Contents

Angular

Angular is a web framework for developing fast and reliable web applications based on TypeScript.

Project Structure

Root

path	features
./	Konfigurationsdateien / ENV
./public	static file serving
./src	source

/src

path	features
./src/styles.css	global CSS
./src/main.ts	bootstrapper
./src/index.html	HTML wrapper without body
./src/app	app code

/app

path	features
./	

Code

main.ts

```ts
import { bootstrapApplication } from '@angular/platform-browser';
import { appConfig } from './app/app.config';
import { AppComponent } from './app/app.component';

bootstrapApplication(AppComponent, appConfig)
    .catch((err) => console.error(err));
```

index.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <title>Demos</title>
    <base href="/">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="icon" type="image/x-icon" href="favicon.ico">
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com/" crossorigin>
    <link href="https://fonts.googleapis.com/css2?family=Be+Vietnam+Pro:ital,wght@0,400;0,70
</head>
<body>
    <app-root></app-root>
</body>
</html>
```

Component Lifecycle

1. Component creation: `ngOnChanges()` -> `ngOnInit()`
2. Content projection: `ngAfterContentInit()` -> `ngAfterContentChecked()`
3. View Initialization: `ngAfterViewInit()` -> `ngAfterViewChecked()`
4. Change detection runs repeatedly: `ngDoCheck()` -> `ngAfterContentChecked()` -> `ngAfterViewChecked`
5. Component destruction: `ngOnDestroy()`

Forms

Template Driven Forms

- simple to set up and use
- suitable for smaller forms
- angular handles most logic automatically

Reactive Forms

- offer more control
- for complex and dynamic forms
- better scalability and testability
- form login is implemented in component class

Modules

Container that organizes related code. - you can define your own modules - groups components, services and elements into a *cohesive unit* - modular architecture enables **lazy loading**