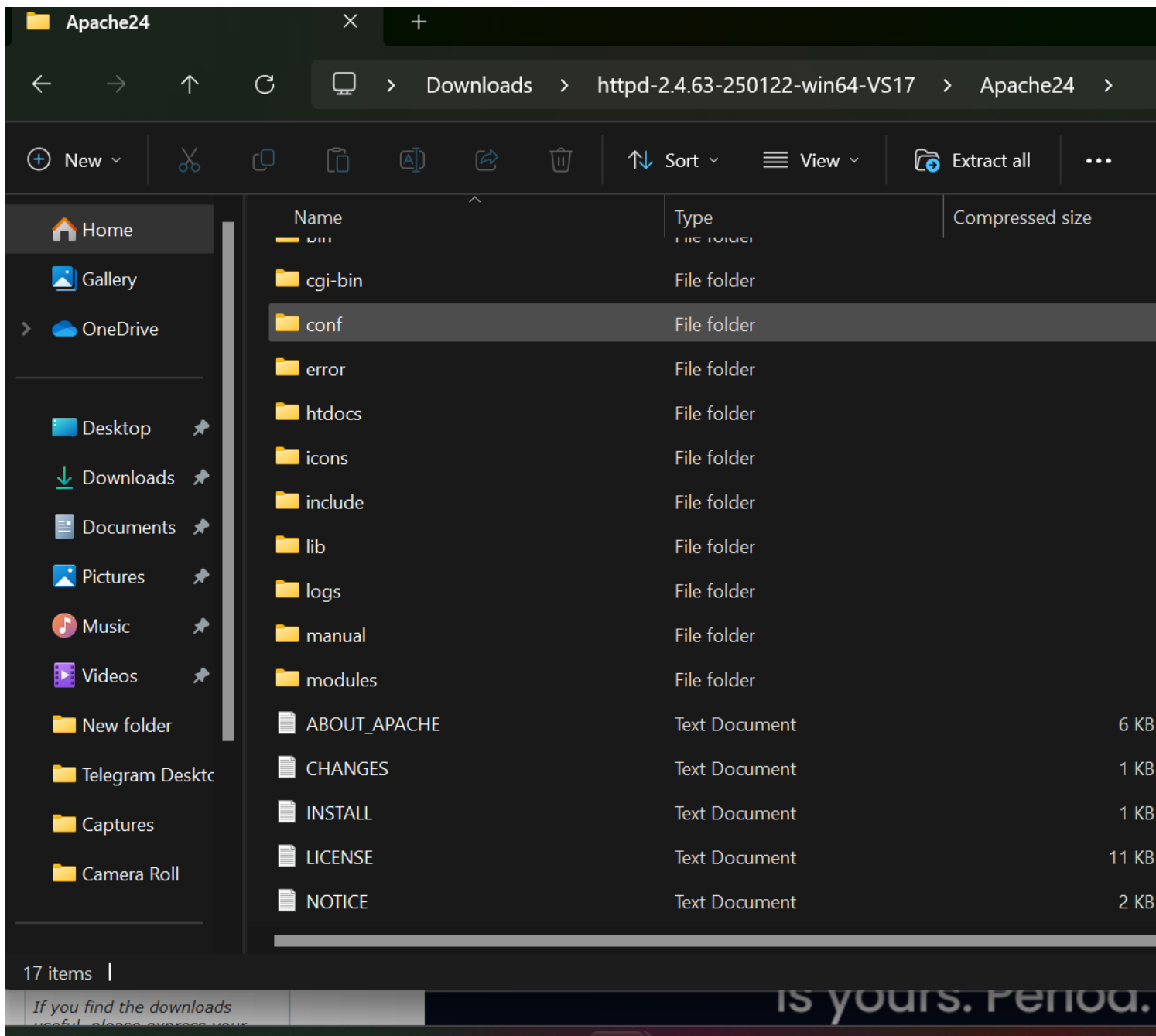
Step 6 :

Navigate to the Apache folder you downloaded, go to the **conf** folder, and right-click on the httpd.conf file; select 'Edit with Notepad'

(Apache/conf/httpd.conf)

Step 7 :

Inside the **httpd.conf** file, replace the content with the provided configuration. Ensure you update the SRVROOT directive with your Apache installation path. This configuration defines the server's root directory, listening port, modules, document root for serving web files, logging paths, and basic permissions, ensuring Apache serves content correctly from the specified htdocs directory.

```
#
# Mutex: Allows you to set the mutex mechanism and mutex file directory
# for individual mutexes, or change the global defaults
#
# Uncomment and change the directory if mutexes are file-based and the default
# mutex file directory is not on a local disk or is not appropriate for some
# other reason.
#
# Mutex default:logs
```

```
#LoadModule access_compat_module modules/mod_access_compat.so
LoadModule actions_module modules/mod_actions.so
LoadModule alias_module modules/mod_alias.so
LoadModule allowmethods_module modules/mod_allowmethods.so
LoadModule asis_module modules/mod_asis.so
LoadModule auth_basic_module modules/mod_auth_basic.so
#LoadModule auth_digest_module modules/mod_auth_digest.so
#LoadModule auth_form_module modules/mod_auth_form.so
#LoadModule authn_anon_module modules/mod_authn_anon.so
LoadModule authn_core_module modules/mod_authn_core.so
#LoadModule authn_dbd_module modules/mod_authn_dbd.so
#LoadModule authn_dbm_module modules/mod_authn_dbm.so
LoadModule authn_file_module modules/mod_authn_file.so
#LoadModule authn_socache_module modules/mod_authn_socache.so
#LoadModule authnz_fcgi_module modules/mod_authnz_fcgi.so
#LoadModule authnz_ldap_module modules/mod_authnz_ldap.so
LoadModule authz_core_module modules/mod_authz_core.so
#LoadModule authz_dbd_module modules/mod_authz_dbd.so
#LoadModule authz_dbm_module modules/mod_authz_dbm.so
LoadModule authz_groupfile_module modules/mod_authz_groupfile.so
LoadModule authz_host_module modules/mod_authz_host.so
#LoadModule authz_owner_module modules/mod_authz_owner.so
LoadModule authz_user_module modules/mod_authz_user.so
LoadModule autoindex_module modules/mod_autoindex.so
```

Step 8 :

Open Command Prompt and type the command **httpd.exe -t** to test the configuration file. If the configuration is correct, you should see **'Syntax OK'**.

```
C:\Users\Jeffrina>C:\Users\Jeffrina\Downloads\httpd-2.4.63-250122-win64-VS17 (1).zip_
```
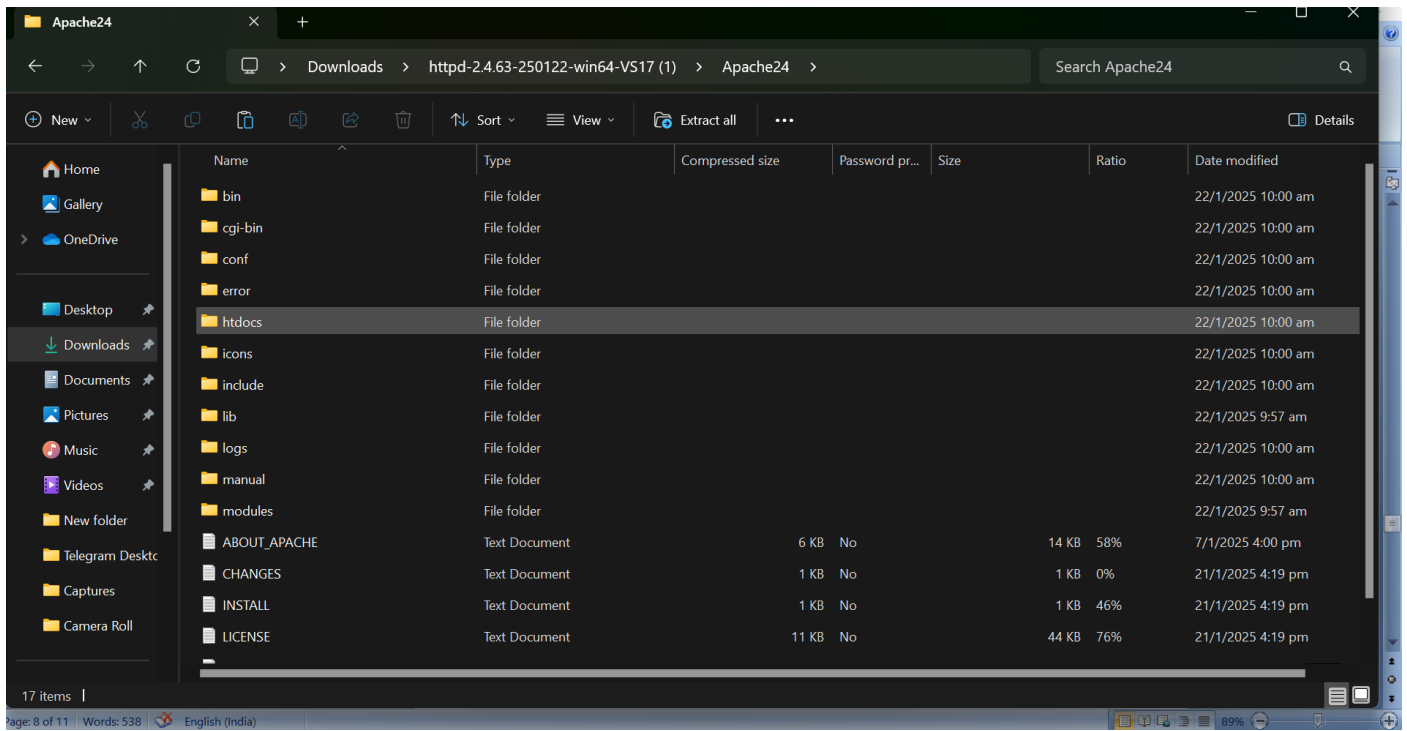
Step 9 :

Run the command **httpd.exe -k** start to start the Apache server.

```
C:\Users\Jeffrina>C:\Users\Jeffrina\Downloads\httpd-2.4.63-250122-win64 httpd.exe -k start_
```
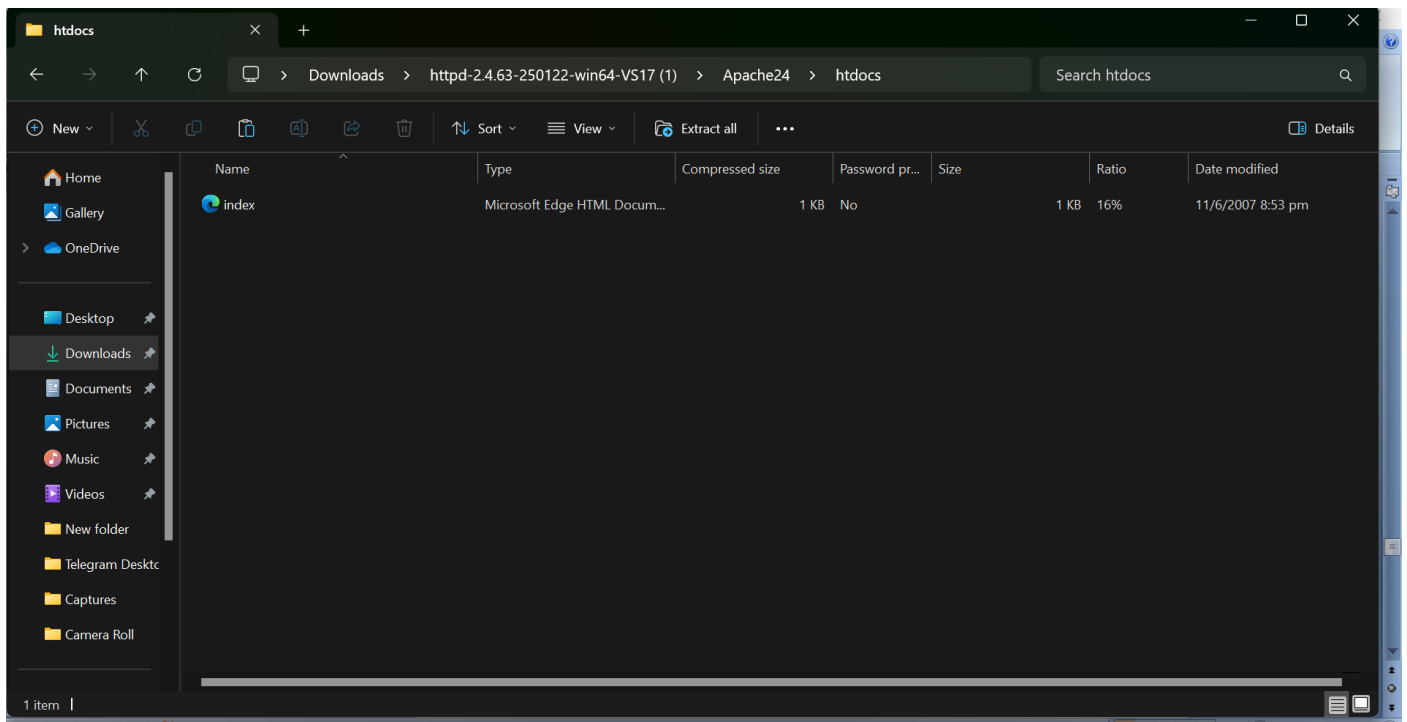
Step10:

Go to the Apache folder, navigate to the **htdocs** folder, and find the **index.html** file. Right-click on it and select 'Edit with Notepad'.
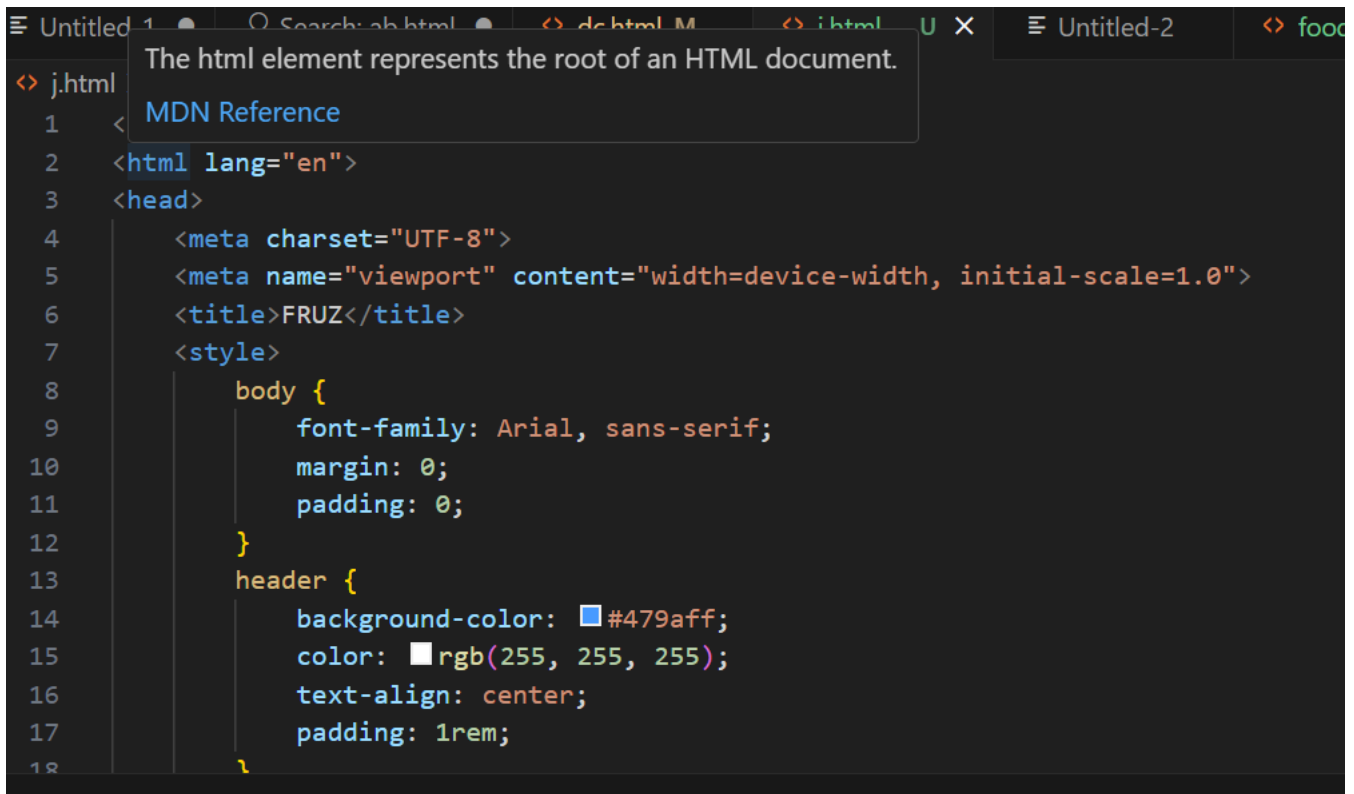
Step 11 :

Create a simple model to display your name in HTML (you may optionally add CSS for styling).

The html element represents the root of an HTML document.

MDN Reference

```html
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>FRUZ</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
        }
        header {
            background-color: #479aff;
            color: rgb(255, 255, 255);
            text-align: center;
            padding: 1rem;
```
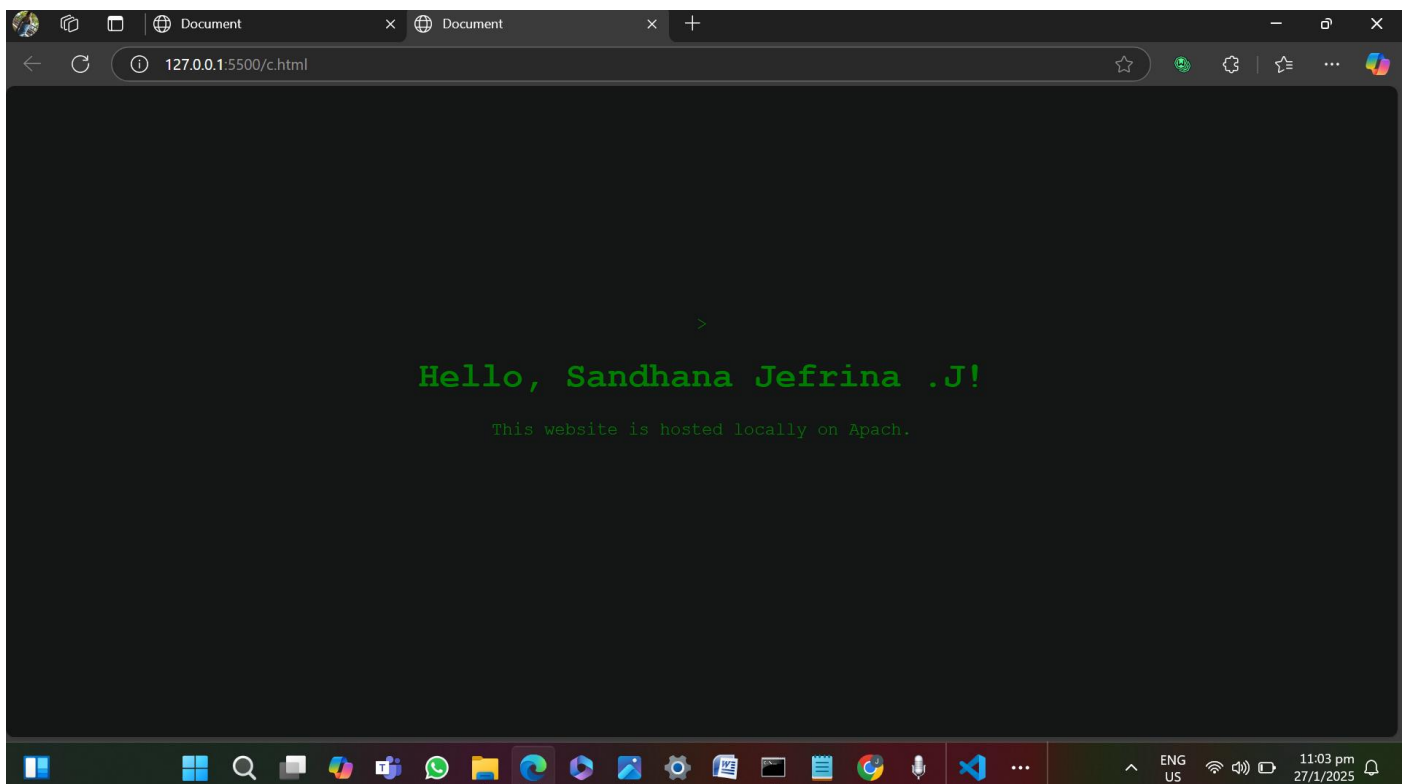
Step 12 :

Open the Chrome browser and type **localhost/index.html** in the address bar. You should be able to see the website hosted successfully.

Hello, Sandhana Jefrina .J!

This website is hosted locally on Apach.

Expected Outcome

By completing this POC, you will:

1. Successfully configure and run an Apache server locally.

2. Host a static HTML website that displays your name.

3. Understand the basics of web server configuration and file hosting.