Angular meets GOF

Install considerations for Angular
Gobal
Project specific

Installing Angular at the Global level does eliminate a few steps when creating a future projects however saving steps is not worth the price of locking in a specific version of Angular.

Installing Angular at the Project Level locks in the project to a specific version allowing future projects can be on a different (later) version.

The Angular environment is very active with updates and improvements.

To that end, it's time to start a new Visual Code Project.

1. Open Visual Code and issue CTRL-K,CTRL-O or select 'FILE' then Open Folder from the menu.
2. Select your base development directory (c:\dev)
3. Issue CTRL-SHFT-` or New Terminal from the Terminal Menu Item
4. In the new terminal window issue the following command
5. Microsoft Windows [Version 10.0.18362.356]
6. C:\dev>npx @angular/cli new g-o-f

Issue this command starts the Angular scaffolding process with the latest version of Angular loaded specifically for that project.

The process will start and then will present the first installation choice:

Would you like to add Angular routing? (y/N)

For this project, routing will be used so 'y' is supplied as the answer.

The next response is focused on 'styling' used for the web side.

Which stylesheet format would you like to use? (Use arrow keys)
> CSS

  SCSS [https://sass-lang.com/documentation/syntax#scss   ]

  Sass [https://sass-lang.com/documentation/syntax#the-indented-syntax]

  Less [http://lesscss.org   ]

  Stylus [http://stylus-lang.com

Accepted the default of 'CSS'

Now we are off to the races:

CREATE g-o-f/tslint.json (1988 bytes)

CREATE g-o-f/.editorconfig (246 bytes)

CREATE g-o-f/.gitignore (631 bytes)

CREATE g-o-f/browserslist (429 bytes)

CREATE g-o-f/karma.conf.js (1017 bytes)

CREATE g-o-f/tsconfig.app.json (270 bytes)

CREATE g-o-f/tsconfig.spec.json (270 bytes)

CREATE g-o-f/src/favicon.ico (948 bytes)

CREATE g-o-f/src/index.html (289 bytes)

CREATE g-o-f/src/main.ts (372 bytes)

CREATE g-o-f/src/polyfills.ts (2838 bytes)

CREATE g-o-f/src/styles.css (80 bytes)

CREATE g-o-f/src/test.ts (642 bytes)

CREATE g-o-f/src/assets/.gitkeep (0 bytes)

CREATE g-o-f/src/environments/environment.prod.ts (51 bytes)

CREATE g-o-f/src/environments/environment.ts (662 bytes)

CREATE g-o-f/src/app/app-routing.module.ts (246 bytes)

CREATE g-o-f/src/app/app.module.ts (393 bytes)

CREATE g-o-f/src/app/app.component.html (25530 bytes)

CREATE g-o-f/src/app/app.component.spec.ts (1095 bytes)

CREATE g-o-f/src/app/app.component.ts (209 bytes)

CREATE g-o-f/src/app/app.component.css (0 bytes)

CREATE g-o-f/e2e/protractor.conf.js (810 bytes)

CREATE g-o-f/e2e/tsconfig.json (214 bytes)

CREATE g-o-f/e2e/src/app.e2e-spec.ts (638 bytes)

CREATE g-o-f/e2e/src/app.po.ts (262 bytes)

[................] - fetchMetadata: sill pacote version manifest for webpack-dev-serv

Once the scaffolding process has finished, you are presented with a base application that will generate a generic web page.

   Successfully initialized git.

C:\dev>

Change to the new file directory created by the generation process.

Cd c:\dev\g-o-f

Volume in drive C is Windows

Volume Serial Number is 5625-66C7

Directory of C:\dev\g-o-f

```
09/13/2019  02:29 PM    <DIR>          .
09/13/2019  02:29 PM    <DIR>          ..
09/13/2019  02:22 PM               246 .editorconfig
09/13/2019  02:22 PM               631 .gitignore
09/13/2019  02:22 PM             3,585 angular.json
09/13/2019  02:22 PM               429 browserslist
09/13/2019  02:22 PM    <DIR>          e2e
09/13/2019  02:22 PM             1,017 karma.conf.js
09/13/2019  02:29 PM    <DIR>          node_modules
09/13/2019  02:29 PM           473,541 package-lock.json
09/13/2019  02:22 PM             1,279 package.json
09/13/2019  02:22 PM             1,020 README.md
09/13/2019  02:22 PM    <DIR>          src
09/13/2019  02:22 PM               270 tsconfig.app.json
09/13/2019  02:22 PM               543 tsconfig.json
09/13/2019  02:22 PM               270 tsconfig.spec.json
09/13/2019  02:22 PM             1,988 tslint.json
              12 File(s)        484,819 bytes
               5 Dir(s)  379,039,870,976 bytes free
```

Key files at the base leve:
Package.json
Package-lock.json
Angular.json

At this point, Visual Code is still pointing at c:\dev. From the file menu, chose open folder (ctrl+k, ctrl-o) and select the g-o-f directory.
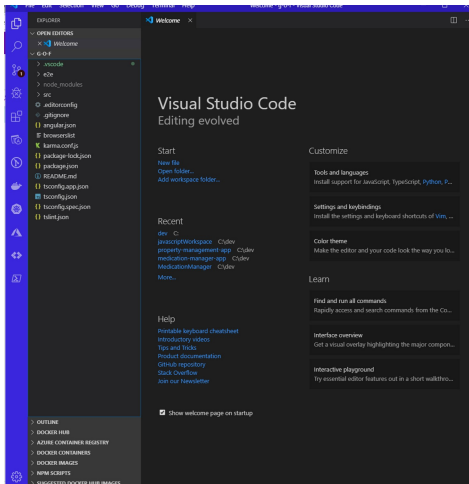
Exploring the package.json file:

```
{
  "name": "g-o-f", <-- default application name update to your preferred name
  "version": "0.0.0",<-- versioning, change to 1.0.0

The scripts below with be modified from their default implementation.

For example the "start" : "ng serve" will one of the first scripts that will be modified.
  "scripts": {
    "ng": "ng",
    "start": "ng serve",
    "build": "ng build",
    "test": "ng test",
    "lint": "ng lint",
    "e2e": "ng e2e"
  },

    • -dependencies for production
  "private": true,
  "dependencies": {
    "@angular/animations": "~8.2.5",
    "@angular/common": "~8.2.5",
    "@angular/compiler": "~8.2.5",
    "@angular/core": "~8.2.5",
    "@angular/forms": "~8.2.5",
    "@angular/platform-browser": "~8.2.5",
    "@angular/platform-browser-dynamic": "~8.2.5",
    "@angular/router": "~8.2.5",
    "rxjs": "~6.4.0",
    "tslib": "^1.10.0",
    "zone.js": "~0.9.1"
  },

    • -dependencies for development
  "devDependencies": {
    "@angular-devkit/build-angular": "~0.803.4",
    "@angular/cli": "~8.3.4",
    "@angular/compiler-cli": "~8.2.5",
    "@angular/language-service": "~8.2.5",
    "@types/node": "~8.9.4",
```

```
    "@types/jasmine": "~3.3.8",
    "@types/jasminewd2": "~2.0.3",
    "codelyzer": "^5.0.0",
    "jasmine-core": "~3.4.0",
    "jasmine-spec-reporter": "~4.2.1",
    "karma": "~4.1.0",
    "karma-chrome-launcher": "~2.2.0",
    "karma-coverage-istanbul-reporter": "~2.0.1",
    "karma-jasmine": "~2.0.1",
    "karma-jasmine-html-reporter": "^1.4.0",
    "protractor": "~5.4.0",
    "ts-node": "~7.0.0",
    "tslint": "~5.15.0",
    "typescript": "~3.5.3"
  }
}
```

Note that each module has been loaded with specific version numbers and coding that impacts future upgrades to the modules.

This is echoed in the package-lock.json file.

```
  "requires": {
    "@angular-devkit/architect": "0.803.4",
    "@angular-devkit/build-optimizer": "0.803.4",
    "@angular-devkit/build-webpack": "0.803.4",
    "@angular-devkit/core": "8.3.4",
    "@babel/core": "7.5.5",
    "@babel/preset-env": "7.5.5",
    "@ngtools/webpack": "8.3.4",
    "ajv": "6.10.2",
```

The Angular version that was installed at this point in time is 8.2.5.

Information regarding updates and versioning can be found here.

Let's run the application:

We'll use our "start" script with a slight modification. Adding the –o switch.

C:\dev\g-o-f>npm run ng serve -o

> g-o-f@0.0.0 ng C:\dev\g-o-f

> ng "serve"

If everything goes right, you should see the following:
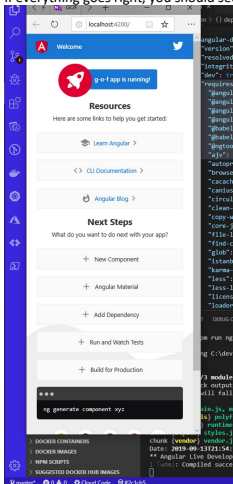
Before we go any further it is time to save the initiated project to a source control repository. Since Git is the default for VS Code, we'll be using GitHub as the SCR.

Before checking in our project, let's make a minor edit to the package.json file.

Change the start script to this: "start": "ng serve --port 5203 -o",

Now, from the visual studio ide, locate the NPM section, located bottom left.
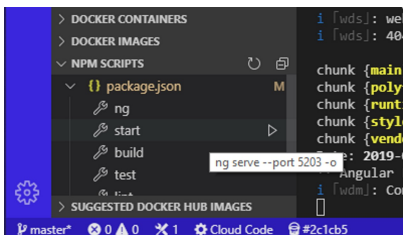
Notice how the start script has been updated. Now by clicking the 'run' icon, the application will serve up the new page on port 5203 instead of the default of 4200.
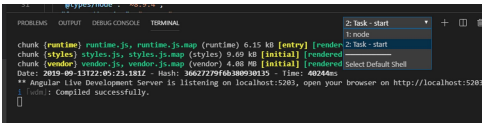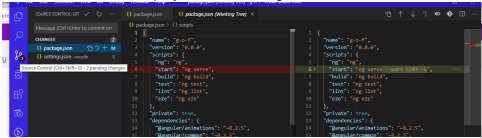
Notice that a new terminal window has opened. Issue ctrl+c to stop the running application.

Terminate batch job (Y/N)? Y

The job will terminate and you can dismiss the window by pressing any key.

Now let's check the base project before adding more default behavior. Select the SCR icon in the IDE.

The files that have been updated and select a file will show the change compared against the original. Add a comment and then check the file by clicking on the checkmark.
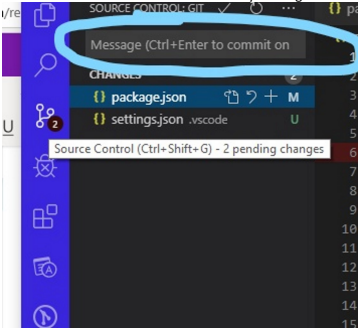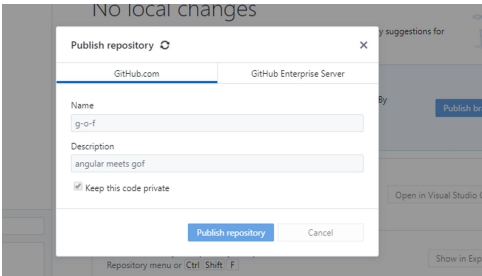

Your changes have been saved to your local repository. The last step is to add your local repository to the master code repository.

Using GitHub, open GitHub desktop the select 'add local repository from the menu and select the g-o-f folder.
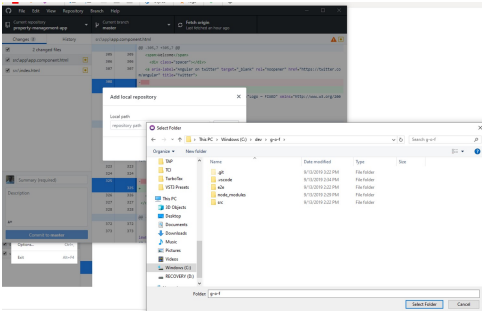
Elect to keep the code private or public then click on "Publish repository"

You are returned to the base screen. Click on publish branch to commit it to the master repository.
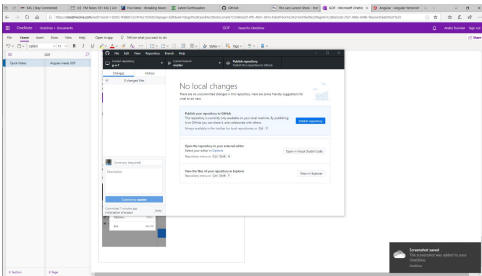
Now, let's change the status of the project from "private" to "public" on the GItHub portal.

Overview   Repositories 35

Find a repository...

g-o-f Private

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● HTML   Updated 8 minutes ago

Select the repository to change

Click on settings then navigate to the "Danger Zone", change the repositories status from private by clicking on "Make public"

You are returned to your repository listing. Notice the "Private" bade is no longer present.

g-o-f

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