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

Name: VIJAYA NANDANA M   Department : CSE

Introduction and Overview

In this POC, we will learn how to host a static website locally using the Apache HTTP Server. This process involves setting up a local web server with the help of command prompt by configuring it correctly, and hosting a simple HTML page. By following these steps, you'll get hands-on experience with configuring and running a local Apache server, which is a foundational skill 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:
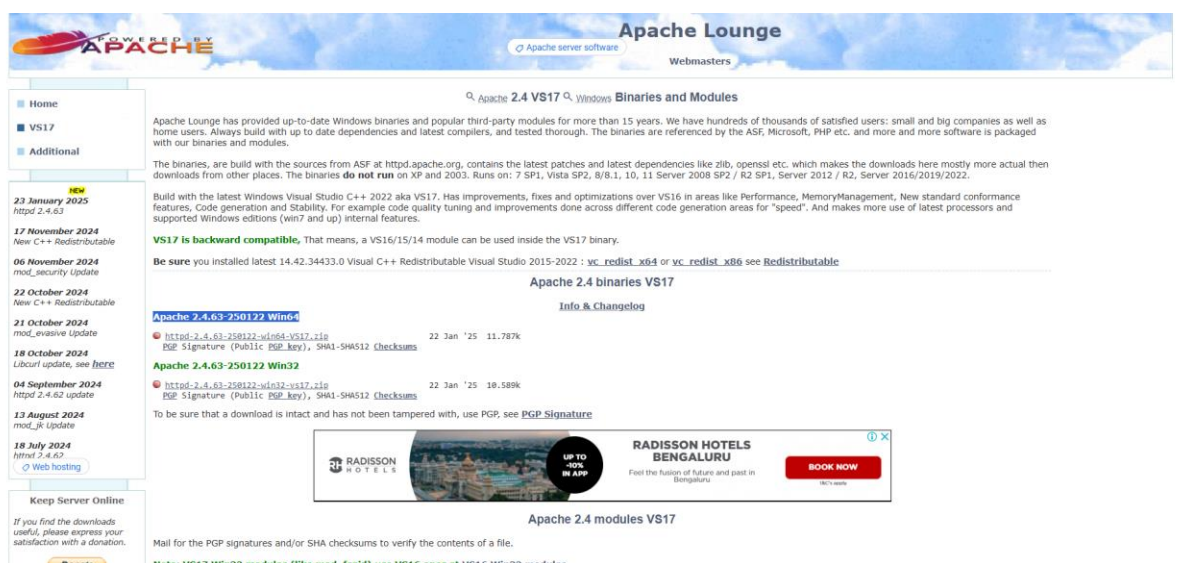
Step-by-Step Overview

Step1:

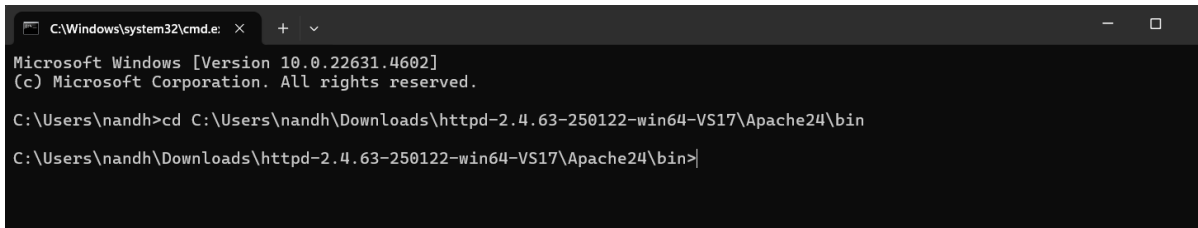Search for "Apache Lounge" on Google and click the first link to access the official website.
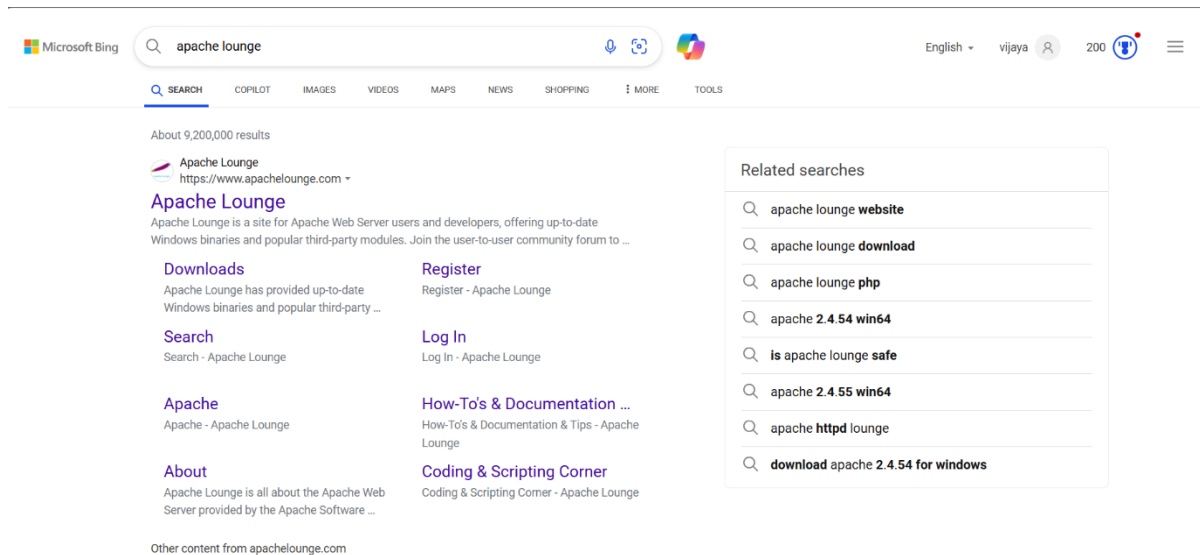
Step 2 :

Click on the "Downloads" option located on the left-hand side of the Apache Lounge website. Click on the link **"Apache 2.4.62-240904 Win64"** (Windows version), download the file, and extract all its contents.

Step 3 :

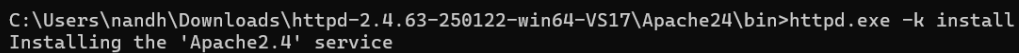Open Command Prompt and use the command cd <file path> to set the path to the Apache bin folder.

Step 4 :

Then Run the command **httpd.exe -k install** for installation of Apache server

Step 5 :

- Navigate to the Apache folder you downloaded.
- Go to the **conf** folder
- Right-click on the **httpd.conf** file. Select 'Edit with Notepad'.
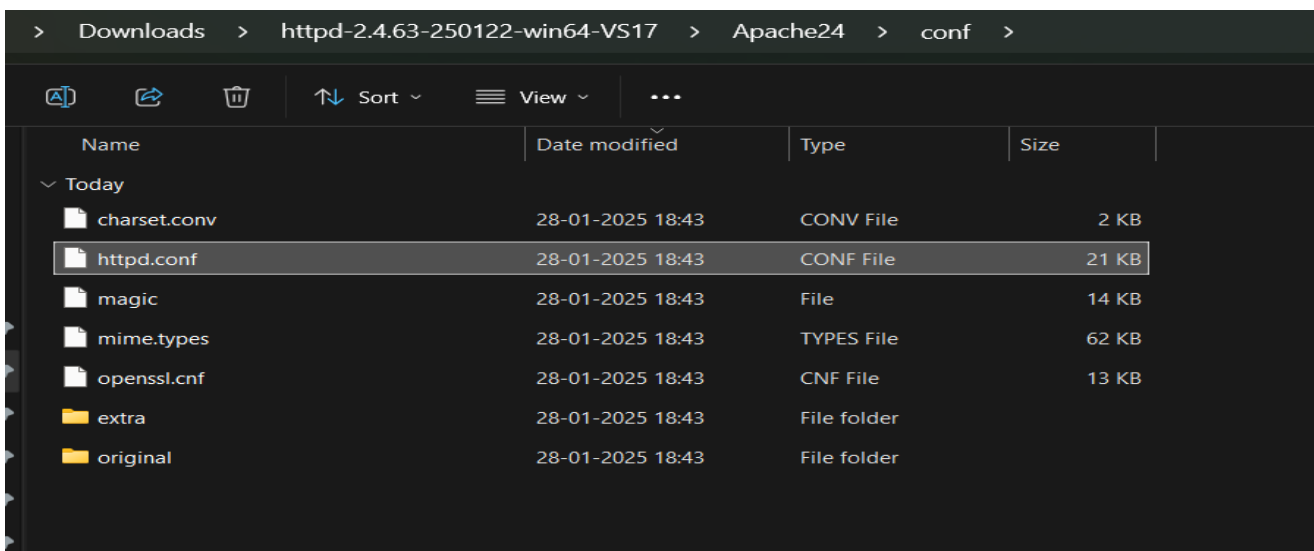
Step 6 :

Inside the **httpd.conf** file, replace the content with the provided configuration. Ensure you update the SRVROOT directive with your Apache installation path.

```
httpd.conf                    ×    +

File    Edit    View
Define SRVROOT "c:/Apache24"

ServerRoot "${SRVROOT}"

#
# 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


#
# Listen: Allows you to bind Apache to specific IP addresses and/or
# ports, instead of the default. See also the <VirtualHost>
# directive.
#
# Change this to Listen on specific IP addresses as shown below to
# prevent Apache from glomming onto all bound IP addresses.
#
#Listen 12.34.56.78:80
Listen 80

#
```

```
httpd.conf                    ●    +

File    Edit    View
Define SRVROOT "C:\Users\nandh\Downloads\httpd-2.4.63-250122-win64-VS17\Apache24"

ServerRoot "${SRVROOT}"

#
# 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.
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# Mutex default:logs


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# directive.
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# Change this to Listen on specific IP addresses as shown below to
# prevent Apache from glomming onto all bound IP addresses.
#
#Listen 12.34.56.78:80
Listen 80
```

Step 7 :

In the cmd terminal type the command **httpd.exe -t** to test the configuration file. If the configuration is correct, you will see **'Syntax OK'**.

```
C:\Users\nandh\Downloads\httpd-2.4.63-250122-win64-VS17\Apache24\bin>httpd.exe -t
Syntax OK
```

Step 8 :

To start the Apache server, type " **httpd.exe -k** ".

```
C:\Users\nandh\Downloads\httpd-2.4.63-250122-win64-VS17\Apache24\bin>httpd.exe -k
```

Step 9 :

- Go to the Apache folder.
- Navigate to the **htdocs** folder.
- Go to the **index.html** file. Right-click on it and select 'Edit with Notepad'.

Name	Date modified	Type	Size
∨ Today			
ABOUT_APACHE	28-01-2025 18:43	Text Document	14 KB
CHANGES	28-01-2025 18:43	Text Document	1 KB
INSTALL	28-01-2025 18:43	Text Document	1 KB
LICENSE	28-01-2025 18:43	Text Document	44 KB
NOTICE	28-01-2025 18:43	Text Document	3 KB
README	28-01-2025 18:43	Text Document	5 KB
modules	28-01-2025 18:43	File folder	
include	28-01-2025 18:43	File folder	
lib	28-01-2025 18:43	File folder	
logs	28-01-2025 18:43	File folder	
manual	28-01-2025 18:43	File folder	
icons	28-01-2025 18:43	File folder	
error	28-01-2025 18:43	File folder	
htdocs	28-01-2025 18:43	File folder	
bin	28-01-2025 18:43	File folder	
cgi-bin	28-01-2025 18:43	File folder	
conf	28-01-2025 18:43	File folder	

Step10:

Create a simple model to display your name in HTML.

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Vijaya Nandana</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            display: flex;
            justify-content: center;
            align-items: center;
            height: 100vh;
            margin: 0;
            background-color: #f4f4f9;
        }
        h1 {
            font-size: 3rem;
            color: #333;
        }
    </style>
</head>
<body>
    <h1>Vijaya Nandana </h1>
</body>
</html>
```
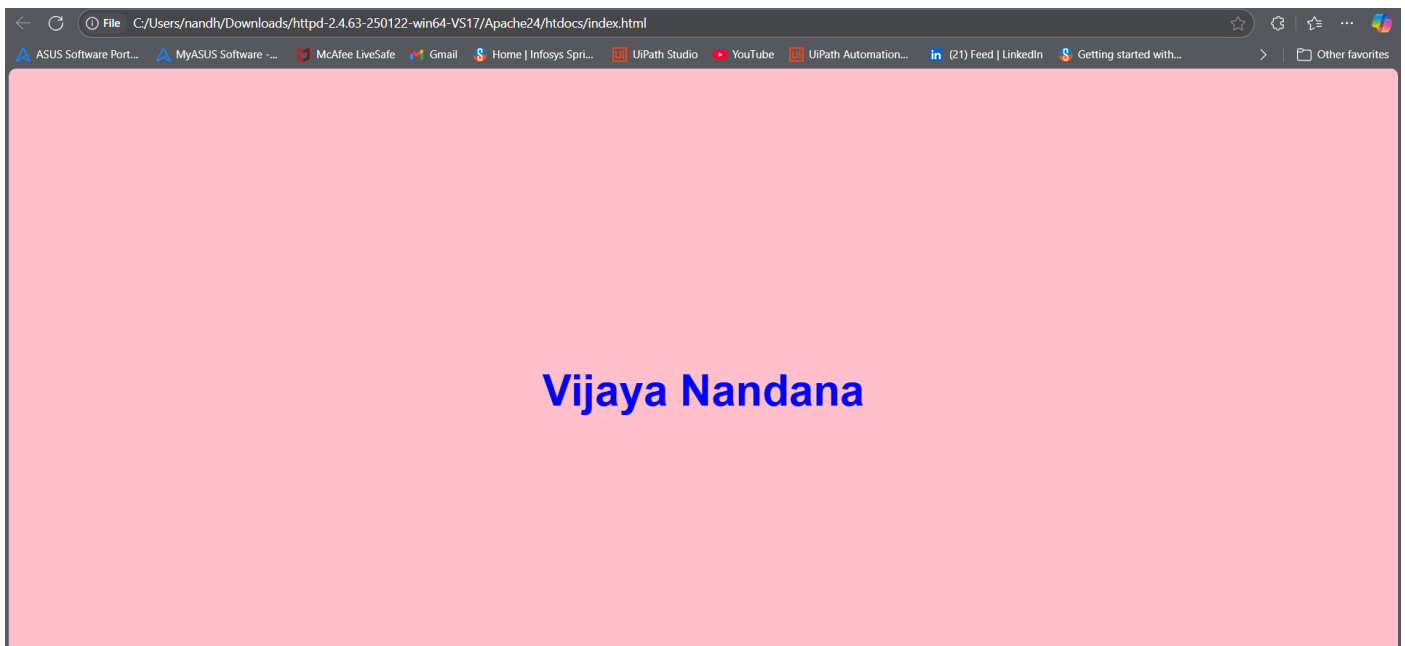
Step 11 :

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

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.