**Module 1: Laboratory Exercises**

Estimated Time: 30 minutes

**Exercise 1: Consuming Data**

#### Task 1: Opening an Angular Project and adding sample data

1. In the **Start Menu** click **Node.js command prompt.**
2. Navigate to Exercise1 for Module 1 by typing the following command.

**>D:**

**>cd D:\ITLCANGULAR\MOD1\Starter\Exercise1**

1. Start the Angular Development Server by typing the following command.

**>ng serve**

1. In the **Task Bar** click **Google Chrome** then in the address bar type [**http://localhost:4200**](http://localhost:4200) then hit Enter.
2. Verify that the default Angular App Page appears.
3. In the **Start Menu** click **Visual Studio Code**
4. In the **Visual Studio Code** click the **File** menu then click **Open Folder.**
5. In the dialog box navigate to **D:\ITLCANGULAR\MOD1\starter\Exercise1** then click **Select Folder.**
6. In the **Exercise1-Visual Studio Code, Explorer,** expand **src** folder then click expand the **app** folder then click **app.component.ts.**
7. In the **app.component.ts** locate the following code.

**title=’App’;**

1. After the code that you located type the code below.

**products=[];**

1. Place the cursor inside the square brackets [] ,then press enter twice then type the following code.

{

id:1,

name:'sample product 1',

brand: 'brand A',

description:'Description for product 1',

price: 1000,

comments:[{

productId:1,

author:'author1@mail.com',

createdOn:1397490980837

},{

productId:1,

author:'author2@mail.com',

createdOn:1397490980837

}]

},

1. Place the cursor at the end of the code that you have just added then add the following code.

{

id:2,

name:'sample product 2',

brand: 'brand B',

description:'Description for product 2',

price: 2000,

comments:[{

productId:2,

author:'author3@mail.com',

createdOn:1397490980837

},{

productId:2,

author:'author4@mail.com',

createdOn:1397490980837

}]

},

1. Place the cursor at the end of the code that you have just added then add the following code.

{

id:3,

name:'sample product 3',

brand: 'brand C',

description:'Description for product 3',

price: 3000,

comments:[{

productId:3,

author:'author5@mail.com',

createdOn:1397490980837

},{

productId:3,

author:'author6@mail.com',

createdOn:1397490980837

}]

}

1. In the **app.component.ts** window click on **File** then click **Save All.**

*Note: You may add more sample data in the array for further testing*

#### Task 2: Creating the Web Page

1. In the **Exercise1- Visual Studio Code, Explorer,** click the **app.component.html**
2. In the **app.component.html** delete all the code.
3. In the **app.component.html** add the following code.

**<div></div>**

1. In the **Exercise1- Visual Studio Code** window click on **File** then click **Save All.**

#### Task 3: Displaying the data in the webpage.

1. In the **Exercise1- Visual Studio Code, Explorer,** click **app.component.html.**
2. Place your cursor between the **<div>** element then add the following code.

**Name: {{products[0].name}}<br/>**

**Brand: {{products[0].brand}}<br/>**

**Description: {{products[0].description}}<br/>**

**Price: {{products[0].price}}<br/>**

1. In the **app.component.html** window click on **File** then click **Save All.**
2. In the Google Chrome Browser, verify that it displays **sample product 1.**
3. Close the Google Chrome Browser

#### Task 4: Iterating the data.

1. In the **Exercise1- Visual Studio Code, Explorer,** double click the **app.component.html**
2. In the **app.component.html** locate the following code.

**<div>**

1. Replace the located code with the following code.

**<div \*ngFor =”let product of products”>**

1. In the **app.component.html** locate the following code.

**Name: {{products[0].name}}<br/>**

**Brand: {{products[0].brand}}<br/>**

**Description: {{products[0].description}}<br/>**

**Price: {{products[0].price}}<br/>**

1. Replace the located code with the following code.

**Name: {{product.name}}<br/>**

**Brand: {{product.brand}}<br/>**

**Description: {{products.description}}<br/>**

**Price: {{products.price}}<br/>**

1. In the **app.component.html** window click on **File** then click **Save All.**
2. In the Google Chrome Browser, verify that it now displaysall the products**.**
3. Close the Google Chrome Browser
4. In Node.js Command prompt press **ctrl+c** then enter **y,** then type the command **exit.**

**Exercise 2: Styling a page in Angular**

#### Task 1: Modifying the app.component.css

1. In the **Start Menu** click **Node.js command prompt.**
2. Navigate to Exercise2 for Module 1 by typing the following command.

**>D:**

**>cd D: \ITLCANGULAR\MOD1\Starter\Exercise2**

1. Start the Angular Development Server by typing the following command.

**>ng serve**

1. In the **Task Bar** click **Google Chrome** then in the address bar type [**http://localhost:4200**](http://localhost:4200) then hit Enter.
2. Verify that the default Products Page appears.
3. In the **Start Menu** click **Visual Studio Code**
4. In the **Visual Studio Code** click the **File** menu then click **Open Folder.**
5. In the dialog box navigate to **D:\ ITLCANGULAR\MOD1\starter\Exercise2** then click **Select Folder.**
6. In the **Exercise2- Visual Studio Code, Explorer,** expand **src** folder then expand the **app** folder then click **app.component.css.**
7. In the **app.component.css** add the following code.

div{

padding:20px;

}

1. In the **app.component.css** window click on **File** then click **Save All.**
2. In the Google Chrome Browser, verify that it now displaysall the products with padding**.**

*Note: You may add other styling and elements to experiment on this part.*