**SETUP:**

1. Angular tutorial - Prat 1 -setup + project creation
2. Install Node JS : https://nodejs.org/en/download
3. check if Node & NPM installed or not : npm -v & node -v
4. Install angular cli - npm i @angular/cli
5. Check if it installed : ng version
6. https://angular.dev/tutorials/learn-angular : angular website
7. create new project : ng new angular-18-tutorial
8. GitHub repo : https://github.com/rawatankita/Angular\_18\_tutorial
9. npm install
10. ng serve --o
11. multiple port : ng serve --port 4204

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**Setup questions:**

✔ Which stylesheet format would you like to use? CSS [ https://developer.mozilla.org/docs/Web/CSS ] ✔ Do you want to enable Server-Side Rendering (SSR) and Static Site Generation (SSG/Prerendering)? No ? Do you want to create a 'zoneless' application without zone.js (Developer Preview)?

**Answer**:

Great question! A zoneless Angular application is one that runs without zone.js, which traditionally handles change detection in Angular. This new approach is part of Angular’s Developer Preview and aims to improve performance, debugging, and compatibility.

🚀 Why Go Zoneless?

Better performance: Avoids unnecessary change detection cycles.

Smaller bundle size: Removes zone.js from your build.

Improved debugging: Cleaner stack traces.

Future-ready: Avoids monkey-patching browser APIs, which can break with newer features.

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**new changes in angular 18+**

no app.module.ts file : changed to app.config.ts

zoneless change detection

app.route.ts : constant file

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**Angular 18 tutorial part 2:**

**Project files and structure:**

package.json : (dependencies and packages)

angular.json : (project setup/ architecture file)

style.css

gitignore

tsconfig.json : (typescript configuration)

main.ts ( first file to execute when app start)

index.html (Single page application one file only index.html load)

app.config.ts

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**package.json**

dependency : ( part of angular build)

dev dependency : (to run angular project locally and not part of your build)

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🧭 1. main.ts — The True Entry Point

Located in src/main.ts, this file is where Angular begins execution.

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**Angular 20 highlights**

You're absolutely right to notice a change in Angular 20's structure. In earlier versions, the angular.json file explicitly listed the path to index.html under the build options. But in Angular 20, the configuration has evolved.

🧾 What's New in Angular 20?

According to the official Angular workspace configuration guide:

The angular.json file still exists and controls build and development settings.

However, the index option may not be explicitly listed unless customized.

Angular CLI assumes default paths unless overridden.

🗂 Default Behavior

If you don’t see index.html in angular.json, it’s because Angular 20 uses convention over configuration:

It assumes your index.html is located at src/index.html.

Unless you change it, there's no need to declare it explicitly.

🛠 How to Customize It (If Needed)

You can still manually add or override the index file path like this:

json

"projects": {

"your-app-name": {

"architect": {

"build": {

"options": {

"index": "src/custom-index.html"

}

}

}

}

}

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