

EXP – 1

Aim

To set up and host a simple static website using Node.js and Express, allowing access to the site via a local server.

Prerequisites

1. Node.js Installed: Ensure Node.js is installed on your machine.
2. Visual Studio Code Installed: A code editor to develop and manage your project files.

Steps

Step 1: Download and Install Node.js

1. Download and install Node.js
2. Download and Install Visual Studio Code

1. Download VS Code:

- Go to the [Visual Studio Code website](#) and download the installer.

2. Install VS Code:

- Follow the installation instructions for your operating system.

Step 3: Set Up Project Folder

1. Create a New Folder:
 - Create a new folder for your project (e.g., my-website).
2. Open Command Prompt:
 - Right-click inside the folder and select Open command window here or Open PowerShell window here.

Step 4: Initialize Node.js Project

1. Initialize Project:
 - In the command prompt, type:

```
Bash: npm init -y
```
 - This creates a package.json file with default settings.
2. Install Dependencies:
 - Install Node.js modules:

```
Bash: npm install express
```

Step 5: Open Project in VS Code

1. Open VS Code:
 - Type code . in the command prompt and press Enter.

Step 6: Write the Server Code

1. Create app.js:
 - In the project-root folder, create a file named app.js.
2. Add Code to app.js:

Javascript:

```
const express = require('express');
const path = require('path');
const app = express();
const port = 8080;

// Serve static files from the public directory
app.use(express.static(path.join(__dirname, 'public')));

// Define a route to serve your HTML file
app.get('/', (req, res) => {
  res.sendFile(path.join(__dirname, 'public', 'index.html'));
});

// Start the server
app.listen(port, () => {
  console.log(`Server running at http://localhost:${port}/`);
});
```

Step 7: Create Your HTML File

1. Add HTML File:
 - In the public folder, create a file named index.html.
2. Write HTML Code:
 - Add your HTML content to index.html:

```
<!DOCTYPE html>

<html>

<head>

  <title>My Website</title>

</head>

<body>

  <h1>Welcome to My Website</h1>

  <p>This is a simple Node.js hosted site.</p>

</body>

</html>
```

Step 8: Run the Server

1. Start the Server:
 - Open the terminal in VS Code or use the command prompt, and run:
Bash:node app.js
2. Verify Hosting:
 - Open a web browser and go to <http://localhost:8080/> to view your website.