

Angular CLI

Angular CLI

Angular CLI is a command-line tool for developing, scaffolding and maintaining Angular applications.

Angular CLI

To install the Angular CLI - The CLI tool for Angular:

→ `npm i -g @angular/cli`

Read more about the angular package:

<https://www.npmjs.com/package/@angular/cli>

Create Angular Project

Create Angular Project

After installing the angular package (@angular/cli), use this command to create the Angular project:

→ `ng new project_name`

```
● PS C:\Users\d.kanaan.ext\Desktop> ng new TheLearningHub
? Would you like to add Angular routing? Yes
? Which stylesheet format would you like to use? CSS
```

Create Angular Project

To run the project, use this command:

→ `ng serve -o`

```
PS C:\Users\d.kanaan.ext\Desktop\TheLearningHub> ng serve -o
```

```
? Would you like to share pseudonymous usage data about this project with the Angular Team  
at Google under Google's Privacy Policy at https://policies.google.com/privacy. For more  
● details and how to change this setting, see https://angular.io/analytics. Yes
```

Create Angular Project

To know what the Angular version , use this command :

→ ng version

```
PS C:\Users\d.kanaan.ext\Desktop\TheLearningHub> ng version
```

Angular CLI

```
Angular CLI: 16.0.4  
Node: 18.16.0  
Package Manager: npm 9.5.1  
OS: win32 x64
```

```
Angular: 16.0.4  
... animations, cli, common, compiler, compiler-cli, core, forms  
... platform-browser, platform-browser-dynamic, router
```

Package	Version
@angular-devkit/architect	0.1600.4
@angular-devkit/build-angular	16.0.4

Exercise

Search about What happens when we do NG serve?



Note: By default, angular project run on port **4200**.

- PS C:\Users\d.kanaan.ext\Desktop\TheLearningHub> ng serve -o
✓ Browser application bundle generation complete.

Initial Chunk Files	Names	Raw Size
vendor.js	vendor	2.26 MB
polyfills.js	polyfills	328.94 kB
styles.css, styles.js	styles	226.38 kB
main.js	main	48.12 kB
runtime.js	runtime	6.53 kB
Initial Total		2.86 MB

Build at: 2023-06-05T13:05:58.878Z - Hash: 5339c3b817c18923 - Time: 7629ms

** Angular Live Development Server is listening on localhost:4200, open your browser on
http://localhost:4200/ **

✓ Compiled successfully.

Create Angular Project

We will create an LMS website (TheLearningHub) during this course, to create the angular project for our demo, use this command:

→ `ng new TheLearningHub`

```
● PS C:\Users\d.kanaan.ext\Desktop> cd .\TheLearningHub\  
PS C:\Users\d.kanaan.ext\Desktop\TheLearningHub> |
```

Create Angular Project

Go to The Learning Hub project using the cd command.

```
● PS C:\Users\d.kanaan.ext\Desktop> cd .\TheLearningHub  
  PS C:\Users\d.kanaan.ext\Desktop\TheLearningHub> code .  
○ PS C:\Users\d.kanaan.ext\Desktop\TheLearningHub> 
```

TheLearningHub project files:

✓ THELEARNINGHUB

- > .angular
- > .vscode
- > node_modules
- > src
- .editorconfig
- .gitignore
- angular.json
- package-lock.json
- package.json
- README.md
- tsconfig.app.json
- tsconfig.json
- tsconfig.spec.json

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Angular project files

node_modules: You can think of the node_modules folder as a cache for the external modules that your project depends upon. NPM installs these modules with the NPM service, which downloads them from the web and copies them into the node_modules folder.

src: The project will be worked on in this folder.
Inside the src, the app folder was created during the project setup and holds all the required files for the project.

Angular project files

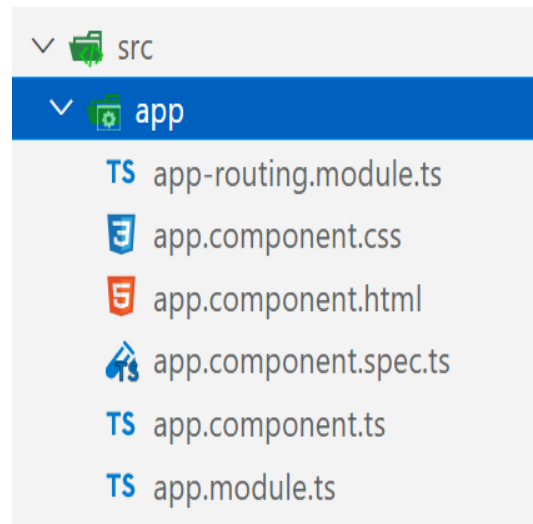
assets: It contains the resources such as images, videos, audio, and bootstrap files.

index.html: It is the first file that will be loaded in the angular project.

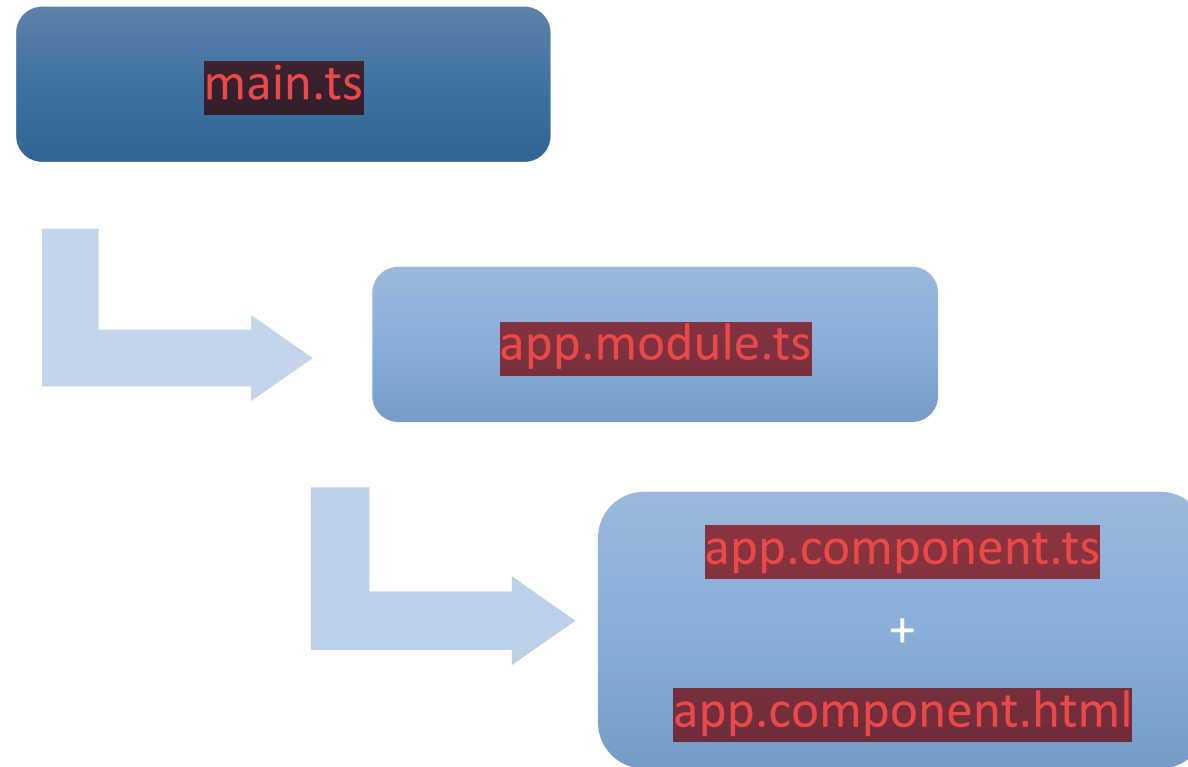
styles.css: It contains the CSS style that you would apply to the whole project.

Angular project files

By default, the angular project contains one component called the **app component**.



The Flow of Execution of Angular App.



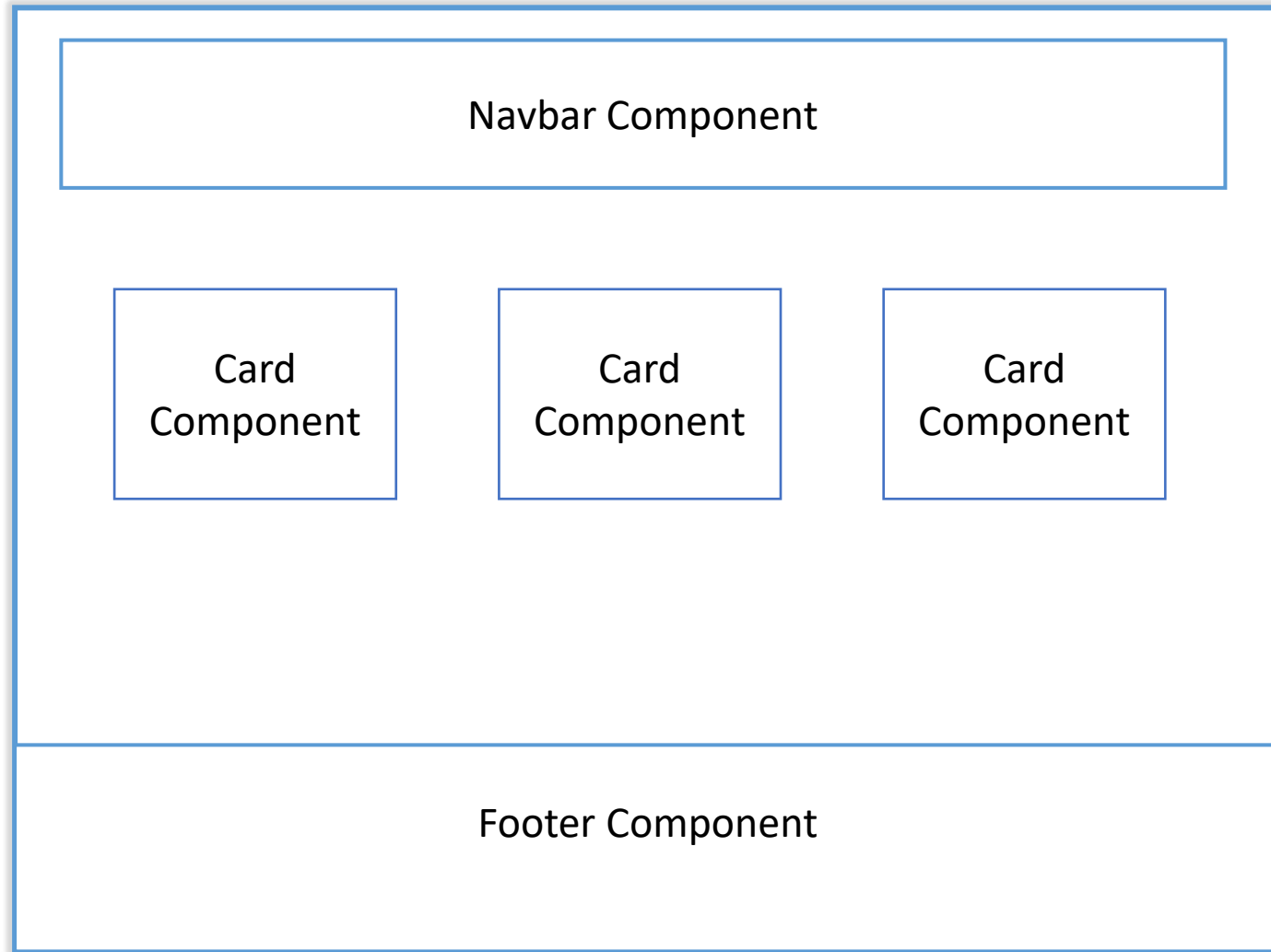
The Flow of Execution of Angular App.

Component in Angular

Overview of Angular Component

Components are the basic building blocks of an Angular application.

The Component defines the view and its data, which determine how the view appears and behaves.



Overview of Angular Component

Components in Angular are JavaScript/TypeScript classes that are **defined** using **@component Decorators**.

Using the Decorator, the component **can display a view & get metadata** about the class.

Data Binding is the process used by the component to **pass data to the view**. (We will discuss it in Chapter 02).