HOST A STATIC WEBSITE LOCALLY

AIM:

To set up a local server (Apache or Nginx) and host a simple HTML page with your name.

NEED FOR LOCAL WEBSITE HOSTING:

Local web hosting can be useful for a variety of reasons. If you're asking about the need for it, here are a few key advantages:

1. **Performance and Speed**: Local web hosting can offer better performance because the server is physically closer to the user, reducing latency.

2. **Control and Customization**: You have more control over the server's configuration and can easily customize the hosting environment for your needs.

3. **Cost-Effective**: For small to medium-sized websites, local hosting can sometimes be more affordable compared to international hosting services, especially if you have your own server hardware.

4. **Security**: If you're dealing with sensitive data or need to comply with specific local data privacy laws, hosting locally can give you more control over security and data protection.

5. **Regulatory Compliance**: Some countries have laws that require data to be stored within the country. Local hosting ensures that you're in compliance with such regulations.

STEP BY STEP OVERVIEW:

Step 1: Installing APACHE for windows

- Go to browser and search for 'APACHE LONGUE' and click the first link to access the official website.
- Click on 'Downloads' option of the Apache Lounge website.
- Click on the link provided foe the Windows version and download the file and extract all its contents.

Step 2: INSTALLATION

- Open the command prompt as 'Administrator' and use the command 'cd C:\path\to\Apache\bin' to set path to the 'Apache bin' folder.
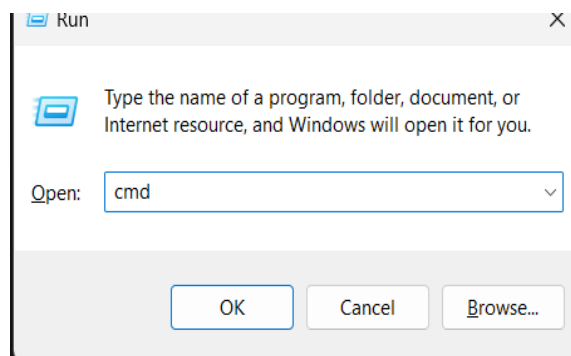
- Also, then run the installation command 'httpd.exe -k install' and your Apache will be installed successfully.

Step 3: CONFIGURE

- Navigate to the Apache folder, go to the 'conf' folder and right-click on it to edit it with Notepad.
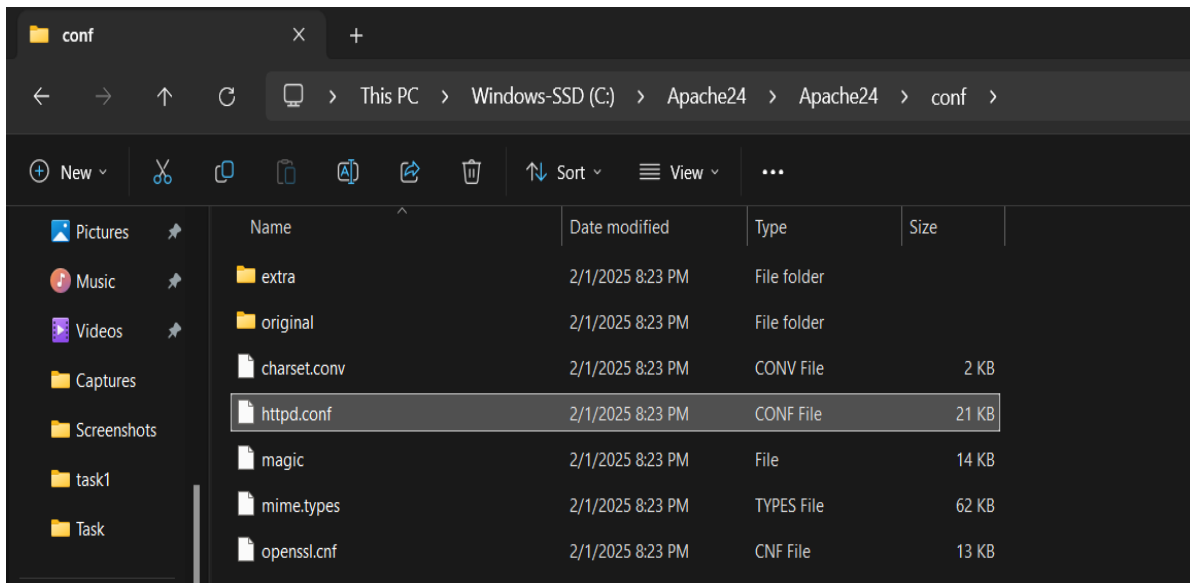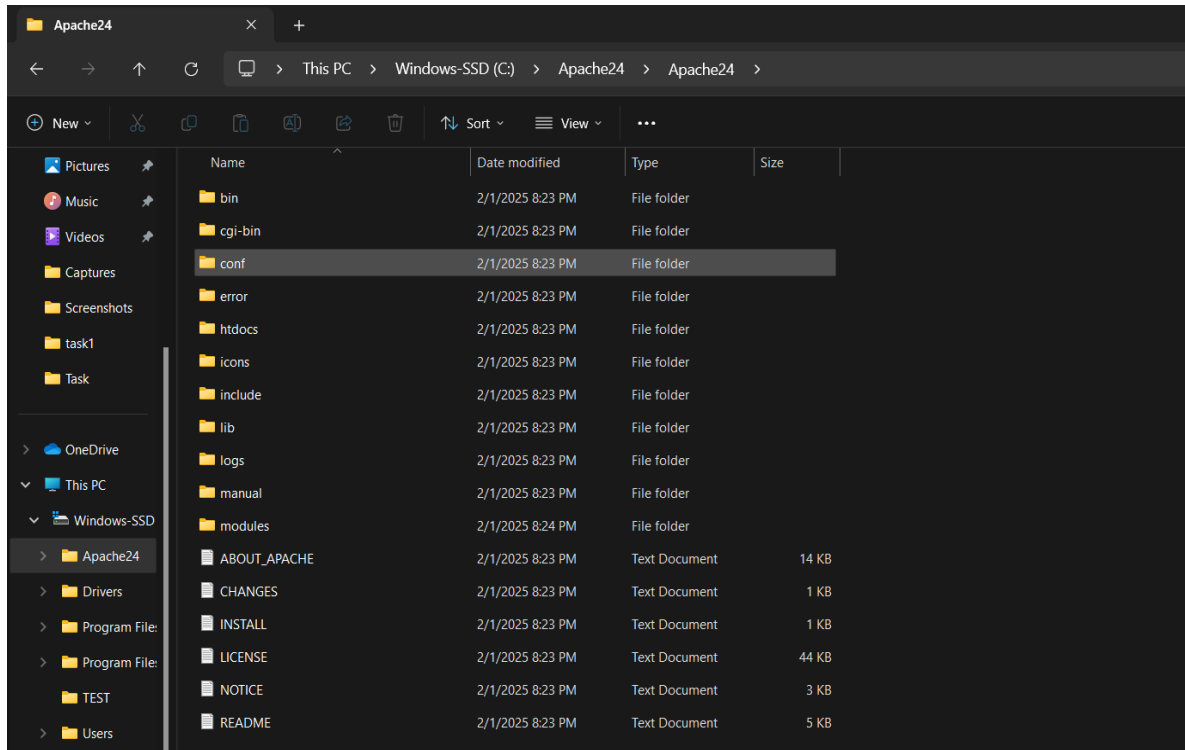
- Replace the content with the provided configuration. Ensure you update the SRVROOT directive with your Apache installation path.

```
httpd.conf                    index.html              +
File    Edit    View

#Define SRVROOT
Define SRVROOT C:\Apache24\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
#Additional settings for MIME types, Directory Index, etc.
<IfModule mime_module>
TypesConfig conf/mime.types
AddType application/x-compress .Z
AddType application/x-gzip .gz .tgz
</IfModule>
<IfModule dir_module>
rectory Index index.html
</fModule>
```

Step 4: TEST CONFIGURATION

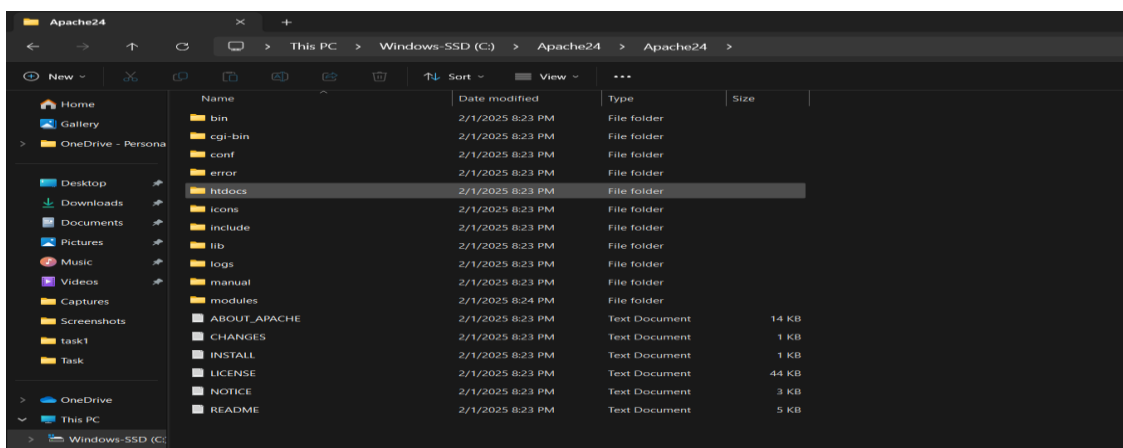- Open the command prompt and give 'httpd.exe -t' to test the configuration.

  `C:\Apache24\Apache24\bin>httpd.exe -t`

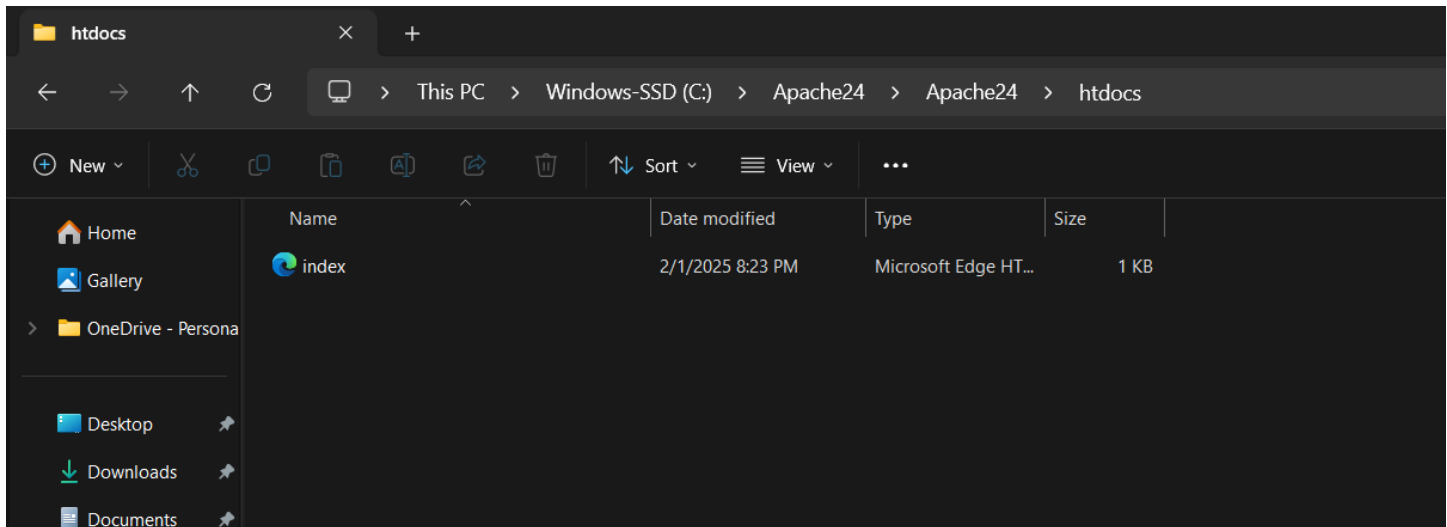- Run the command 'httpd.exe -k' to start the Apache server.

  `C:\Apache24\Apache24\bin>httpd.exe -k`

Step 5: UPLOADING A HTML FILE

- Go to the Apache folder and navigate to 'htdocs' folder.

- You will find a index.html file. Edit it with Notepad.

- Give a html code that prints your name as shown below;

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>My Name</title>
</head>
<body>
    <h1>NIDHISHA A DHAS</h1>
</body>
</html>
```

- Save this file.

Step 6: TEST THE WEB-HOSTING

- Open your browser and type 'localhost/index.html' in the address bar.
- You will be able to see the website hosted successfully.

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CONCLUSION:

In this POC, we have understood:

- To install, configure and run the Apache server locally.
- To host a static website the displays your name.
- Understand the basics of web-server configuration and file hosting.