

Module 2: Angular Components and Data Binding

Demo Document 1: Create A Shopping List Component

edureka!

edureka!

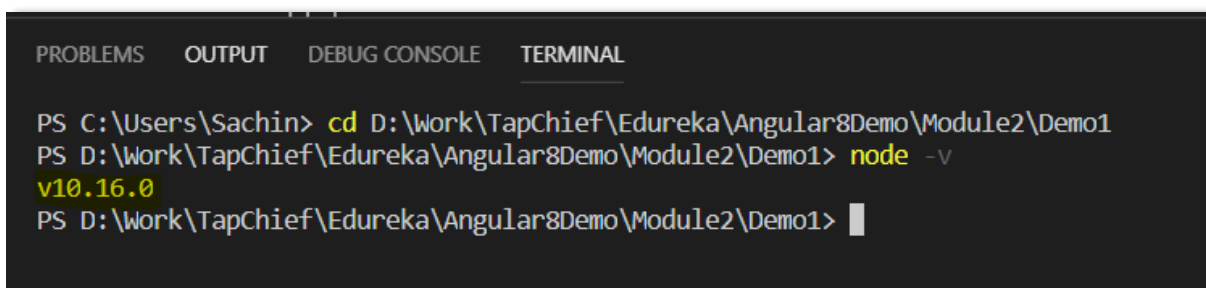
© Brain4ce Education Solutions Pvt. Ltd.

Create A Shopping List Component Using Bootstrap Styles

In this demo, we will see how to create new component using Angular and style our application using bootstrap 4.

Step 1 –

- Open Visual Studio Code, navigate to Terminal → New Terminal, it will open a new terminal window
- Check node.js version using command 'node -v' (see the screenshot below)



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS C:\Users\Sachin> cd D:\Work\TapChief\Edureka\Angular8Demo\Module2\Demo1
PS D:\Work\TapChief\Edureka\Angular8Demo\Module2\Demo1> node -v
v10.16.0
PS D:\Work\TapChief\Edureka\Angular8Demo\Module2\Demo1> 
```

- Check angular cli version using command 'ng version' or 'ng --version'



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS D:\Work\TapChief\Edureka\Angular8Demo\Module2\Demo1> ng version

Angular CLI
Angular CLI: 8.1.3
Node: 10.16.0
OS: win32 x64
Angular:
...

Package                                  Version
-----
@angular-devkit/architect               0.801.3
@angular-devkit/core                    8.1.3
@angular-devkit/schematics              8.1.3
@schematics/angular                     8.1.3
@schematics/update                       0.801.3
rxjs                                     6.4.0

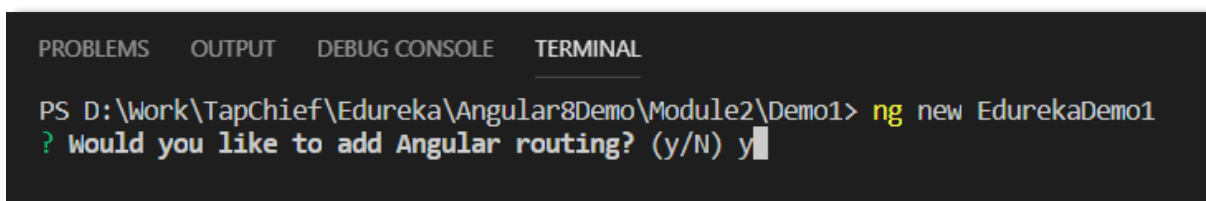
PS D:\Work\TapChief\Edureka\Angular8Demo\Module2\Demo1> 
```

Step 2 –

- Navigate to the folder where you want to build the Angular app. Create new Angular app by using command 'ng new {AppName}'

Make a note of this app as we will be using same app in the next demo as well

- Enter y when it asks, 'Would you like to add Angular routing?'



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

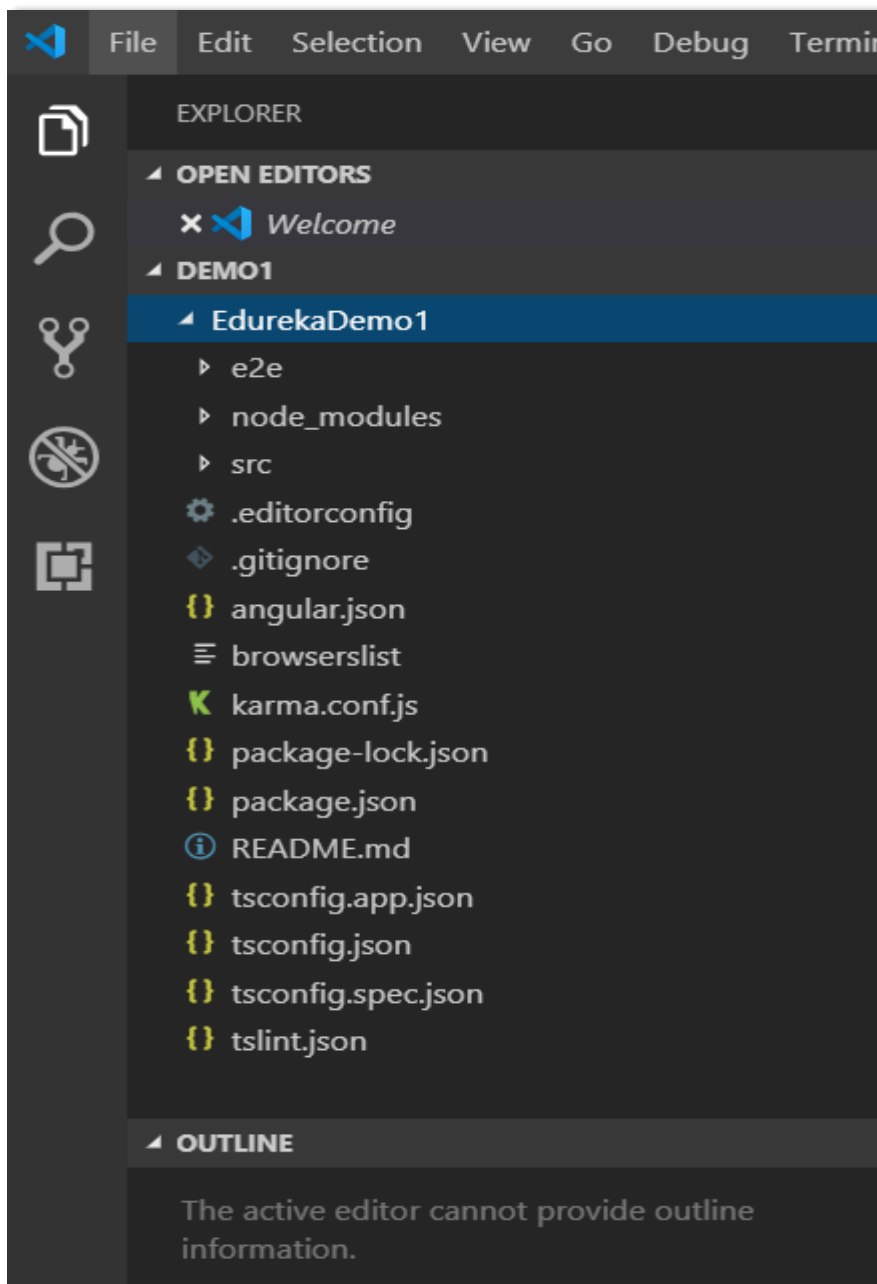
PS D:\Work\TapChief\Edureka\Angular8Demo\Module2\Demo1> ng new EdurekaDemo1
? Would you like to add Angular routing? (y/N) y
```

- When it prompts: ? Which stylesheet format would you like to use?

Select > CSS and press enter

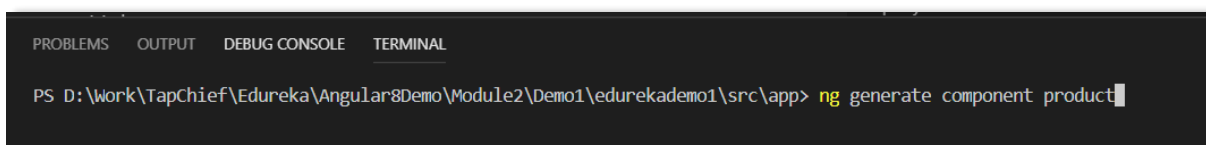
Wait for a few minutes for the npm packages to be installed. Once the download is completed, you will get a success message in command prompt. Ignore any warnings.

Step 3 – Open the app in Visual studio code by navigating to File → Open Folder → {AppName}, app/folders will be loaded as below



Step 4 –

- Create new component named '*product*' using the command 'ng generate component {ComponentName}'

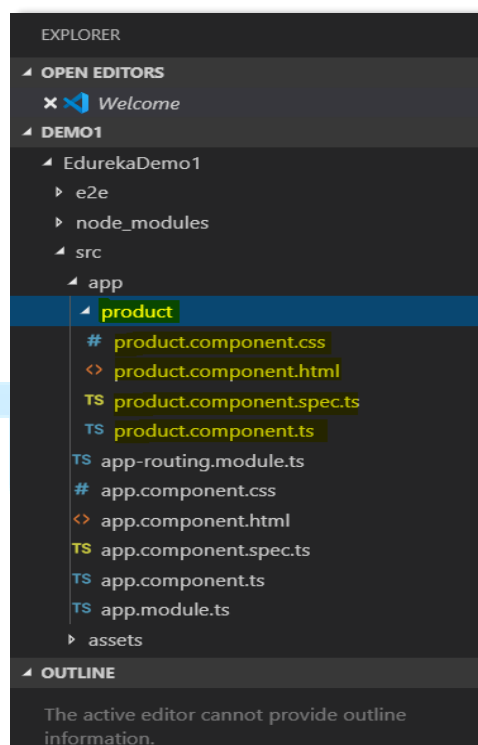


- New product component will be created as shown below

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS D:\Work\TapChief\Edureka\Angular8Demo\Module2\Demo1\edurekademo1\src\app> ng generate component product
CREATE src/app/product/product.component.html (22 bytes)
CREATE src/app/product/product.component.spec.ts (635 bytes)
CREATE src/app/product/product.component.ts (273 bytes)
CREATE src/app/product/product.component.css (0 bytes)
UPDATE src/app/app.module.ts (479 bytes)
PS D:\Work\TapChief\Edureka\Angular8Demo\Module2\Demo1\edurekademo1\src\app> |
```

- Also, we can see in the app folder, all the files related to product component will be created



4 types of files will be created for component as below

- .css -> styling
- .html -> template
- .spec.ts -> testing
- .ts -> root file

‘ng generate component’ command will automatically add product component reference in the app.module.ts file as shown below

```
TS app.module.ts x
EdurekaDemo1 ▸ src ▸ app ▸ TS app.module.ts ▸ AppModule
1  import { BrowserModule } from '@angular/platform-browser';
2  import { NgModule } from '@angular/core';
3
4  import { AppRoutingModule } from './app-routing.module';
5  import { AppComponent } from './app.component';
6  import { ProductComponent } from './product/product.component';
7
8  @NgModule({
9    declarations: [
10     AppComponent,
11     ProductComponent
12   ],
13   imports: [
14     BrowserModule,
15     AppRoutingModule
16   ],
17   providers: [],
18   bootstrap: [AppComponent]
19 })
20 export class AppModule { }
21
```

Step 5 – Open `app.component.html` file and remove the highlighted lines.

```

1  <!--The content below is only a placeholder and can be replaced.-->
2  <div style="text-align:center">
3    <h1>
4      Welcome to {{ title }}!
5    </h1>
6    
7  </div>
8  <h2>Here are some links to help you start: </h2>
9  <ul>
10   <li>
11     <h2><a target="_blank" rel="noopener" href="https://angular.io/tutorial">Tour of Heroes</a></h2>
12   </li>
13   <li>
14     <h2><a target="_blank" rel="noopener" href="https://angular.io/cli">CLI Documentation</a></h2>
15   </li>
16   <li>
17     <h2><a target="_blank" rel="noopener" href="https://blog.angular.io/">Angular blog</a></h2>
18   </li>
19 </ul>
20
21 <router-outlet></router-outlet>
22

```

Step 6 – Add the selector <app-product> to app.component.html file.

```
1  <!--The content below is only a placeholder and can be replaced.-->
2  <div style="text-align:center">
3    <h1>
4      Welcome to {{ title }}!
5    </h1>
6  </div>
7
8  <app-product></app-product>
9
10 <router-outlet></router-outlet>
11
12
```

```
app.component.html  index.html  TS app.component.ts  product.component.html  TS product.component.ts  TS app.mo
EdurekaDemo1 ▸ src ▸ app ▸ product ▸ TS product.component.ts ▸ ProductComponent
1  import { Component, OnInit } from '@angular/core';
2
3
4
5  import { Product } from './Products';
6
7
8
9  @Component({
10   selector: 'app-product',
11   templateUrl: './product.component.html',
12   styleUrls: ['./product.component.css']
13 })
```

Now our product component is ready, but we don't have any html code added to product component. We will add html tags and styles and create our shopping list design page as below.

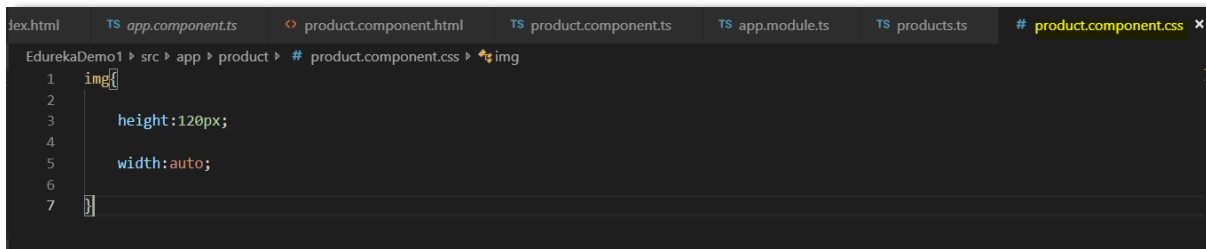
Step 7— To use Bootstrap 4 library for styling the application, import it from the links. Add reference of bootstrap to src/index.html file as shown below

```
EdurekaDemo1 ▸ src ▸ index.html ▸ html ▸ head ▸ title
1 <!doctype html>
2 <html lang="en">
3 <head>
4   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
5
6   <!-- jQuery library -->
7   <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.4.1/jquery.min.js"></script>
8
9   <!-- Popper JS -->
10  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"></script>
11
12  <!-- Latest compiled JavaScript -->
13  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"></script>
14  <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.6.3/css/all.css" integrity="sha384-UhRTZI+pbxTHCwp1t77Bi1
15
16  <meta charset="utf-8">
17  <title>EdurekaDemo1</title>
18  <base href="/">
19
20  <meta name="viewport" content="width=device-width, initial-scale=1">
21  <link rel="icon" type="image/x-icon" href="favicon.ico">
22 </head>
23 <body>
24   <app-root></app-root>
25 </body>
```

Step 8— Open product.component.html file and add html code to create shopping list design

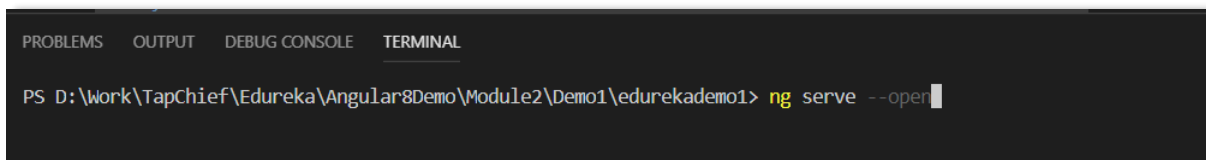
```
<div>
  <div class="row">
    <div class="col-8">
      <div class="card">
        <div class="card-header bg-info text-center">SHOPPING LIST</div>
        <div class="card-body">
          <div class="row">
            <div class="col-xl-4 col-sm-6 col-12 border border-warning mb-2" *ngFor = "let item of products">
              <div class="row text-center mb-2">
                <div class="col-12">
                  
                </div>
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
```


Step 9 – Overwrite existing image styles by adding height & width property of image in the product.component.css as below.



```
1 img{
2
3   height:120px;
4
5   width:auto;
6
7 }
```

Step 10 – Run Angular application by using command 'ng serve --open'



```
PS D:\work\TapChief\Edureka\Angular8Demo\Module2\Demo1\edurekademo1> ng serve --open
```

Step 11 – This will open our shopping list app in the browser as shown below.

