Module 2 – Angular Components and Data Binding

Demo Document 3: Bind data to shopping list component

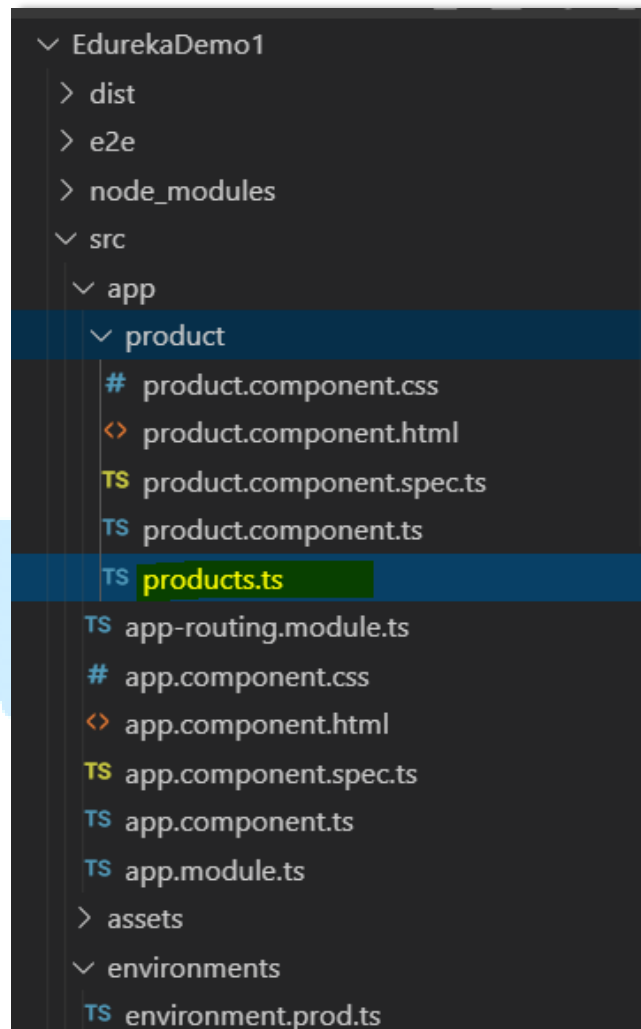edureka!

edureka!

In this demo, we will see how to bind data to shopping list component created in Module 2 demo 1

Step 1 – Open visual studio code, Open project folder created in Demo1 (EdurekaDemo1)

Step 2 – Navigate to src → app →product folder, right click on product folder and select 'New File'. Name the new file as 'product.ts'

Product.ts is model file created for databinding

Step3 – Add the 5 properties/variables to product.ts as shown below

```typescript
TS products.ts ×
EdurekaDemo1 > src > app > product > TS products.ts > ⊷○ Product
1    export interface Product {
2
3        p_id : number,
4
5      product_name : string,
6
7      product_weight : string,
8
9      product_price : number,
10
11     product_image :string
12
13   }
```

Step 4 – Open product.component.ts file to add the business logic. Create different arrays to store data.

```typescript
TS product.component.ts ×
EdurekaDemo1 > src > app > product > TS product.component.ts > ✲ProductComponent
11     templateUrl: './product.component.html',
12     styleUrls: ['./product.component.css']
13   })
14
15   export class ProductComponent implements OnInit {
16
17
18
19
20
21   products: Product[];
22
23   selectedProduct:Product;
24
25   productList: Product[]=[];
26
27   errorItem: boolean = false;
28
29     |
30
31     constructor() {}
32
33
```
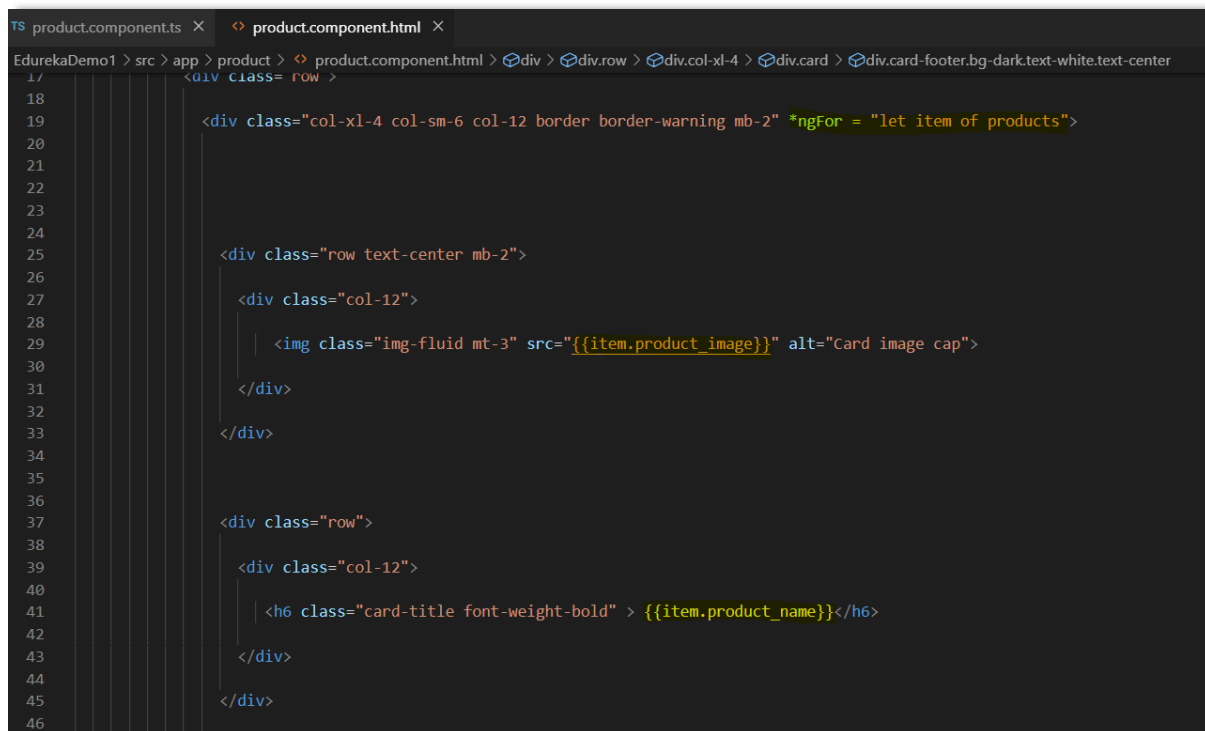
Step 5 – Add sample products to this.products array, this.products array will be used to display product list.

```typescript
TS product.component.ts
EdurekaDemo1 > src > app > product > TS product.component.ts > ProductComponent > [∅]constructor
30
31      constructor() {}
32
33
34      ngOnInit() {
35
36
37        this.products = [
38
39        {
40
41          p_id : 1,
42
43          product_name : 'Surf Excel',
44
45          product_weight : '1Kg',
46
47          product_price : 590,
48
49          product_image : 'https://rukminim1.flixcart.com/image/832/832/jg6v24w0/washing-powder/3/r/d/2-2-kg-top-load-surf-excel-orig
50
51        },
52
53        {
54
55          p_id : 2,
56
57          product_name : 'Nivea',
58
59          product_weight : '200ml',
```

Step 6 – Create functions/methods to add and remove product operations

```typescript
TS product.component.ts
EdurekaDemo1 > src > app > product > TS product.component.ts > ProductComponent > addToCart
170
171
172
173     total() {
174
175         return this.productList.reduce((total, item) => total + item.product_price, 0);
176
177     }
178
179     addToCart(item) {
180
181         if(this.productList.indexOf(item) === -1) {
182
183           this.productList.push(item);
184
185           this.errorItem = false;
186
187         }
188
189         else if (this.productList.indexOf(item) > -1) {
190
191           | this.errorItem = true;
192
193         }
194
195     }
196
197     removeItem(item) {
198
199       var index = this.productList.indexOf(item);
```

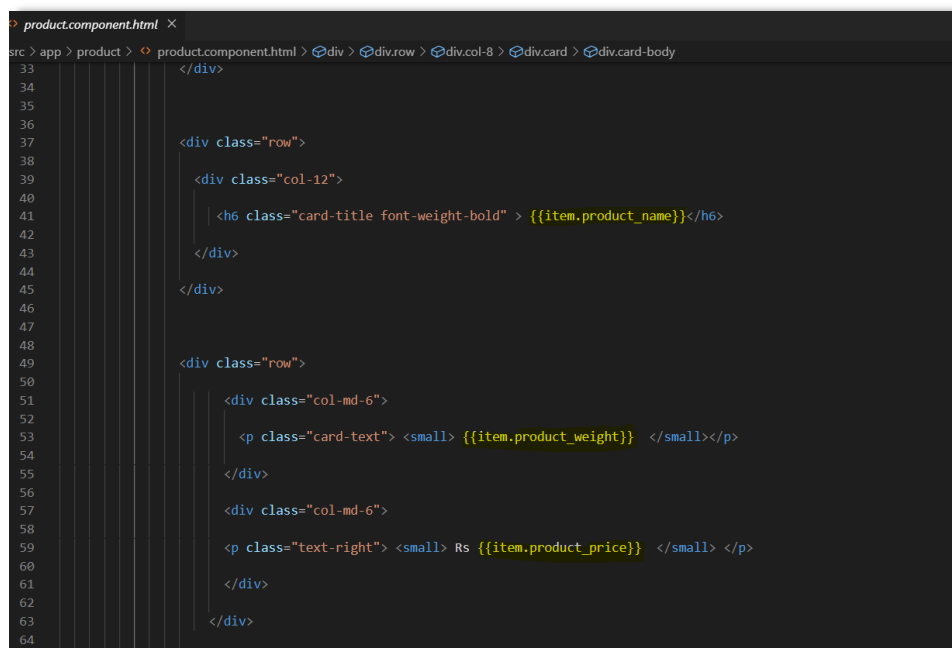**Step 7** – Open product.component.html file, modify html file to bind data to different html element

Step 8 – Open product.component.html file and bind data to the template, use *String Interpolation* for this. String interpolation is one-way databinding technique which is used to output the data from a TypeScript code to HTML template (view). It uses the template expression in double curly braces to display the data from the component to the view. The below screenshot shows string interpolation binding.

Step 9 – Bind data to src property of img html tag, we use *Property Binding* for this. In property binding, we bind a property of a DOM element to a field which is a defined property in our component TypeScript code.

```html
<div class="row text-center mb-2">

  <div class="col-12">

    <img class="img-fluid mt-3" src="{{item.product_image}}" alt="Card image cap">

  </div>

</div>
```
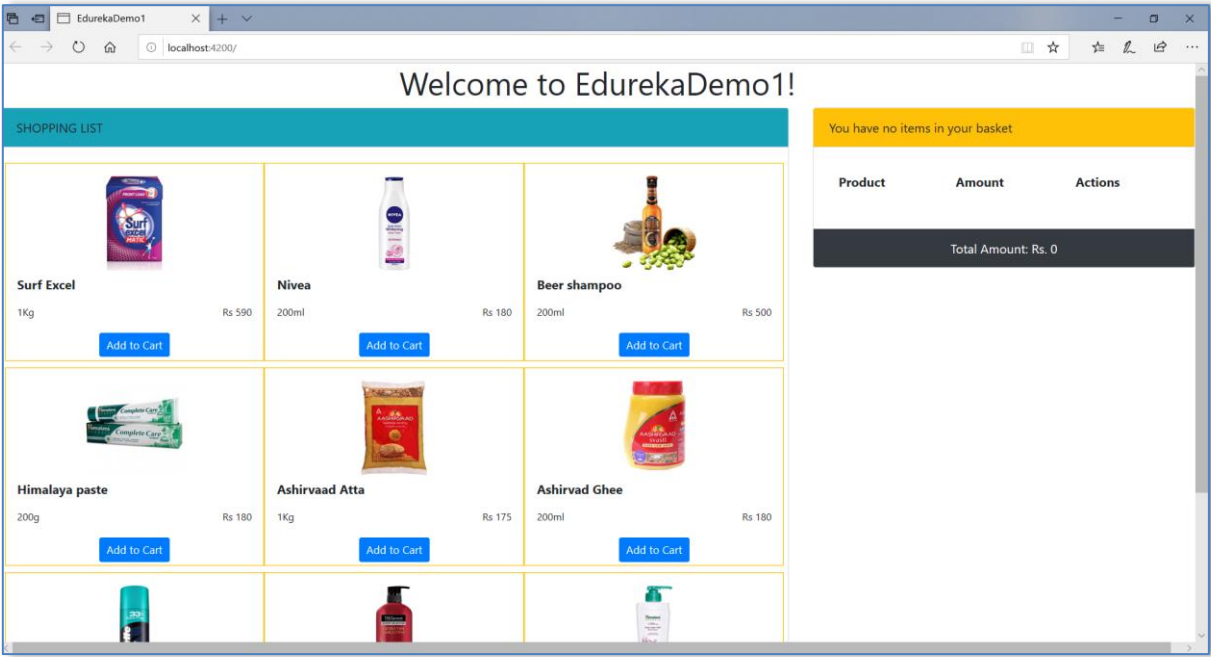
Step 10 – Bind to a click event and assign the event handler "addToCart(item)" to this event, *use Event Binding* for this. Event binding is used to handle the events raised from the DOM like button click, mouse move etc. When the DOM event happens (e.g. click, change), it calls the specified method in the component.

```html
<div class="row text-center mb-1">

  <div class="col-12">

    <button class="btn btn-sm btn-primary" (click)="addToCart(item)">Add to Cart</button>

  </div>

</div>
```

Step 11 – Run angular application by using command 'ng serve --open'

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL

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

Step 9 – This will open our shopping list app with data binding to html elements in the browser as shown below

Click on Add to cart to add product to cart, also remove button from cart will remove products from cart. Total amount will show sum of total amount of products added to cart.