**Module 8: Laboratory Exercises**

**Exercise 1: Adding Navigations**

#### Task 1: Creating the navigation

1. In the Start Menu click in **Visual Studio Code**.
2. In the **Visual Studio Code** windowclick on **File** then click **Open Folder.**
3. In the dialog box navigate to **D:\ITLCANGULAR\MOD8\Starter\Exercise1\LaptopWebApplication,** then click **Select Folder**
4. In the **Visual Studio Explorer,** expand **src** folder then right click the **app** folder then click **New Folder.**
5. Name the **New Folder** to **nav.**
6. In the **Visual Studio Explorer** right click the **nav** folder then click **New File**.
7. Name the **New File** to **nav.component.ts**
8. In the **nav.component.ts** add the following codes.

**import { Component } from “@angular/core”;**

**@Component({**

**selector:’nav-bar’,**

**templateUrl:’nav.component.html’**

**})**

**export class NavBarComponent{**

**}**

1. In the **Visual Studio Code Explorer** right click the **nav** folder then click **New File**.
2. Name the **New File** to **nav.component.html**
3. In the start menu click the **File Explorer.**
4. In the File explorer navigate to **D:\ITLCANGULAR\MOD8\Contents.**
5. In the **Contents** folder double **Navbar.txt,** then copy all the codes.
6. Switch back to **Visual Studio Code** then in the **nav.component.html** code window, paste all the codes.
7. In the **Visual Studio Code Explorer,** click the **app.module.ts** file.
8. In the **app.module.ts** file locate the following codes.

**import { HttpClientModule } from ‘@angular/common/http’;**

1. After the located code add the following codes.

**import { NavBarComponent } from ‘./nav/nav.component’**

1. In the **app.module.ts** file locate the following code in the declarations array.

**LaptopReviewsComponent**

1. After the located code add the following code.

**,NavBarComponent**

1. In the **Visual Studio Code Explorer,** click the **app.component.html** file.
2. In the **app.component.html** file add the following code above first **div element.**

**<nav-bar></nav-bar>**

1. In the **Visual Studio Code,** click the **File** menu then click **Save All.**
2. In the start menu click on **Node.js command prompt**
3. In the **Node.js command prompt**  enter the following command

**>D:**

**> cd ITLCANGULAR/MOD8/Starter/Exercise1/LaptopWebApplication**

1. In the **Node.js command prompt**  enter the following command

**>ng serve**

1. In the start menu click on Google Chrome, then browse the address

**http://localhost:4200**

1. Verify that the webpage now displays a navigation bar.
2. Also notice that the page is not yet navigating to other page, which is because the other pages are not yet implemented.
3. In the **Google Chrome** Window click close.
4. In the **Node.js command prompt** click close.
5. In the **Visual Studio Code** window click close.

**Exercise 2: Creating Routes**

#### Task 1: Creating the partial views.

1. In the start menu click on Visual Studio Code.
2. In the Visual Studio Code click on **File** then click **Open Folder.**
3. In the dialog box navigate to **D:\ITLCANGULAR\MOD8\Starter\Exercise2\LaptopWebApplication,** then click **Select Folder.**
4. In the **Visual Studio Code Explorer**, expand **src** folder then right click the **app** folder then click **New Folder**.
5. Name the new folder to **home**.
6. In the **Visual Studio Code Explorer**, right click the **app** folder then click **New Folder**.
7. Name the new folder to **about**.
8. In the **Visual Studio Code Explorer**, right click the **home** folder then click **New File**.
9. Name the new file to **home.component.ts**
10. In the **Visual Studio Code Explorer**, right click the **home** folder then click **New File**.
11. Name the new file to **home.component.html**
12. In the **Visual Studio Code Explorer**, right click the **about** folder then click **New File**.
13. Name the new file to **about.component.ts**
14. In the **Visual Studio Code Explorer**, right click the **about** folder then click **New File**.
15. Name the new file to **about.component.html**
16. In the **Visual Studio Code Explorer**, click the **home.component.ts** then add the following codes.

**import{ Component } from “@angular/core”;**

**@Component({**

**templateUrl:”home.component.html”**

**})**

**export class HomeComponent{ }**

1. In the **Visual Studio Code Explorer**, click the **about.component.ts** then add the following codes.

**import{ Component } from “@angular/core”;**

**@Component({**

**templateUrl:”about.component.html”**

**})**

**export class AboutComponent{ }**

1. In the start menu click on **File Explorer** then navigate to **D:\ITLCANGULAR\MOD8\Contents.**
2. In the **Contents** folder double click the **Home.txt** then copy all the codes.
3. In the **Visual Studio Code Explorer**, click the **home.component.html** then paste the code.
4. In the start menu click on **File Explorer** then navigate to **D:\ITLCANGULAR\MOD8\Contents.**
5. In the **Contents** folder double click the **About.txt** then copy all the codes.
6. In the **Visual Studio Code Explorer**, click the **about.component.html** then paste the code.
7. In the **Visual Studio Code Explorer** click the **app.module.ts.**
8. In the **app.module.ts** add the following codes below the other imports.

**import { HomeComponent } from ‘./home/home.component’;**

**import { AboutComponent } from ‘./about/about.component’;**

1. In the **app.module.ts** locate the following code inside the declarations array.

**NavBar**

1. Below the located code add the following codes.

**,HomeComponent,**

**AboutComponent**

1. In the **Visual Studio Code,** click the **File** menu then click **Save All.**

#### Task 2: Creating the routes.

1. In the **Visual Studio Code,** right click the **app** folderthen click **New File.**
2. Name the new file to **route.ts**
3. In the **route.ts** file add the following code.

**import { Routes } from ‘@angular/router’**

**export const appRoutes:Routes=[**

**]**

1. Inside the **appRoutes** array add the following codes.

**{path:’laptops’,component: LaptopListComponent},**

**{path:’home’,component:HomeComponent},**

**{path:’about’,component: AboutComponent},**

**{path:’’,redirectTo:’/home’,pathMatch:’full’}**

1. In the **route.ts** add the following codes in the imports.

**import { LaptopListComponent } from "./laptops/laptoplist.component";**

**import { HomeComponent } from './home/home.component';**

**import { AboutComponent } from './about/about.component';**

1. In the **Visual Studio Code,** click the **app.module.ts,** add the following codes in the imports.

**import { appRoutes } from './route'**

**import { RouterModule } from '@angular/router';**

1. Inside the **imports array** of the **NgModule** add the following code.

**,RouterModule.forRoot(appRoutes)**

1. In the **Visual Studio Code,** click the **File** menu then click **Save All.**

#### Task 3: Modifying the app.component.html to use the routes.

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

**<laptop-list [laptops]="laptops"></laptop-list>**

1. Replace the located code with the following.

**<router-outlet></router-outlet>**

1. In the **Visual Studio Code Explorer,** click **app.component.ts.**
2. In the **app.component.html,** locate the following code then **hightlight** then **Cut (ctrl+x)**

**laptops:any[];**

**constructor(private Laptops:LaptopService){**

**}**

**ngOnInit(){**

**this.Laptops.getLaptops().subscribe(**

**data=>{**

**this.laptops=data;**

**}**

**);**

**}**

1. In the **Visual Studio Code Explorer,** expand the laptops folder then click **laptoplist.component.ts.**
2. In the **laptoplist.component.ts** locate the following code.

**export class LaptopListComponent{**

1. Right after the located code, **Paste (ctrl+v)** the code that you **Cut (ctrl+x).**
2. In the **laptoplist.component.ts** delete the following code.

**@Input() laptops:any;**

1. In the **laptoplist.component.ts** add the following code below the other imports.

**import { LaptopService } from ‘../services/laptops.services’;**

1. In the **Visual Studio Code,** click the **File** menu then click **Save All.**

#### Task 4: Fixing the navigation links

1. In the **Visual Studio Code Explorer,** click the **index.html.**
2. In the **index.html** add the following code in the head element.

**<base href=”/”>**

1. In the **Visual Studio Code Explorer,** expand the **Nav** folder thenclick the **nav.component.html.**
2. In the **nav.component.html** locate the following codes.

**<a class=”navbar-brand” href=”home”>ABC Laptop Store</a>**

1. Replace the located code with the following codes.

**<a class=”nav-link” href=”home” [routerLink]="['/home']">ABC Laptop Store</a>**

1. In the **nav.component.html** locate the following codes.

**<a class=”nav-link” href=”home”>Home</a>**

1. Replace the located code with the following codes.

**<a class=”nav-link” href=”home” [routerLink]="['/home']" routerLinkActive="active" [routerLinkActiveOptions]="{exact:true}">Home</a>**

1. In the **nav.component.html** locate the following codes.

**<a class=”nav-link” href=”laptops”>Laptops</a>**

1. Replace the located code with the following codes.

**<a class=”nav-link” href=”laptops” [routerLink]="['/laptops’]" routerLinkActive="active" [routerLinkActiveOptions]="{exact:true}"> Laptops </a>**

1. In the **nav.component.html** locate the following codes.

**<a class=”nav-link” href=”about”>About</a>**

1. Replace the located code with the following codes.

**<a class=”nav-link” href=”about” [routerLink]="['/about’]" routerLinkActive="active" [routerLinkActiveOptions]="{exact:true}"> About </a>**

1. In the **Visual Studio Code,** click the **File** menu then click **Save All.**
2. In the start menu click on **Node.js command prompt**
3. In the **Node.js command prompt**  enter the following command

**>D:**

**> cd ITLCANGULAR/MOD8/Starter/Exercise2/LaptopWebApplication**

1. In the **Node.js command prompt**  enter the following command

**>ng serve**

1. In the start menu click on Google Chrome, then browse the address

**http://localhost:4200**

1. In the **Google Chrome** window, In the **Laptop Store webpage,** click the navigation links.
2. Verify that we can now see that the webpage is navigating accordingly when the navigation link is clicked.
3. In the **Google Chrome** window, click **close**.
4. In the **Visual Studio** window, click **close**.
5. In the **Node.js command prompt** window, click **close.**