

ANGULAR PROJECT ANATOMY

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BEGINNING

- An Angular project is basically an NPM project
- If you have git installed, the newly created project is initialized as a git repository
- Also, .gitignore is added to exclude library and output folders
- Through Angular CLI, you get a project with testing scaffolding as well



TOP-LEVEL FOLDERS

Folder	Description
e2e	Folder to contain end-to-end test project (Protractor is the tool Angular uses)
node_modules	Project-level local repository for npm packages
src	Source files for the Angular project

TOP-LEVEL FILES

Files	Description
.gitignore	Exclusion list for git
angular.json	Angular build configuration file
browserlist	Configuration used for polyfilling
karma.conf.js	Configuration for Karma test runner used for unit tests
package-lock.json	All internal dependencies for the project
package.json	Project-level dependencies
tsconfig.app.json	Extension to tsconfig.json used exclusively for main.ts and test.ts
tsconfig.json	TypeScript compiler options (Angular conventions) for all .ts files
tsconfig.spec.json	Extension to tsconfig.json used exclusively for .spec.ts (test) files
tslint.json	Lint configuration for TypeScript (Angular convention) for all .ts files

FOLDERS AND FILES IN SRC

Files	Description
app	Primary directory for the project source files. Contains AppModule and AppComponent together
assets	used for storing static resources such as images
environments	Folder that contains two files, that are used by Angular build process to determine the production vs non-production environment settings
favicon.ico	Default favicon for the project used in index.html
index.html	The only HTML file of the project which houses the root component by a custom selector <app-root>
main.ts	Entry point for build process. Creates Angular platform over the DOM and bootstraps the AppModule (root module) and provides a global error handler
polyfills.ts	Provides for custom configuration for supporting features in old browsers
styles.css	Global stylesheet. Used for importing css frameworks such as bootstrap.
test.ts	Entry point for Angular testing. Initializes the test environment, prepares all spec files, and loads

FILES IN APP

Files	Description
app.module.ts	A TS class. The root module. The representative of the whole app. Provides the basic software structure as declarables, importables, and providables (injectables)
app.component.ts	A TS class. The root component file. Declared in AppModule. Has the custom selector app-root, which is used in index.html.
app.component.html	Looks like HTML, but actually Angular template file. Tied to AppComponent. When index.html uses <app-root>, this template will be rendered in the place.
app.component.css	A CSS file, tied to app.component.html template. Component-specific stylesheet. Style declared here do not permeate to other components.
app.component.spec.ts	Unit test file. Uses Jasmine structure. By default, most generated schematics such as component, directive, pipe, service, guard, etc by the CLI get .spec.ts file of their own