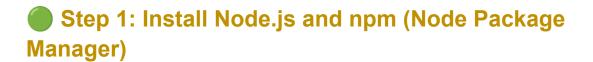


Angular is a TypeScript-based front-end framework developed and maintained by Google. It is used for building Single Page Applications (SPA) with powerful data binding, component architecture, and modern tooling.



🧱 Angular 19 Installation – Step-by-Step 🥹



Why?

Angular runs in the Node is environment and uses npm to manage libraries and tools.

How to Install:

- 1. Go to the official Node.js website:
 - https://nodejs.org
- 2. Download the LTS (Long-Term Support) version (e.g., 18.x or later)

```
After installation, verify:
node -v
npm -v
You should see version numbers like:
node: v22.1.0
npm: 9.5.1
```

Step 2: Install Angular CLI Version 19

Why?

Angular CLI (Command Line Interface) helps you create and manage Angular projects with simple commands. Installing version 19 ensures you're using the latest stable Angular version.

Install Globally:

npm install -g @angular/cli@19

- -g: Installs the package globally on your system
- @19: Ensures version 19 is installed (replace @19 with a specific version if needed)

```
Confirm installation:
ng version

You'll see output like:
Angular CLI: 19.2.0
Node: 18.x
Package Manager: npm
Angular: 19.0.0
...
```

Step 3: Create a New Angular 19 Application

Use the Following command in the terminal : No see the Following command

The CLI will ask:

- 1. Would you like to add Angular routing?
 - Choose **Yes** if your app will use multiple pages (routes)
- 2. Which stylesheet format would you like to use?
 - o Options: CSS, SCSS, SASS, LESS, or Stylus
 - Choose CSS if you are just getting started

The CLI will:

- Create the project folder
- Install required dependencies (node_modules)
- Set up tsconfig.json, angular.json, etc.
- Generate a working template app

Navigate into the app folder:

cd my-angular-app

Step 4: Serve the Angular Application (Start Dev Server) 😀

Start the development server:

ng serve

- This compiles and starts the app
- Default port is 4200

Open in browser:

http://localhost:4200

You'll see a welcome screen that says "Welcome to my-angular-app".

Step 5: Explore Project Structure

Here's what Angular CLI generates:

```
my-angular-app/
    - src/
      – app/
          app.component.ts
                               # Component logic

    app.component.html # Component template

         app.module.ts
                              # Root module
                          # Images, icons, etc.
       - assets/
       - index.html
                           # Main HTML page
                           # Angular CLI config
   angular.json
   package.json
                            # Dependencies & scripts
    - tsconfig.json
                           # TypeScript settings
    - node_modules/
                              # Installed packages
```



Useful Angular CLI Commands

Command	Purpose
ng generate component xyz	Creates a new component
ng build	Compiles app for production
ng g s xyz	Create a Service
ng test	Runs unit tests
ng serve	Starts development server