

# Placement empowering 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:

Through this task we'll learn how to host a static website locally using Apache HTTP server. The process involved are setting up a local web server, configuring it correctly, and hosting a simple HTML page. To make this happen we just need our html code and CMD (command prompt) to make this possible. By following the below steps, you'll get hands-on experience with configuring and running a local Apache server.

## 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 allows developers to test and experiment with web applications in a controlled environment. It offers several advantages, such as:

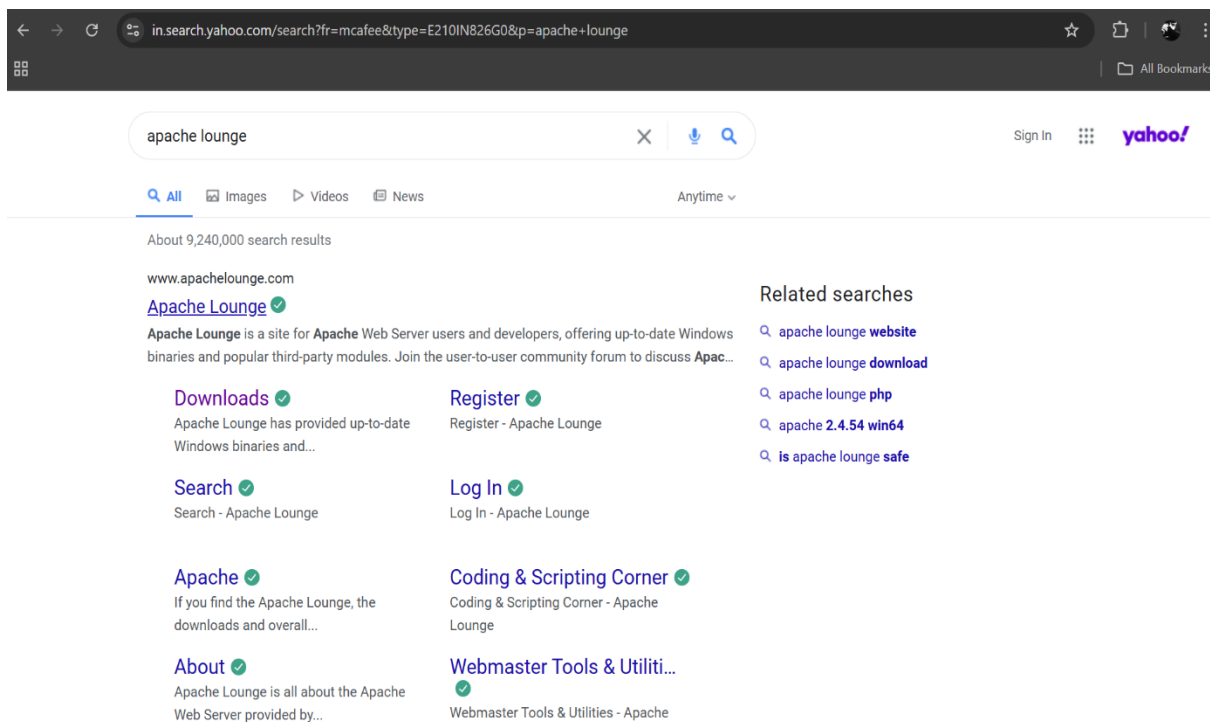
**Hands-On Learning:** Gain practical experience with server setup and configuration.

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



**Step 2:** After opening the link, click on the "Downloads" option located on the left-hand side of the Apache Lounge website.

The screenshot shows the Apache Lounge website homepage. The header features the Apache logo and the text "Apache Lounge" with a link to "Apache Software Foundation training" and "Webmasters". A search bar is located in the top right. On the left, a navigation menu includes links for "About", "Forum Index", "Downloads", "Search", "Register", "Log in", "RSS", and "X". Below the menu is a section titled "Windows Server Monitoring tool" with an icon. The main content area contains a welcome message from the Apache Software Foundation, a link to the "Forum Index", and a table of forum topics. The table lists topics such as "News & Hangout", "Apache", "Third-party Modules", "Other Software", "Coding & Scripting Corner", and "How-to's & Documentation & Tips", along with their respective post counts and last post dates.

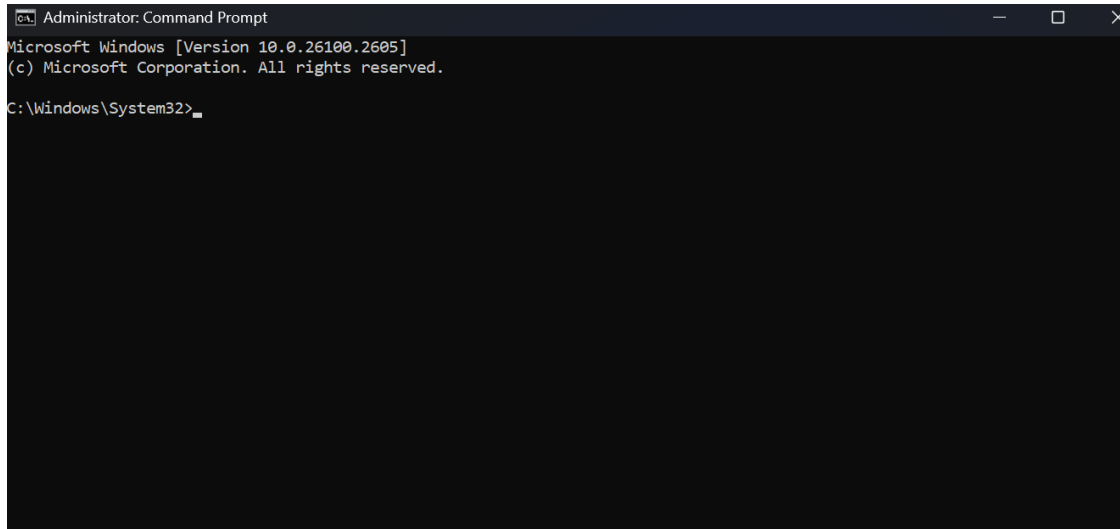
	Posts	Last Post
<b>News &amp; Hangout</b> News and announcements and for anything else which doesn't fit in the forums below. Site feedback, random talk, whatever, are welcome. General chat about anything that goes, a good place to introduce yourself and say hi, tell a Joke, or just relax.	1954	Fri 24 Jan '25 10:45 Steffen
<b>Apache</b> Need help or have questions about the Apache Server ? Put them here, no question too simple! And please help fellow Apacherians. Here goes 2.2 as well as 2.4. For building, see below.	22102	Fri 17 Jan '25 16:06 FRubin
<b>Third-party Modules</b> This is the place to discuss third-party modules like mod_security, mod_jk etc.	4312	Fri 24 Jan '25 12:26 Otomatic
<b>Other Software</b> Discuss installation and issues with other software, like Perl, Php, Mysql, Tomcat etc. For example, installing PHP under Apache goes here as well as installing a CMS like Joomla, Wordpress, a Forum like phpBB etc. For programming/coding see forum below.	5937	Thu 16 Jan '25 18:47 Obsdark
<b>Coding &amp; Scripting Corner</b> Forum for discussing coding in Perl, PHP, HTML, JavaScript, Ajax etc. Also when you made/use a script you want to share, post it here.	1194	Wed 01 Jan '25 6:21 Stray78
<b>How-to's &amp; Documentation &amp; Tips</b> Do not hesitate to post your knowledge! Do not post issues here.	560	Wed 01 Jan '25 16:55 Sophie123

**Step 3:** Click on "Apache 2.4.63-250122 Win64" (Windows version) download the file, and extract all its contents.

The screenshot shows the Apache Lounge website download page. The header features the Apache logo and the text "Apache Lounge" with a link to "Apache Software Foundation training" and "Webmasters". A search bar is located in the top right. On the left, a navigation menu includes links for "Home", "VS17", and "Additional". Below the menu is a section titled "Windows Server Monitoring tool" with an icon. The main content area contains a welcome message from the Apache Software Foundation, a link to the "Forum Index", and a table of forum topics. The table lists topics such as "News & Hangout", "Apache", "Third-party Modules", "Other Software", "Coding & Scripting Corner", and "How-to's & Documentation & Tips", along with their respective post counts and last post dates.

	Posts	Last Post
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**Step 4:** Open Command Prompt and give run as administrator (Windows + R, type cmd right-click and select 'Run as Administrator')



**Step 5:** Use the command `cd C:\Users\Jeffersen Godfrey\Downloads\httpd-2.4.63-250122-win64-VS17\Apache24\bin` (the bin path) to set the path to the Apache bin folder.

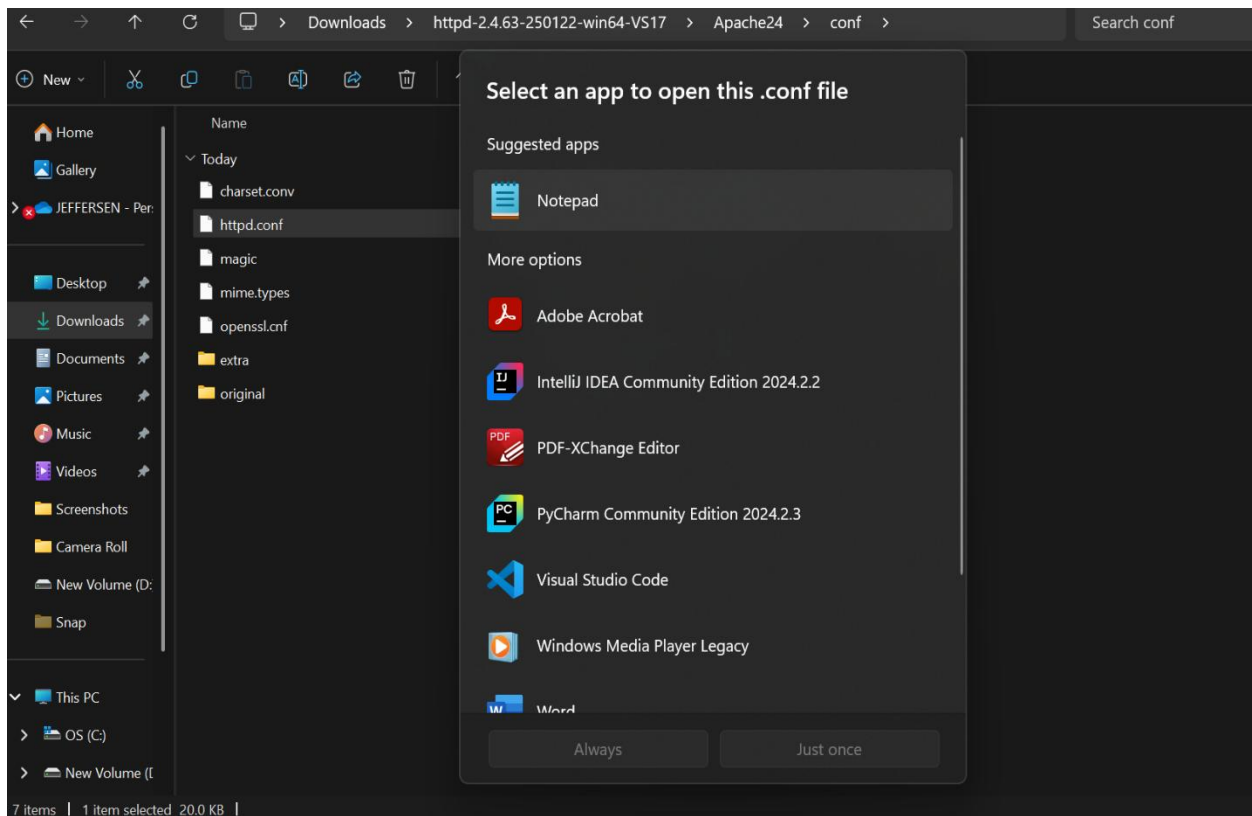
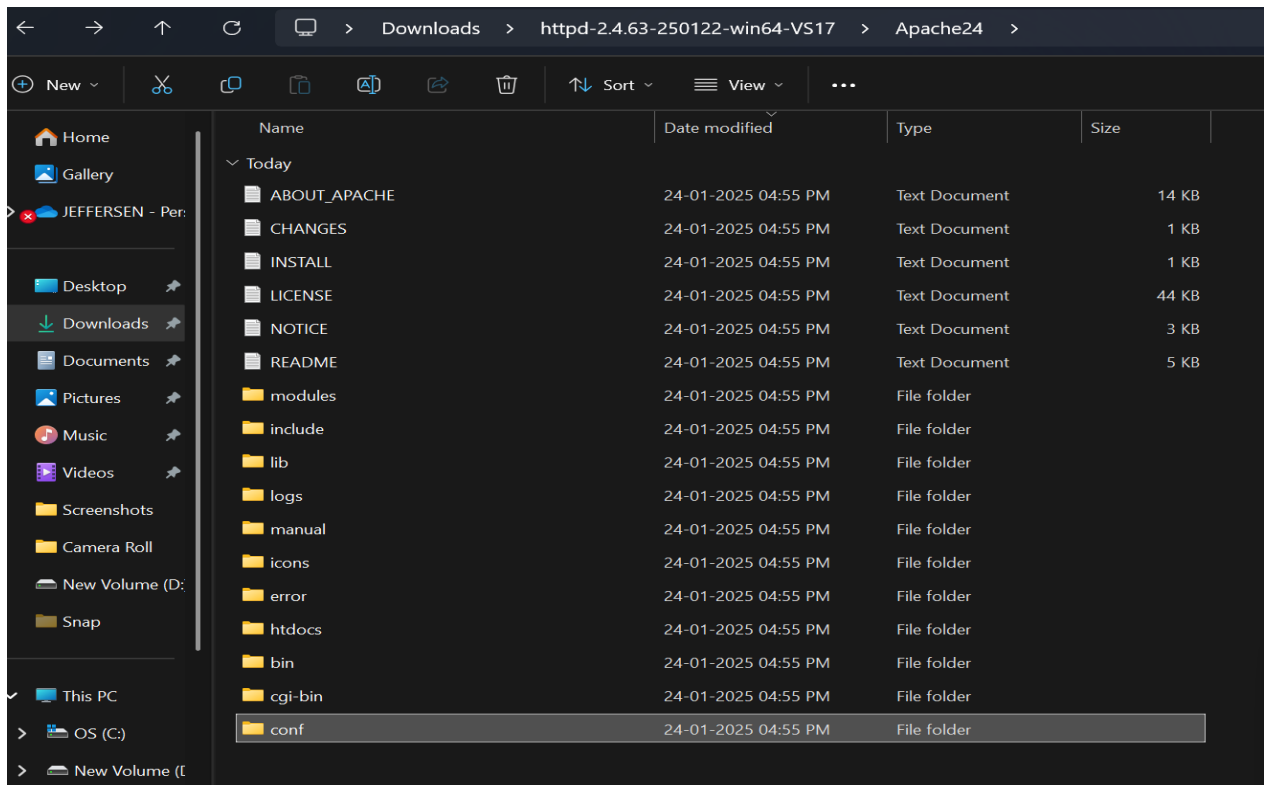
```
C:\Windows\System32>cd C:\Users\Jeffersen Godfrey\Downloads\httpd-2.4.63-250122-win64-VS17\Apache24\bin
```

**Step 6:** Then Run the installation command:

**httpd.exe -k install**

```
C:\Users\Jeffersen Godfrey\Downloads\httpd-2.4.63-250122-win64-VS17\Apache24\bin>httpd.exe -k install  
[Sat Jan 25 21:36:33.657056 2025] [mpm_winnt:error] [pid 7824:tid 348] AH00433: Apache2.4: Service is already installed.
```

**Step 7:** Navigate to the Apache folder you downloaded, go to the **conf** folder, and right-click on the **httpd.conf** file; select 'Edit with Notepad' .



**Step 8:** 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.

```
File Edit View

# Define SRVROOT
Define SRVROOT "C:\Users\Jeffersen Godfrey\Downloads\httpd-2.4.63-250122-win64-VS17\Apache24"

# Ensure the path resolves correctly for DocumentRoot
ServerRoot "${SRVROOT}"

# Listening Port
Listen 80

# ServerName (optional, but recommended for local testing)
ServerName localhost:80

# LoadModules (essential modules)
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 auth_basic_module modules/mod_auth_basic.so
LoadModule authn_core_module modules/mod_authn_core.so
LoadModule authz_core_module modules/mod_authz_core.so
LoadModule dir_module modules/mod_dir.so
LoadModule log_config_module modules/mod_log_config.so
LoadModule mime_module modules/mod_mime.so
LoadModule rewrite_module modules/mod_rewrite.so
LoadModule setenvif_module modules/mod_setenvif.so

# DocumentRoot and Directory configuration
DocumentRoot "${SRVROOT}/htdocs"
<Directory "${SRVROOT}/htdocs">
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>

# Logs (you can adjust the paths as needed)
ErrorLog "${SRVROOT}/logs/error.log"
CustomLog "${SRVROOT}/logs/access.log" common

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ErrorLog "${SRVROOT}/logs/error.log"
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# Additional settings for MIME types, DirectoryIndex, etc.
<IfModule mime_module>
    TypesConfig conf/mime.types
    AddType application/x-compress .Z
    AddType application/x-gzip .gz .tgz
</IfModule>

<IfModule dir_module>
    DirectoryIndex index.html
</IfModule>
```

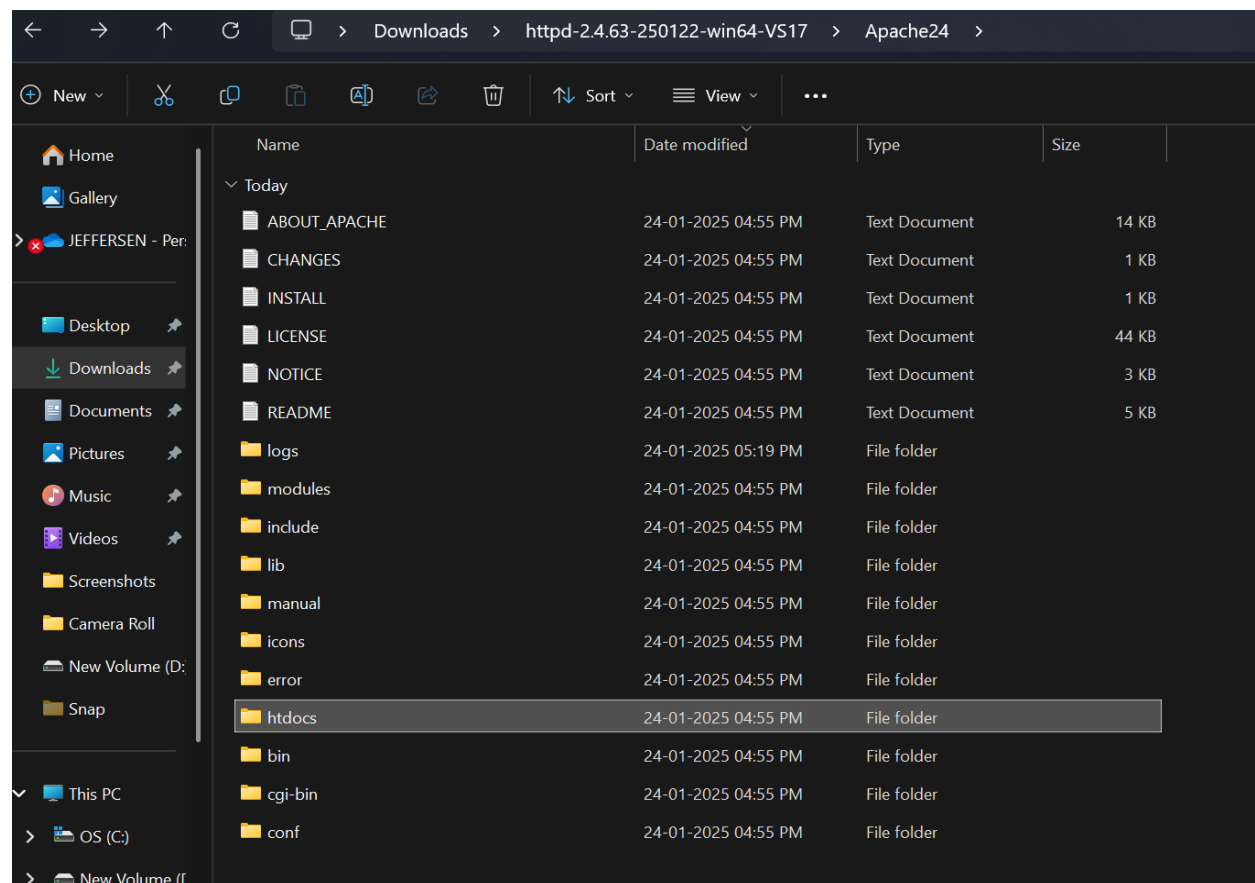
**Step 9:** Open Command Prompt and type the command **httpd.exe -t** to test the configuration file. If the configuration is correct, you should see '**Syntax OK**'.

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

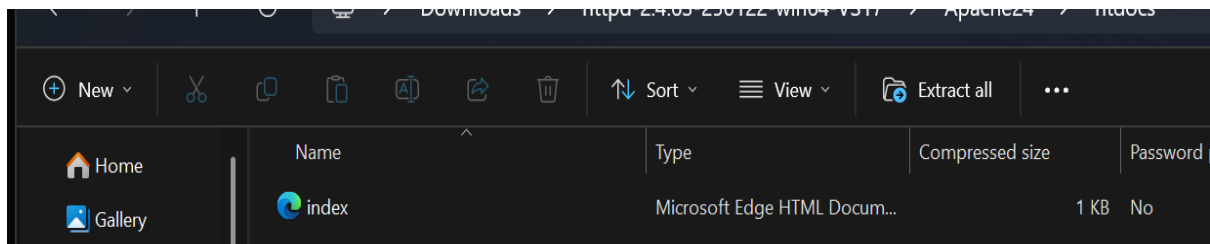
**Step 10:** Run the command **httpd.exe -k start** to start the Apache server.

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

**Step 11:** 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 12:** Create a simple model to display your name in HTML (you may optionally add CSS for styling).

```
File Edit View

<html><body><h1>Jeffersen Godfrey A M</h1></body></html>
```

**Step 13:** Open the Chrome browser and type **localhost/index.html** in the address bar. You should be able to see the website hosted successfully.



## **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.