



Angular for Beginners: Part 1 – Getting Started

- By Tuba Mansoor

New to angular? Don't worry! This series of articles aims to help beginners like yourself learn the basics of angular.

This is the first part of the Angular Beginners course. We will cover how to get started with Angular in this part.

What is Angular?

Angular is a framework that is based on Typescript. It is an open-source framework from Google. It is a quite different from its predecessor AngularJS. Angular is a SPA or Single Page Application because, it as the name suggests, it has a single page and part of this refreshed to provide user with different views.

Getting started

There are many editors you can use for working with Angular. But I prefer '[Visual Studio Code](#)'. If you are planning to code along with me, better to install it.

Next we need to install [node.js](#). Installing node.js will install npm too. To check if they have installed alright type in the following commands in your command prompt. This should show you the version

Go to the command prompt and type:

```
node -v
```

```
npm -v
```

Now we will be installing the angular CLI so that we can start using angular commands. Type in the following command at the command prompt.

```
npm install -g @angular/cli
```

If you are working behind a proxy, you will need to set the proxy as follows before running the command to install angular cli.

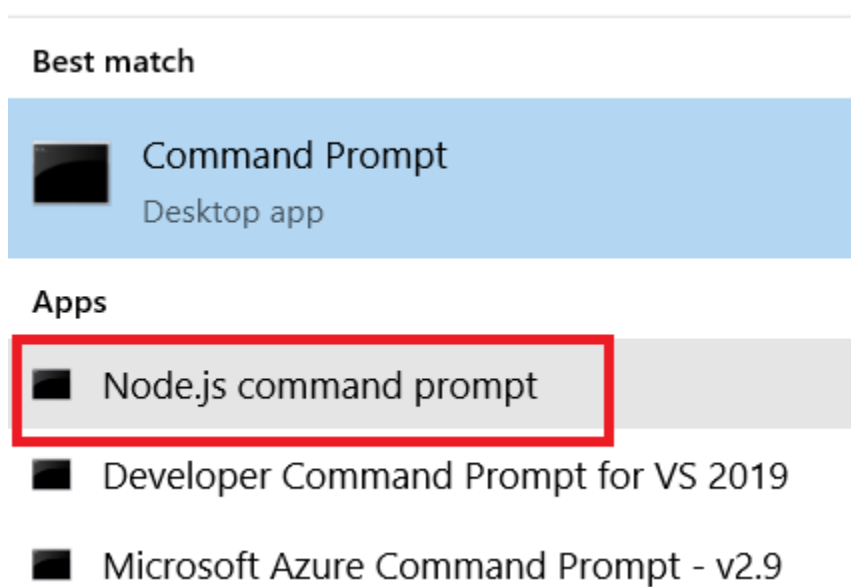
```
npm config set proxy http://username:password@proxy.thing.com:xxxx/
```

```
npm config set https-proxy http://username:password@proxy.thing.com:xxxx/
```

Run the above commands in the command prompt. Substitute your proxy in place of 'proxy.thing.com:xxxx'. Your username and password should also be encoded before using it in the above statements. You can get it encoded [here](#). Once you have set the proxy you can run the command to install the angular CLI.

Once installation is done, we are set to create our angular project.

Navigate to the path, where you want to create your app in your **Node.js command prompt**.



Type in the following command to create your new app.

ng new AngularBeginner

```
? Would you like to add Angular routing? Yes
? Which stylesheet format would you like to use? (Use arrow keys)
> CSS
SCSS  [ http://sass-lang.com/documentation/file.SASS_REFERENCE.html#syntax ]
Sass  [ http://sass-lang.com/documentation/file.INDENTED_SYNTAX.html       ]
Less  [ http://lesscss.org                                                    ]
Stylus [ http://stylus-lang.com                                                  ]
```

Here AngularBeginner is the name of our app. It will ask you whether you need routing in angular. Select Yes. Next it will ask for stylesheets. Select 'CSS'. Press Enter. It will begin installation. You will see a lot of files installing as below:

```
npm
create AngularBeginner/e2e/app.e2e-spec.ts (298 bytes)
create AngularBeginner/e2e/app.po.ts (208 bytes)
create AngularBeginner/e2e/tsconfig.e2e.json (235 bytes)
create AngularBeginner/karma.conf.js (923 bytes)
create AngularBeginner/package.json (1301 bytes)
create AngularBeginner/protractor.conf.js (722 bytes)
create AngularBeginner/README.md (1031 bytes)
create AngularBeginner/tsconfig.json (363 bytes)
create AngularBeginner/tslint.json (3012 bytes)
create AngularBeginner/.angular-cli.json (1251 bytes)
create AngularBeginner/.editorconfig (245 bytes)
create AngularBeginner/.gitignore (544 bytes)
create AngularBeginner/src/assets/.gitkeep (0 bytes)
create AngularBeginner/src/environments/environment.prod.ts (51 bytes)
create AngularBeginner/src/environments/environment.ts (387 bytes)
create AngularBeginner/src/favicon.ico (5430 bytes)
create AngularBeginner/src/index.html (302 bytes)
create AngularBeginner/src/main.ts (370 bytes)
create AngularBeginner/src/polyfills.ts (3114 bytes)
create AngularBeginner/src/styles.css (80 bytes)
create AngularBeginner/src/test.ts (642 bytes)
create AngularBeginner/src/tsconfig.app.json (211 bytes)
create AngularBeginner/src/tsconfig.spec.json (283 bytes)
create AngularBeginner/src/typings.d.ts (104 bytes)
create AngularBeginner/src/app/app.module.ts (316 bytes)
create AngularBeginner/src/app/app.component.html (1141 bytes)
create AngularBeginner/src/app/app.component.spec.ts (986 bytes)
create AngularBeginner/src/app/app.component.ts (207 bytes)
create AngularBeginner/src/app/app.component.css (0 bytes)
[.....] | fetchMetadata: sill pacote range manifest for braces@^0.1.2 fetched in 54ms
```

New app being created in command prompt.

Sit back and relax. This will take some time.

Once the installation is done. Use the command prompt command to navigate to inside the folder where your angular app is created.

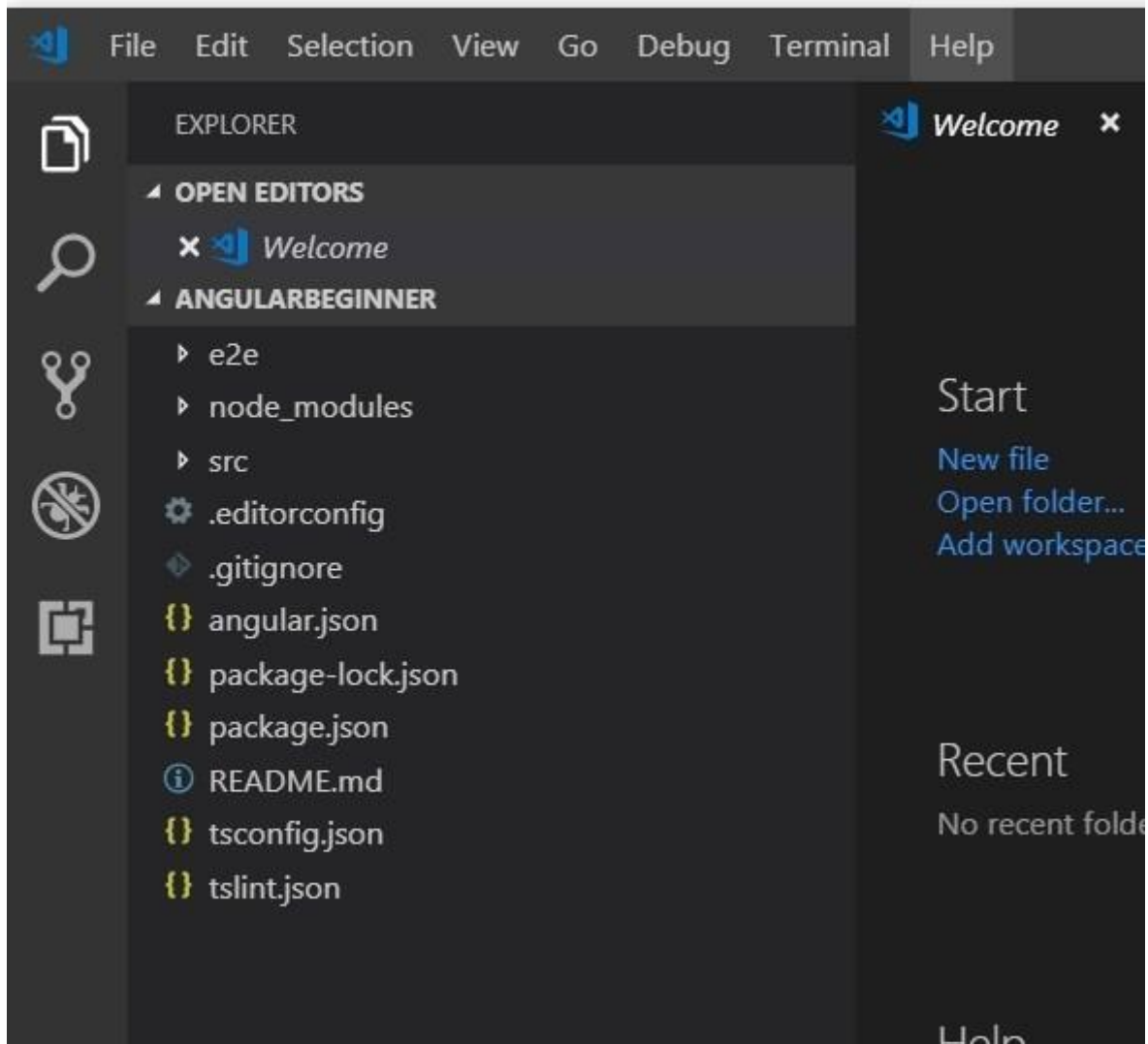
```
C:\Tuba>cd angularBeginner
```

Next type in the command to open your visual studio code.

code .

```
C:\Tuba\AngularBeginner>code .
```

Our angular code will open in Visual Studio code.

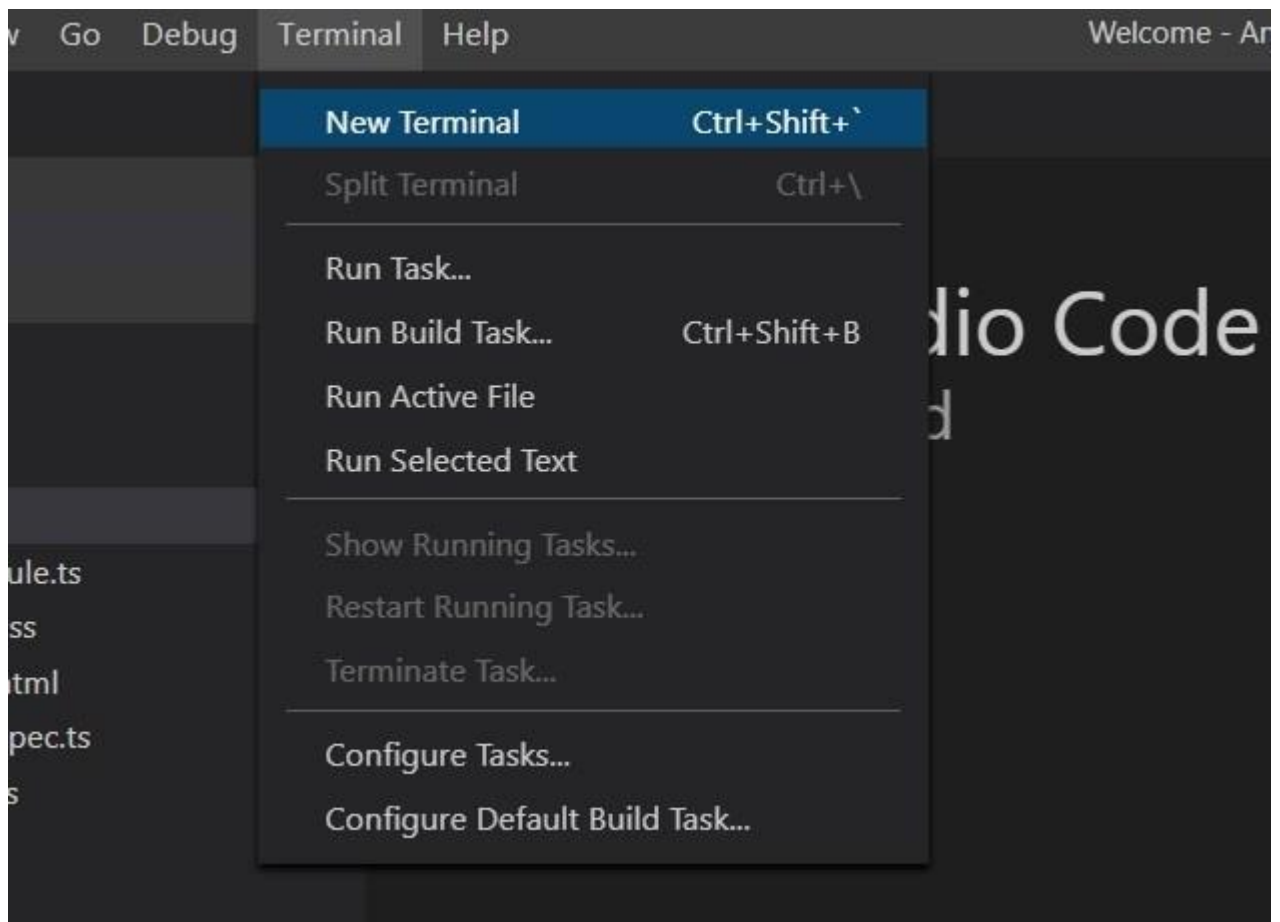


Here we can find a couple of files that angular creates. Let's discuss the important ones.

The src folder is the one that you will be using to write most of your code.

The node_modules folder contains all the packages that are needed to run your application. The packages that need to be installed will be mentioned in the package.json file. This folder contains a lot of files. When you deploy or move your code, you don't need this folder. When you again run the command npm install, the angular CLI will again install all the packages mentioned in the package.json file.

Now let's run the code. Goto the 'Terminal' window in Visual Studio Code and select 'New Terminal' as below:



This will open a terminal window.

Go and type in the following command:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

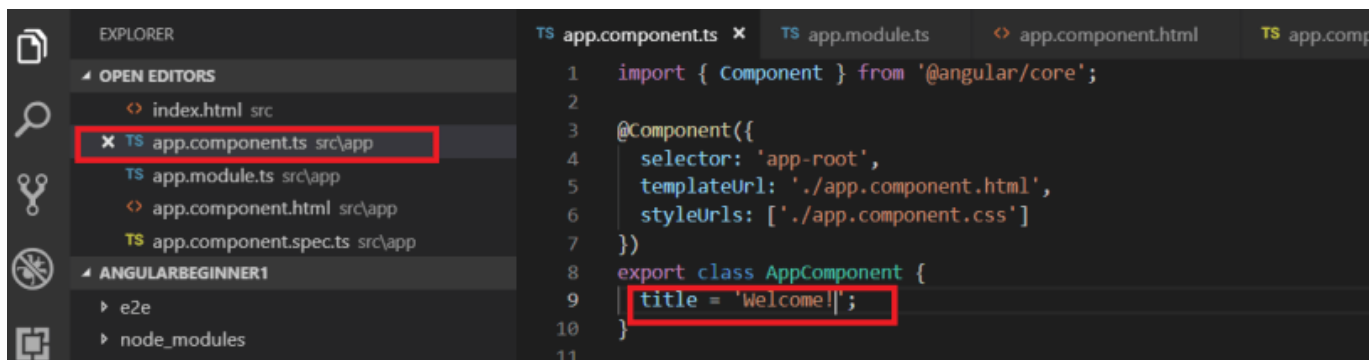
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Tuba\AngularBeginner> ng serve --o
```

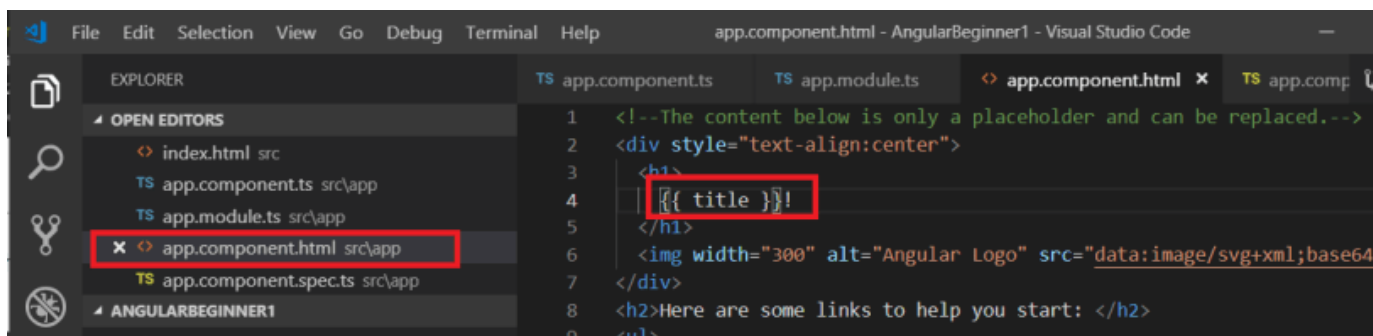
This will open your code in a new browser as below:



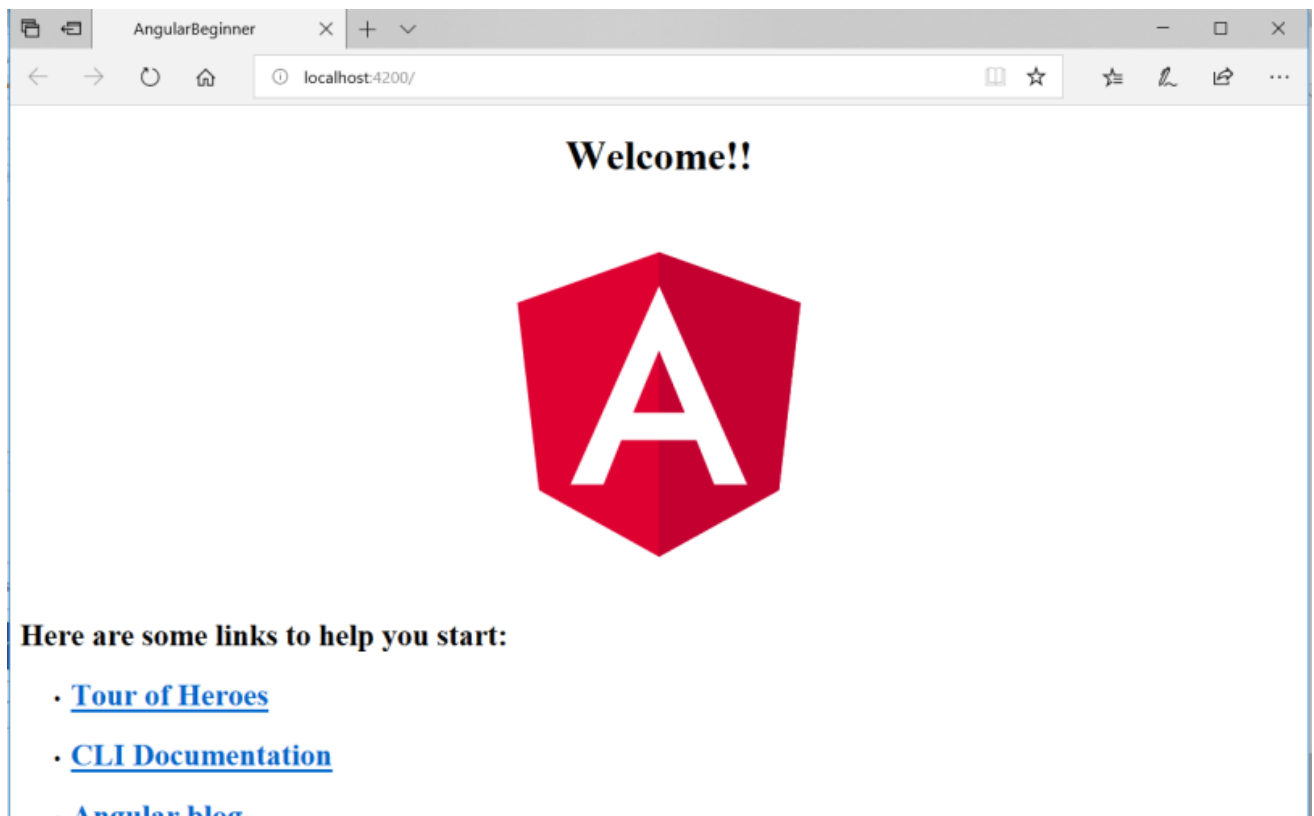
Now let's go back to our code in Visual Studio Code.



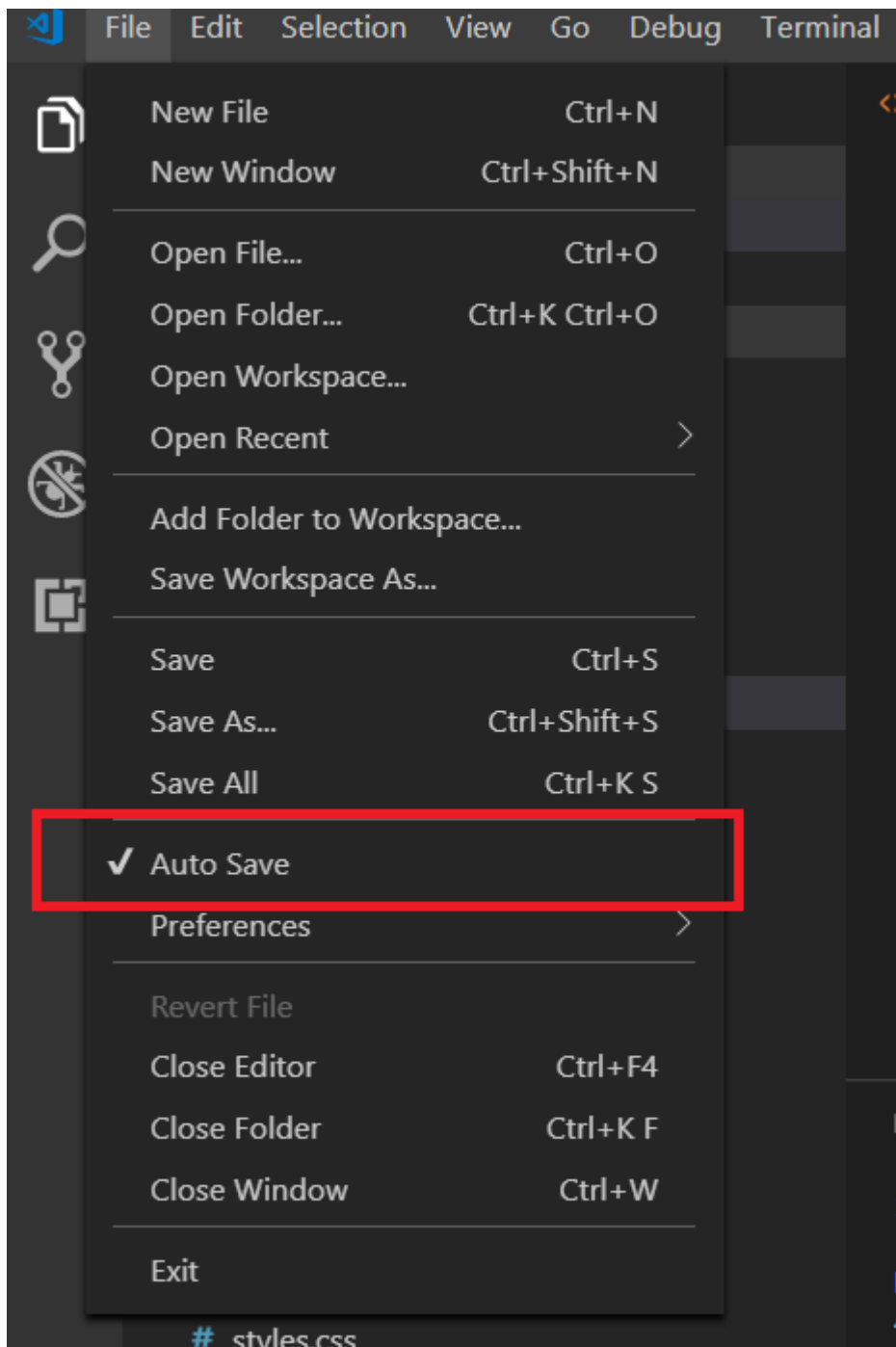
Change the title in the app.component.ts file as above. Change the app.component.html file as below:



Save the files. Go back to your browser. You will find that the title has changed.



Check the below AutoSave option to automatically save your code.

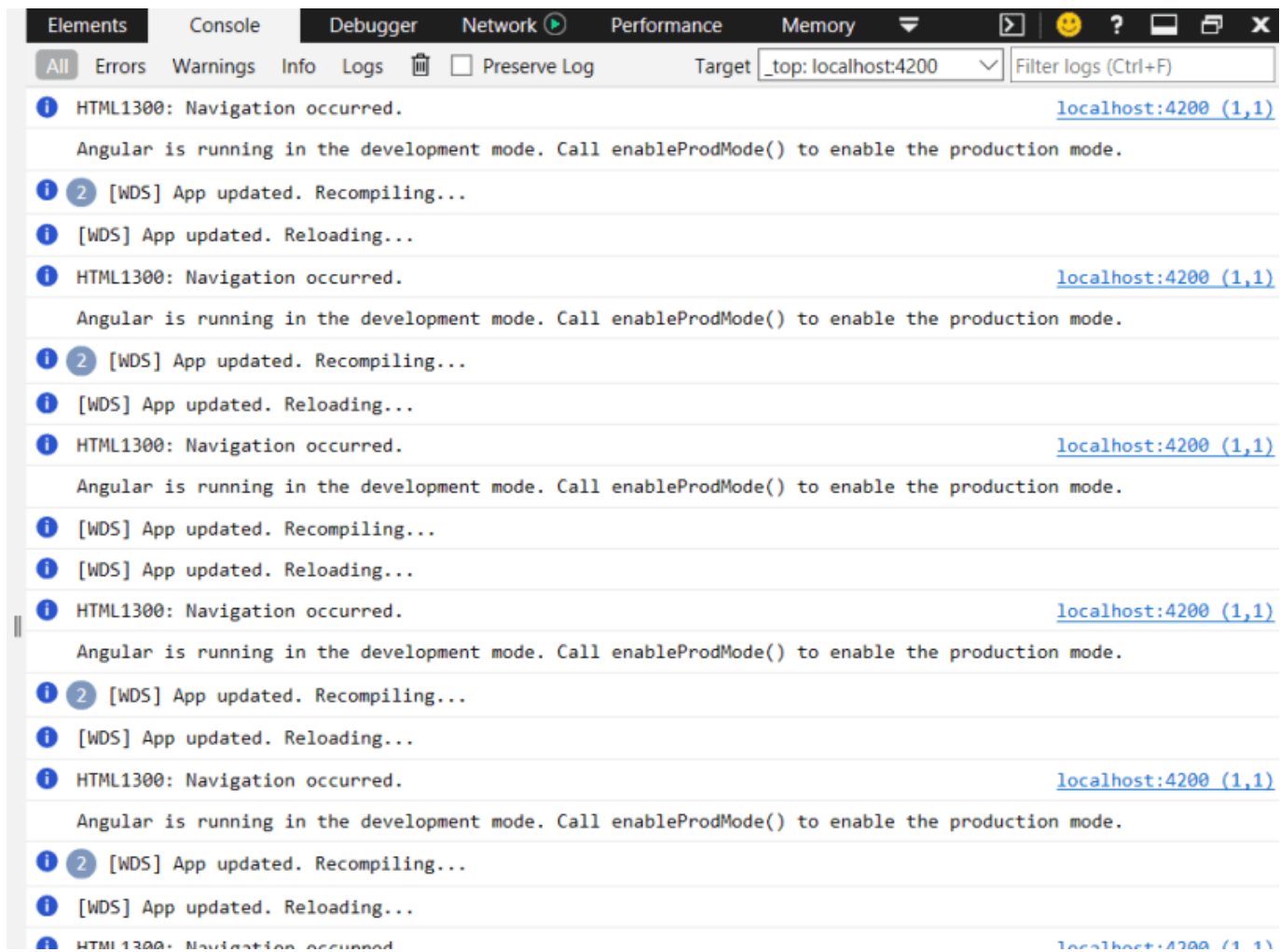


You will that whatever changes you make to your code are automatically updated in your browser.

Instead of opening a new terminal in visual studio code, you can also navigate to your angular project folder in command prompt and type in the command 'ng serve -o'.

Debugging

Once you proceed with Angular, the 'F12' key will be your friend while debugging. If there is any error, your browser will turn blank. If such case pressing on F12 will open developer console and you can find your errors here.



The console tab here will help you debug.

In the next part of this series we will discuss the basic tenets of Angular : Modules, Components & Directives.

Happy Learning!

This article was originally published on my website [taagung](http://taagung.com).