EMPOWher-angular

empowher-angular program is designed for angular training.

- Editor: VSCode-- We will use VSCode for coding. if not installed on your system please install VSCode from https://code.visualstudio.com/docs/?dv=win.

Prerequisite:

1. Understanding of HTML: HTML is the basic building block of any web application. Since Angular is used to build dynamic and complex web applications, it is essential to understand how HTML works and how it is used to define the structure of web pages.

    - W3Schools HTML Tutorial
    - Mozilla Developer Network (MDN) HTML Basics

2. Knowledge of CSS: CSS is used to style HTML content, so understanding it is crucial to making your Angular applications look good and perform well.

    - W3Schools CSS Tutorial
    - MDN CSS Basics

3. JavaScript and Typescript: Angular applications are typically written in TypeScript, which is a statically typed superset of JavaScript. Therefore, having a firm grasp on JavaScript and TypeScript principles, syntax, and features is very important.

    - MDN JavaScript Guide
    - W3Schools JavaScript Tutorial
    - TypeScript Documentation

4. Basic Understanding of MVC (Model View Controller) Design Pattern: Angular follows the MVC design pattern. It is important to understand how MVC works, as it will help you to better structure your application and code.

    - GeeksforGeeks MVC Architecture

5. Familiarity with Node.js and npm: While not directly related to writing Angular code, Node.js and the Node Package Manager (npm) are often used in the development environment for Angular applications. Knowledge of these tools can help you manage dependencies, run tests, and perform other development tasks.

- Node.js Official Documentation
- npm Official Documentation

6. Single Page Applications (SPA): Angular is often used to build SPAs, so understanding how SPAs work and why they are useful can help you make the most of Angular's features.

    - MDN Introduction to SPA

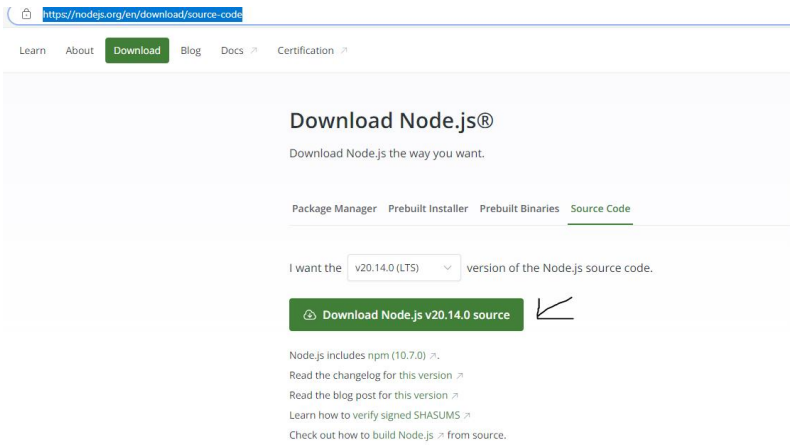
Angular setup/installation steps

Setting up Angular on your system involves a series of steps. Here they are:

- Install Node.js and npm: Angular requires Node.js and npm package manager for its working. You can download Node.js from its official website: Node.js Download. The Node Package Manager (npm) comes bundled with Node.js. After installing, you can verify the installation by running the following commands in your terminal:

  node -v
  npm -v

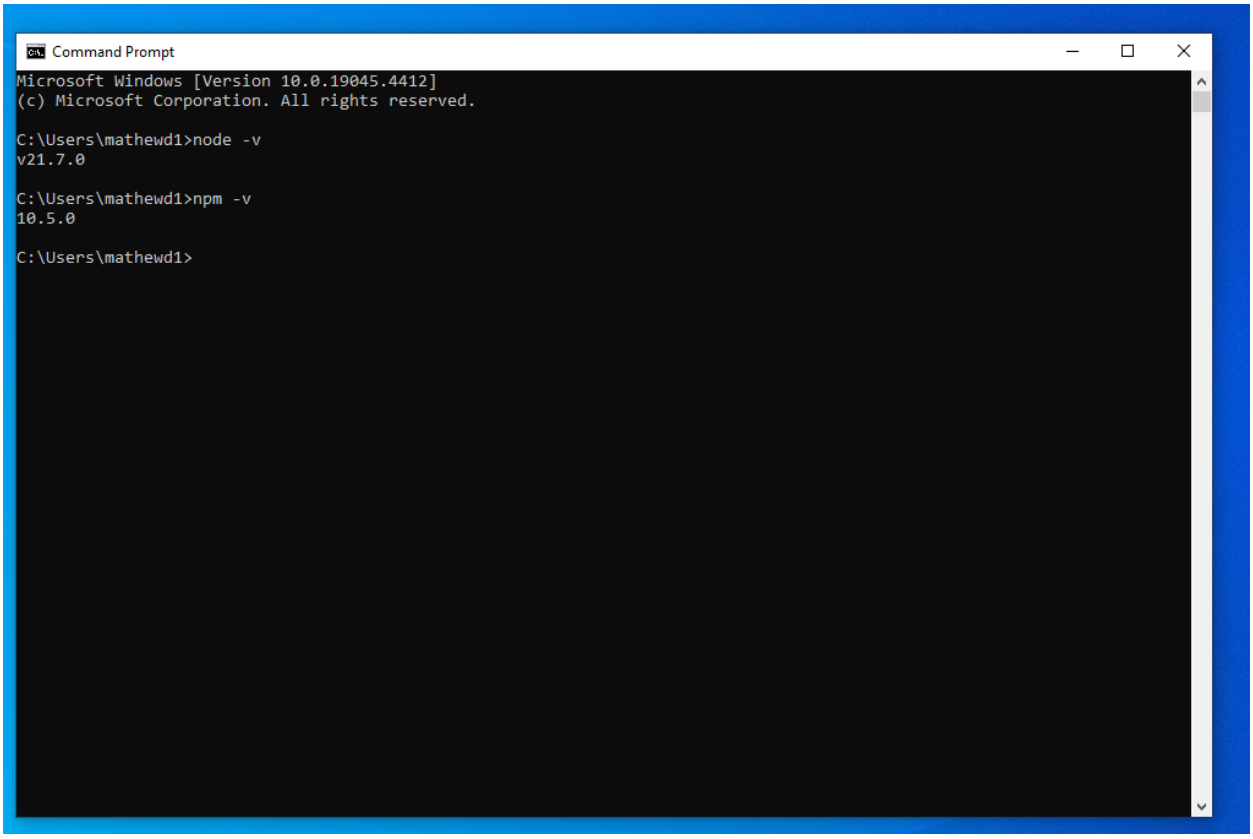
  Steps:
  a. navigate to Download Node.js and download node by following the instructions.



  Note: *You do not need to install Node.js in any specific path. The Node.js installer handles the installation path and environment setup for you. When you run the installer, it will suggest a default location. For Windows, the location is typically* ***C:\Program Files\nodejs\.***

During the Node.js installation, the installer will automatically add Node.js to your system's PATH environment variable. The PATH is a list of directories that tells your operating system where to look for executable files when a command is run.

Once the installation is complete, you can verify that Node.js and npm are installed correctly by opening a new command line or terminal window (to ensure it has the updated PATH) and running the commands node -v and npm -v. If both commands return a version number, then they're installed correctly.



Ignore the version in the screenshot

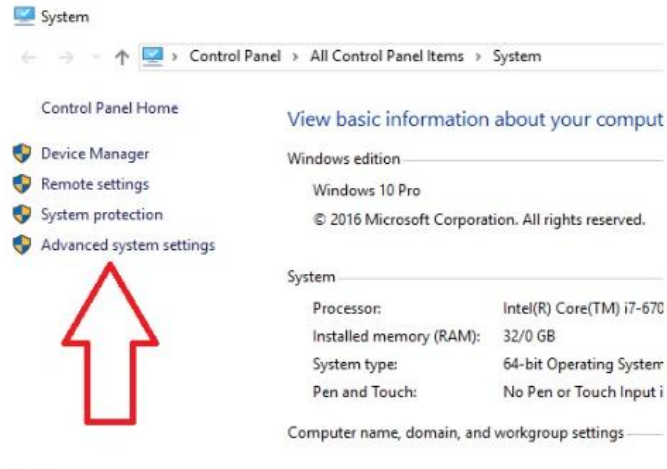
If the Node.js path is not set automatically after installation, you can manually add it to your environment variables.

For Windows:

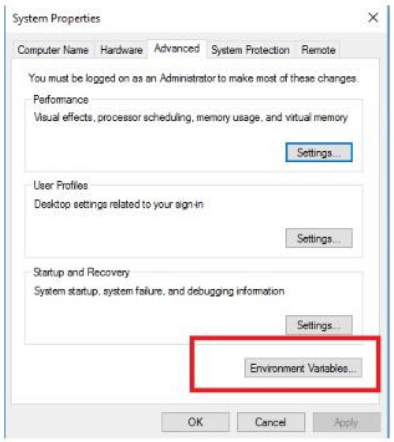
1. Find the path where Node.js is installed. The default is typically C:\Program Files\nodejs\.
2. Right-click on 'Computer' or 'This PC' on your desktop or in File Explorer, and choose 'Properties'.
3. Click on 'Advanced system settings'.
4. In the System Properties window that appears, click on the 'Environment Variables...' button.
5. In the Environment Variables window, under 'System variables', find the 'Path' variable and select it. Click 'Edit...'.
6. In the Edit Environment Variable window, either click 'New' and type in the path of the directory where Node.js was installed, or if 'New' is not available, append the path at the end of the variable value followed by a semicolon (;) without any spaces.
7. Click Ok in all windows.

step 1:

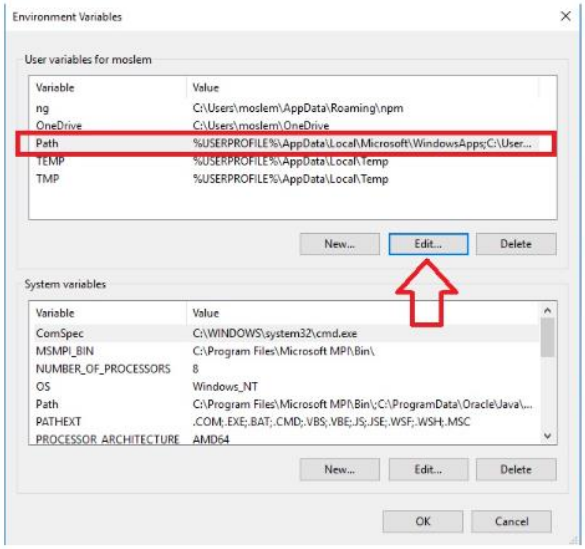
step 2 :



step3:



step4:



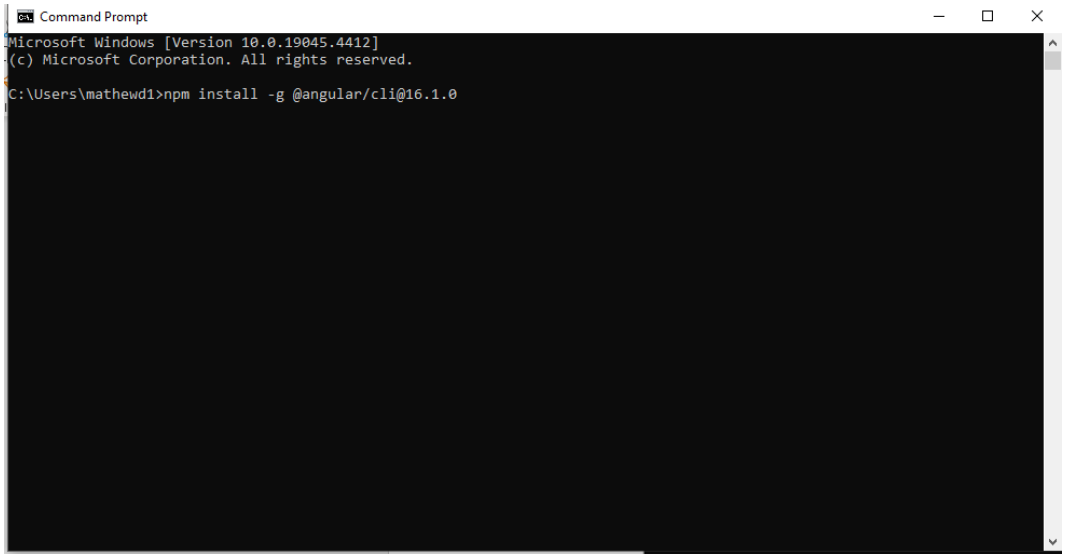
- Install Angular CLI: Angular CLI (Command Line Interface) is a powerful tool that lets you initialize, develop, scaffold, and maintain Angular applications directly from a command shell.

  You can install it globally on your system using npm with the following command:

  STEPS:

1. Open your terminal or command prompt.
2. You can install Angular CLI globally on your machine by using the following command:
   npm install -g @angular/cli

   To install specific version, use below command(*so we will be using Angular 16 , so you can install)*
   `npm install -g @angular/cli@16.1.0`



The -g flag in this command tells npm to install Angular CLI globally. After running this command, you can use the ng command from any directory within your terminal.

You can verify the installation by checking the version of Angular CLI using the following command:

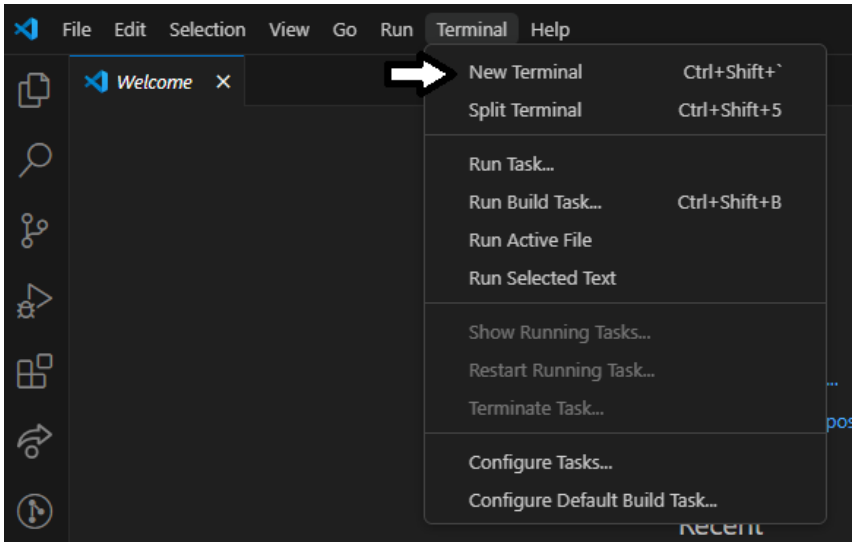
ng –version

- Create a new Angular project:

  Once the Angular CLI is installed, you can create a new Angular project by using the following command (replace my-app with your desired project name): **ng new my-app**

  The CLI will ask you a few questions regarding the setup. For a beginner, it's fine to stick with the default settings.

  NOTE: *you can run these commands in Visual Studio Code (or any other editor of your choice)*



- Serve the application: Navigate into the project directory and start the server:

  cd my-app ng
  serve

  By default, the application will be served at http://localhost:4200/. You can open this URL in your web browser to see your new Angular application in action.

  For Create a new Angular project YOU CAN FOLLOW URL :
  https://www.tektutorialshub.com/angular/angular-create-first-application/

Remember, while the setup process is generally straightforward, it can vary slightly depending on the specifics of your system configuration. Be sure to refer to the official Angular documentation if you encounter difficulties: Angular Setup & Installation.