

Angular -8

Angular CLI Installation, Angular Directory Structure

Presentation by RAJ PRUDHVI

Contact us: <https://training.uplatz.com>

Email: info@uplatz.com

Phone: +44 7836 212635



ANGULAR CLI

- ❖ The Angular CLI helps us to quickly create an Angular application with all the configuration files and packages in one single command
- ❖ The Angular CLI makes it easy to create an application that already works, right out of the box.
- ❖ It also helps us to add features (components, directives, services, etc) to existing Angular applications.
- ❖ <https://cli.angular.io/>
- ❖ The Angular CLI creates the Angular Application and uses Typescript, Webpack (for Module bundling), Karma (for unit testing), Protractor (for an end to end testing).

```
npm install -g @angular/cli
```

CREATING A NEW ANGULAR APPLICATION

- ❖ The creation of your First Project Angular has become very simple using Angular CLI. All you need to run the command from the Prompt

`ng new AngularApp1`

- ❖ The above command will create a folder AngularApp1 and copies all the required dependencies and configuration settings
- ❖ The Angular CLI does the following
 - Creates a new directory AngularApp1
 - Sets up the folder structure for the application
 - Downloads and installs Angular libraries and any other dependencies
 - Installs and configures TypeScript
 - Installs and configures Karma & Protractor for testing

Running your new Angular Project

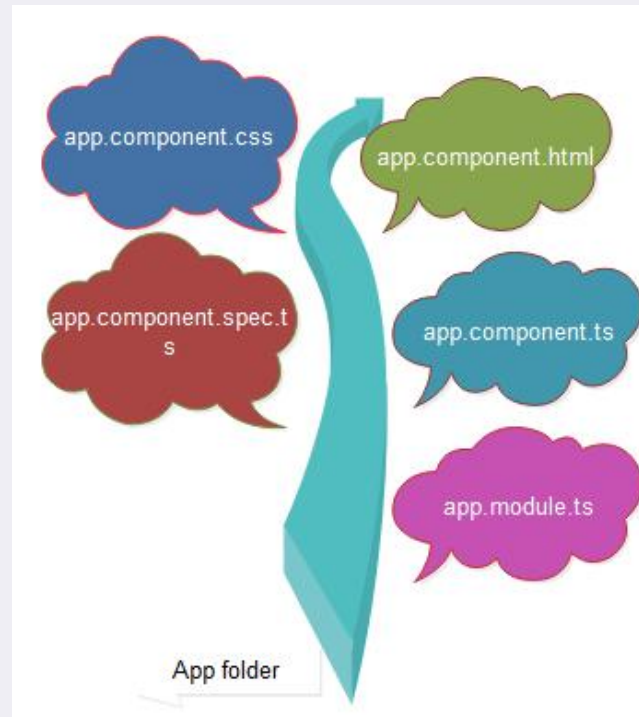
- ❖ To run your application all you need to do is type the following command

ng serve

- ❖ The above command compiles the Angular application and invokes the Webpack development server. The server keeps a watch on our project folder. If you make any changes in the code, it compiles the project again.
- ❖ You can also use **npm start**
- ❖ The Webpack Development server listens on HTTP Port 4200. Hence open the browser and type <http://localhost:4200/> and you will see AngularApp1 app is running displayed on the browser.

Angular Project Folder Structure

- Open the Project Directory from Visual Studio Code and you will see the following folder structure
- The root folder application contains subfolders e2e, node_modules and src. It also contains the few configuration files
- **src folder:** It is the folder which contains the main code files related to our angular application.



Angular Project Folder Structure

- **app folder:** It contains the files which we have created for app components.
- **app.component.css:** The file contains the CSS (cascading style sheets) code in our app component.
- **app.component.html:** The file contains the HTML code related to its app component. It is the template file which is specially used by angular to the data binding.
- **app.component.spec.ts:** This file is a unit testing file to the app component. we can run from angular CLI by command *ng test*.
- **app.component.ts:** It is the essential typescript file which includes the view logic behind the component.
- **app.module.ts:** It is also a typescript file which consists of all dependencies for the website. The data is used to define the needed modules to be imported, the components to be declared, and the main element to be bootstrapped.

Other Important Files in Angular 8

package.json: It is the npm configuration file. It includes details of our website and package dependencies with more information about our site being a package itself.

package-lock.json: This is an auto-generated and transforms files that gets updated when npm does an operation related to the node_modules or package.json file.

angular.json: It is a necessary configuration file related to our angular application. It defines the structure of our app and includes any setting to accomplish with the application.

.gitignore: The record is related to the source code git.

.editorconfig: This is a standard file which is used to maintain consistency in code editors to organizing some basics, such as indentation and whitespaces.

Other Important Files in Angular 8

Assets folder : This folder is a placeholder for the resource files which are used in the application such as images, locales, translations, etc.

Environment folder : The environment folder is used to grasp the environment configuration constants that help when we are building the angular application.

Index.html : It is the entry file which holds the high-level container for the angular application.

karma.config.js : It specifies the config file in the karma Test runner, Karma has been developed by the AngularJS team and can run tests for AngularJS and Angular 2+.

main.ts : This is the main ts file that will run; first, It is mainly used to define the global configurations.

Other Important Files in Angular 8

polyfills.ts : The record is a set of code that can be used to provide compatibility support for older browsers. Angular 8 code is written in ES6+ specifications.

test.ts : It is the primary test file that the Angular CLI command ***ng test*** will apply to traverse all the unit tests within the application.

styles.css: It is the Global Style Sheet of angular application

tsconfig.json: This is a typescript compiler of the configuration file.

tsconfig.app.json : It is used to override the ts.config.json file with app-specific configurations.

tsconfig.spec.json : It overrides the tsconfig.json file with the app-specific unit test cases.



Thank You

Contact us: <https://training.uplatz.com>

Email: info@uplatz.com

Phone: +44 7836 212635

