

Angular Cli

Scaffolding angular app

Problem - Creating new Angular app

When creating a new angular app there is a lot of repetitive tasks we need to do in our project

- Install webpack
- Install typescript
- configure webpack and typescript to work together
- install test framework
- environment variables

scaffolding a new angular project and setting the above list can take a lot of time

Angular Scaffolding tool - @angular/cli

- angular cli is used to start a new angular project
- we install angular cli with npm and usually install it as global npm package
- you can type **ng -v** to verify that it's installed
- you can type **ng help** if you want to see help on the available commands

New Angular Project

- to start a new project:
 - `ng new <project-name>`
- the above command will create a new folder
- Let's run the command and examine what is created.

Student EX

- install @angular/cli globally
- create a new project
- run the project

What our new project contains

- **e2e** - we can create end to end tests using **protractor**. the tests we put in this folder
- **unit testing** - karma and jasmine are configured to run unit tests. unit tests file has a **spec.ts** extension
- **src/app** the application code is located in this folder
- **src/environments** - used for supplying changing variables based on environment
- **lint** - used to alert us on code styling, rules are set to apply for angular code styling

Running our app

- to run our app
 - `ng serve`
- this will run our app at <http://localhost:4200>
- additional flags
 - `--port`, `--host`, `--environment`
- you can check additional options for the command by running:
 - `ng serve --help`
- app will auto reload when changing files

Generating components

- we can use angular cli to create angular architecture components
- during the course we won't use this functionality in order to better understand how to do things ourselves
- the syntax is:
 - **ng generate <type of architecture component> <name>**

Build

- you can use angular cli to build your project
- the command is:
 - `ng build`
- a dist directory with the application will be prepared
- you can add **--prod** if you want the output minimized and tree shaking optimization

Miscellaneous

- some other commands you can use include:
 - **ng lint**
 - **ng test**
 - **ng e2e**

Summary

- it's highly recommended to start your angular project with @angular/cli
- @angular/cli can save you a lot of time while starting your angular app