#### **Source Code**

## index.html:

### styles.css:

```
You can add global styles to this file, and also import other style files */
 * Common CSS
 *{
    margin:0;
    padding:0;
    -webkit-box-sizing:border-box;
    -moz-box-sizing:border-box;
    box-sizing:border-box
body{
    font-family:Poppins,sans-serif;
    font-weight:400;
    font-size:16px;
    line-height:1.625;
    color:#666;
    -webkit-font-smoothing:antialiased;
    -moz-osx-font-smoothing:grayscale
ul{
    margin:0
button,input[type=button]{
    cursor:pointer
```

```
button:focus,input:focus{
    outline:0
input{
    border:none
button{
    border:none;
    background:0 0
img{
    max-width:100%;
    height:auto
p{
    margin:0
h1,h2,h3,h4,h5,h6{
    color:#333;
    font-weight:700;
    margin:0;
    line-height:1.2
h1{
    font-size:36px
h2{
    font-size:30px
h3{
    font-size:24px
h4{
    font-size:18px
h5{
    font-size:15px
h6{
    font-size:13px
```

```
display:inline-block
a:active,a:focus,a:hover{
    text-decoration:none;
    outline:0
a,a:hover{
    -webkit-transition:all .3s ease;
    -o-transition:all .3s ease;
    -moz-transition:all .3s ease;
    transition:all .3s ease
/*Layout Css*/
.section-content-p35{
    padding:0 35px
.page-wrapper{
    overflow:hidden;
    background: #e5e5e5;
    padding-bottom:8vh
.page-container{
    background:#e5e5e5;
    padding-left:200px
.main-content{
    padding-top:116px;
    min-height:100vh
aside.menu-sidebar.d-none.d-lg-block.clr{
    background:0 0;
    z-index:99999999;
    height:75px;
 * Header Desktop Section
.header-desktop{
    background: #B22222;
    -webkit-box-shadow:0 2px 5px 0 rgba(0,0,0,.1);
    -moz-box-shadow:0 2px 5px 0 rgba(0,0,0,.1);
    box-shadow: 0 2px 5px 0 rgba(0,0,0,.1);
```

```
position:fixed;
   top:0;
   right:0;
   left:200px;
   height:75px;
    z-index:3
.header-desktop .section-content{
   overflow:visible;
   position:absolute;
   top:50%;
   left:0;
   right:0;
   -webkit-transform:translateY(-50%);
   -moz-transform:translateY(-50%);
   -ms-transform:translateY(-50%);
   -o-transform:translateY(-50%);
   transform:translateY(-50%)
.header-wrap{
   display:-webkit-box;
   display:-webkit-flex;
   display:-moz-box;
   display:-ms-flexbox;
   display:flex;
   -webkit-box-align:center;
    -webkit-align-items:center;
   -moz-box-align:center;
   -ms-flex-align:center;
   align-items:center;
   -webkit-box-pack:justify;
    -webkit-justify-content:space-between;
   -moz-box-pack:justify;
    -ms-flex-pack:justify;
    justify-content:space-between
.header-button{
   display:-webkit-box;
   display:-webkit-flex;
   display:-moz-box;
   display:-ms-flexbox;
   display:flex;
   -webkit-box-align:center;
   -webkit-align-items:center;
   -moz-box-align:center;
    -ms-flex-align:center;
   align-items:center
.number{
   padding:6px 0
```

```
.arrows i{
    font-size:30px;
    padding:4px 4px
section{
    position:relative
.section-content{
    position:relative;
    margin:0 auto;
    z-index:1
.section-content-p30{
    padding:0 30px
.au-input-x1{
    min-width:935px
input.au-input.au-input-xl{
    border-radius:40px!important;
    margin-right:15px
.au-input{
    line-height:43px;
    border:1px solid #e5e5e5;
    font-size:14px;
    color:#666;
    padding:0 17px;
    -webkit-border-radius:3px;
    -moz-border-radius:3px;
    border-radius:3px;
    -webkit-transition:all .5s ease;
    -o-transition:all .5s ease;
    -moz-transition:all .5s ease;
    transition:all .5s ease
.cart-area.d-n{
    display:block
.cart-area i{
    font-size:22px;
    float:left;
    margin-top:16px;
    color:#fff;
```

```
margin-left:15px
.total{
   background: #205b8d;
   line-height:43px;
   color:#fff;
   border-radius:30px;
   border:1px solid #0da8e4;
   float:left;
   margin-top:7px;
   padding-left:17px
.total span{
   display:inline-block;
   background:#fff;
   padding:0 13px;
   color:#000;
   border-top-right-radius:20px;
   border-bottom-right-radius:20px;
   margin-left:11px
.form-header{
   display:-webkit-box;
   display:-webkit-flex;
   display:-moz-box;
   display:-ms-flexbox;
   display:flex
.au-btn-submit{
   position:relative;
   right:0;
   min-width:95px;
   color:#fff;
   border:1px solid #205b8d;
   -webkit-border-radius:3px;
    -moz-border-radius:3px;
   border-radius:43px;
   background: #205b8d
.au-btn-submit:hover{
   background:#05143f
.au-btn-submit>i{
   font-size:20px;
   color:#fff;
   position:absolute;
    top:50%;
    left:50%;
```

```
-webkit-transform:translate(-50%,-50%);
   -moz-transform:translate(-50%,-50%);
    -ms-transform:translate(-50%,-50%);
   -o-transform:translate(-50%,-50%);
   transform:translate(-50%,-50%)
* Left Menu Bar
.menu-sidebar{
   width:200px;
   position:fixed;
   left:0;
   top:0;
   bottom:0;
   background:#fff;
   overflow-y:auto
.menu-sidebar .logo{
   background: #B22222;
   height:75px;
   padding:0 35px;
   display:-webkit-box;
   display:-webkit-flex;
   display:-moz-box;
   display:-ms-flexbox;
   display:flex;
   -webkit-box-align:center;
   -webkit-align-items:center;
   -moz-box-align:center;
    -ms-flex-align:center;
   align-items:center;
   position:relative;
   z-index:3
.menu-sidebar .navbar-list .navbar-sub-list{
   display:none;
   padding-left:34px
.menu-sidebar .navbar-list .navbar-sub-list li a{
    padding:11.5px 0
.menu-sidebar-content{
    position:relative;
   height:-webkit-calc(100vh - 75px);
```

```
height:-moz-calc(100vh - 75px);
   height:calc(100vh - 75px);
    background: #FA8072;
.navbar-sidebar{
   padding:35px;
    padding-bottom:0
.navbar-sidebar .navbar-list li a{
   color:black;
   font-size:22px;
    padding-left: 4%;
.navbar-sidebar .navbar-list li a i{
   margin-right:19px
.navbar-sidebar .navbar-list li a:hover{
    color:#42788d
 * Header Mobile Section
.header-mobile{
   position:absolute;
   top:0;
   left:0;
   right:0
.header-mobile .header-mobile-bar{
    padding:15px 0;
                     background: #fff;
.header-mobile .header-mobile-inner{
   display:-webkit-box;
   display:-webkit-flex;
   display:-moz-box;
   display:-ms-flexbox;
   display:flex;
    -webkit-box-align:center;
    -webkit-align-items:center;
    -moz-box-align:center;
    -ms-flex-align:center;
    align-items:center;
    -webkit-box-pack:justify;
    -webkit-justify-content:space-between;
```

```
-moz-box-pack:justify;
    -ms-flex-pack:justify;
    justify-content:space-between
.header-mobile .hamburger{
   width:36px;
   height:36px;
   padding:0;
   line-height:1;
   vertical-align:top;
   background:#fff;
   display:-webkit-box;
   display:-webkit-flex;
   display:-moz-box;
   display:-ms-flexbox;
   display:flex;
    -webkit-box-pack:center;
    -webkit-justify-content:center;
    -moz-box-pack:center;
    -ms-flex-pack:center;
   justify-content:center;
    -webkit-box-align:center;
    -webkit-align-items:center;
    -moz-box-align:center;
    -ms-flex-align:center;
    align-items:center
.header-mobile .hamburger .hamburger-box{
   width:20px;
   height:15px
.header-mobile .hamburger .hamburger-box .hamburger-inner{
   width:20px;
   height:2px;
   -webkit-border-radius:0;
    -moz-border-radius:0;
   border-radius:0
.header-mobile .hamburger .hamburger-box .hamburger-inner:before{
   width:20px;
   height:2px;
    top:6px
.header-mobile .hamburger .hamburger-box .hamburger-inner:after{
   top:12px;
   width:20px;
   height:2px
.header-mobile .navbar-mobile{
   display:none;
   position:absolute;
   width:100%;
    top:88px;
    z-index:20
```

```
.header-mobile .navbar-mobile .navbar-mobile-list{
    background:#f8f8f8
.header-mobile .navbar-mobile-list>li>a{
    padding-left:15px!important
.header-mobile .navbar-mobile .navbar-mobile-list li a{
   color:#555;
   display:block;
   padding:10px 15px;
   padding-right:25px;
   padding-left:0;
   border-bottom:1px solid #e6e6e6;
   text-transform:capitalize;
    line-height:inherit
.header-mobile .navbar-mobile .navbar-mobile-list li a:hover{
    color:#0da8e4
.header-mobile .navbar-mobile .navbar-mobile-list li a>i{
   margin-right:19px
.navbar-mobile-sub-list{
   display:none;
   padding-left:30px;
    background:#fff
.header-mobile .navbar-mobile .navbar-mobile-sub-list li a{
    padding-left:15px
.header-mobile-2{
    background: #393939;
    position: static
.header-mobile -2.header-mobile .navbar-mobile{
    top:82px
.header-mobile .hamburger{
    background:0 0
.header-mobile-2.header-mobile .hamburger .hamburger-box .hamburger-inner{
    background:#fff
.header-mobile-2.header-mobile .hamburger .hamburger-box .hamburger-inner::before{
    background:#fff
.header-mobile-2.header-mobile .hamburger .hamburger-box .hamburger-inner::after{
    background:#fff
.main-content.page-m{
    padding:10% 15%!important
```

```
* Products List
.product-box img {
   width: 150px;
.items select {
   width: 100px;
   height: 40px;
   border-radius: 40px;
   padding-left: 15px;
   margin-bottom: 10px;
   outline: 0;
   margin-left: 5px;
.product-box{
   margin-bottom:60px
.price{
   margin:15px 0 0;
   font-weight:800;
    color:#0da8e4
.product-box h1{
   font-size:18px;
   border-bottom:1px solid #ccc;
   padding-bottom:5px;
   font-weight:600;
   padding-top:12px;
   margin-bottom:7px
.product-box h2{
   font-size:15px;
   padding-bottom:0;
   font-weight:500;
   color:#585858
* Shopping Cart Checkout
.form-area{
   background:#e5e5e5;
   position:relative;
   margin-bottom:45px;
    padding:50px 20px;
   border:3px solid #ccc
```

```
.form-area h3{
   position:absolute;
   top:-26px;
   left:13px;
   background:#e5e5e5;
   padding:10px 20px;
   font-weight:500;
   z-index:23;
   display:inline-block
.input-space{
   margin-bottom:20px
.input-space label{
   padding-left:31px;
   font-size:14px;
   margin-bottom:50px
.input-space input[type=text]{
   width:100%;
   height:40px;
   border-radius:30px;
   outline:0;
   padding:10px;
   border:1px solid #ccc
.input-space select{
   width:100%;
   height:40px;
   border-radius:30px;
   outline:0;
   padding:0 10px;
   border:1px solid #ccc
.au-checkbox{
   display:block;
   position:relative;
   cursor:pointer;
   font-size:22px;
   -webkit-user-select:none;
    -moz-user-select:none;
    -ms-user-select:none;
   user-select:none
.au-checkbox input{
   position:absolute;
   opacity:0;
    cursor:pointer
.au-checkmark{
   position:absolute;
    top:0;
    left:0;
```

```
height:22px;
    width:22px;
    background-color:#fff!important;
    border:2px solid #e5e5e5;
    -webkit-border-radius:2px;
    -moz-border-radius:2px;
    border-radius:2px
.au-checkbox:hover input~.au-checkmark{
    background-color:transparent
.au-checkbox input:checked~.au-checkmark{
    background-color:#fff
.au-checkmark:after{
   content:"";
    position:absolute;
    display:none
.au-checkbox input:checked~.au-checkmark:after{
    display:block
label.date{
    padding-top:8px
.au-checkbox .au-checkmark:after{
    left:5px;
    top:-1px;
    width:9px;
    height:15px;
    border:solid #0da8e4;
    border-width:0 4px 4px 0;
    -webkit-border-radius:2px;
    -moz-border-radius:2px;
    border-radius:2px;
    -webkit-transform:rotate(45deg);
    -moz-transform:rotate(45deg);
    -ms-transform:rotate(45deg);
    -o-transform:rotate(45deg);
    transform:rotate(45deg)
option:first{
    color:#ccc
select{
    color:#828482
 * Shopping Cart Details
```

```
.table{
    margin:0
table.table.table-bordered{
    border:1px solid #ccc;
    background:#fff
.table-bordered td,.table-bordered th{
    border:1px solid #dee2e6
table.table.table-bordered th{
    BACKGROUND:#0da8e4;
    color:#fff;
    font-size:14px;
    padding:7px
.table-responsive{
    padding-right:1px
.items select{
    width:100px;
    height:40px;
    border-radius:40px;
    padding-left:15px;
    margin-bottom:10px;
    outline:0;
    margin-left:5px
 * Product Details
 .price{
    margin:15px 0 0;
    font-weight:800;
    color:#0da8e4
.detail-section{
    margin-top:60px
.detail-img{
    width: 30%;
 * Buttons
```

```
.btn-info{
    color:#fff;
    background-color:#0da8e4!important;
    border-color:#0da8e4!important
a.primary-btn{
    background:#05143f;
    padding:7px 20px;
    text-align:center;
    display:inline-block;
    color:#fff;
    border-radius:2px;
    font-size:14px;
    margin-top:5px
a.primary-btn:hover{
    background:#0da8e4;
    color:#fff
.active-link {
  font-weight: bold;
 * Footer section
footer ul li a{
    color:#fff
footer{
    background:#232324;
    z-index:1;
    position:relative;
    text-align:center
footer li a{
    color:#313131;
    font-weight:500
footer ul li{
    display:inline-block;
    font-size:14px;
    padding:10px 20px
```

```
* Media Queries
@media (max-width:1600px){
    .au-input-x1{
        min-width:290px
    }
@media (max-width:1315px) and (min-width:992px){
    .header-desktop3 .section-content{
        padding:0 15px
@media (max-width:1570px) and (min-width:992px){
    .header-navbar ul li a{
        padding:25px 15px
    }
@media (max-width:1315px) and (min-width:992px){
    .header-navbar ul li a{
        font-size:13px;
        padding:27px 15px
    }
    .header-navbar ul li a i{
        margin-right:5px
@media (min-width:1200px){
    .container{
        max-width:1320px
    }
@media (min-width:992px) and (max-width:1199px){
    .cart-area i{
        font-size:22px;
        float:left;
        margin-top:16px;
        color:#205b8d;
        margin-left:15px
    .header-mobile .header-mobile-bar{
        padding:10px 0;
        background:#fff
    .header-wrap .account-item>.content{
        display:none
    }
@media (max-width:991px){
```

```
.section-content-p30{
   padding:0
.page-container{
   position:relative;
   top:88px;
   padding-left:0
 .page-wrapper{
   background:#e5e5e5;
   padding-bottom:12vh
 .main-content{
   padding-top:50px;
   padding-bottom:100px
 .cart-area.d-n{
   display:none
.form-header{
    -webkit-box-pack:center;
    -webkit-justify-content:center;
    -moz-box-pack:center;
    -ms-flex-pack:center;
   justify-content:center
 .au-input-x1{
   min-width:350px
  .logo{
   text-align:center
.header-desktop{
   position:relative;
   top:0;
   left:0;
   height:80px
.header-wrap{
    -webkit-box-orient:vertical;
    -webkit-box-direction:normal;
    -webkit-flex-direction:column;
    -moz-box-orient:vertical;
    -moz-box-direction:normal;
    -ms-flex-direction:column;
   flex-direction:column
.header-button{
   margin-top:30px;
   width:100%;
    -webkit-box-pack:justify;
    -webkit-justify-content:space-between;
    -moz-box-pack:justify;
    -ms-flex-pack:justify;
```

```
justify-content:space-between
    }
    .menu-sidebar2{
        top:0;
        right:-300px;
        left:auto;
        -webkit-box-shadow:0 5px 10px 0 rgba(0,0,0,.1);
        -moz-box-shadow:0 5px 10px 0 rgba(0,0,0,.1);
        box-shadow:0 5px 10px 0 rgba(0,0,0,.1)
     .header-desktop2{
        left:0;
        position:relative
     .header-desktop4{
        position:static
     .section-content.section-content-p30.e-spc{
        padding-top:100px
    header.header-desktop.extra{
        top:93px!important
    .cart-area i{
        font-size:22px;
        float:left;
        margin-top:16px;
        color:#205b8d;
        margin-left:15px
        .header-wrap2{
        -webkit-box-pack:justify;
        -webkit-justify-content:space-between;
        -moz-box-pack:justify;
        -ms-flex-pack:justify;
        justify-content:space-between
@media (max-width:767px){
      .au-input-x1{
        min-width:150px
    .header-button-item{
        font-size:22px;
        margin-right:15px
        .main-content.page-m{
        padding:10% 0!important
    .header-mobile .navbar-mobile{
        display:none;
        position:absolute;
```

```
width:100%;
    top:66px;
    z-index:20
.section-content.section-content-p30.e-spc{
    padding-top:100px
header.header-desktop.extra{
    top:64px!important
.header-desktop{
    position:relative;
    top:0;
    left:0;
    height:80px
a.logo img{
    width:110px
}
.cart-area i{
    font-size:22px;
    float:left;
    margin-top:16px;
    color:#205b8d;
    margin-left:15px
.footer-pagination{
    text-align:center
.product-box{
    text-align:centerg
}
.page-container{
    position:relative;
    top:66px;
    padding-left:0
.au-btn-submit{
    position:relative;
    right:10px;
    min-width:85px;
    color:#fff;
    border:1px solid #205b8d;
    -webkit-border-radius:3px;
    -moz-border-radius:3px;
    border-radius:0;
    background:#205b8d
input.au-input.au-input-xl{
    border-radius:0!important;
    margin-right:0
.cart-area.d-b{
```

```
display:block
   .cart-area.d-n{
       display:none
   .cart-area i{
       font-size:18px;
       float:left;
       margin-top:16px;
       color:#03a9f4;
       margin-left:15px
   }
   .total span{
       display:inline-block;
       background:#fff;
       padding:0 10px;
       color:#000;
       border-top-right-radius:20px;
       border-bottom-right-radius:20px;
       margin-left:6px
   .total{
       background:#205b8d;
       line-height:30px;
       color:#fff;
       border-radius:30px;
       border:1px solid #205b8d;
       float:left;
       margin-top:9px;
       padding-left:12px
   .header-mobile .header-mobile-bar{
       padding:6px 0;
       background:#fff;
       border:0;
       padding:8px 0
.banner {
   display: flex;
   align-items: center;
 .banner-start h3 {
   display: inline-block;
 .banner-start i {
   padding: 0 6px;
 .banner-middle {
   flex: 1;
```

# address.spec.ts:

```
import { Address } from './address';

describe('Address', () => {
   it('should create an instance', () => {
     expect(new Address()).toBeTruthy();
   });
});
```

# address.ts:

```
export class Address {
   id: string;
   zipCode: string;
   street: string;
   city: string;
}
```

## cart-item.spec.ts:

```
import { CartItem } from './cart-item';

describe('CartItem', () => {
   it('should create an instance', () => {
      expect(new CartItem()).toBeTruthy();
   });
});
```

# cart-item.ts:

```
import { Product } from './product';

export class CartItem {

   id: string;
   name: string;
   imageUrl: string;
   price: number;

   quantity: number;

   constructor(product: Product) {
       this.id = product.id;
       this.name = product.name;
       this.imageUrl = product.imageUrl;
```

```
this.price = product.price;
this.quantity = 1;
}
```

## app.component.html:

```
<div class="page-wrapper">
 <!-- MENU SIDEBAR-->
 <aside class="menu-sidebar d-none d-lg-block">
   <div class="logo">
     <a routerLink="/products">
        <img src="assets/logo-new.png" alt="food box" class="img-responsive">
     </a>
   </div>
    <app-product-category-menu></app-product-category-menu>
  </aside>
  <!-- END MENU SIDEBAR-->
  <div class="page-container">
   <!-- HEADER DESKTOP-->
   <header class="header-desktop">
     <div class="section-content section-content-p30">
        <div class="container-fluid">
          <div class="header-wrap">
            <app-search></app-search>
            <app-cart-status></app-cart-status>
            <app-login-status></app-login-status>
          </div>
        </div>
     </div>
   </header>
    <!-- END HEADER DESKTOP-->
   <!-- MAIN CONTENT-->
    <router-outlet></router-outlet>
  </div>
 /div>
```

#### app.component.spec.ts:

```
import { TestBed } from '@angular/core/testing';
import { AppComponent } from './app.component';
describe('AppComponent', () => {
 beforeEach(async () => {
    await TestBed.configureTestingModule({
     declarations: [
        AppComponent
     ],
   }).compileComponents();
  });
  it('should create the app', () => {
   const fixture = TestBed.createComponent(AppComponent);
   const app = fixture.componentInstance;
   expect(app).toBeTruthy();
 });
 it(`should have as title 'foodbox'`, () => {
    const fixture = TestBed.createComponent(AppComponent);
    const app = fixture.componentInstance;
    expect(app.title).toEqual('foodbox');
 });
 it('should render title', () => {
   const fixture = TestBed.createComponent(AppComponent);
   fixture.detectChanges();
    const compiled = fixture.nativeElement;
    expect(compiled.querySelector('.content span').textContent).toContain('foodbox app is
running!');
 });
});
```

# app.module.ts:

```
import { BrowserModule } from '@angular/platform-browser';
import { NgModule } from '@angular/core';
import { FormsModule, ReactiveFormsModule } from '@angular/forms';
```

```
import { AppComponent } from './app.component';
import { ProductListComponent } from './components/product-list/product-list.component';
import { HttpClientModule } from '@angular/common/http';
import { ProductService } from './services/product.service';
import { Routes, RouterModule} from '@angular/router';
import { ProductCategoryMenuComponent } from './components/product-category-menu/product-
category-menu.component';
import { SearchComponent } from './components/search.component';
import { ProductDetailsComponent } from './components/product-details/product-
details.component';
import { NgbModule } from '@ng-bootstrap/ng-bootstrap';
import { CartStatusComponent } from './components/cart-status/cart-status.component';
import { CartDetailsComponent } from './components/cart-details/cart-details.component';
import { RegisterComponent } from './components/register/register.component';
import { LoginComponent } from './components/login/login.component';
import { LoginStatusComponent } from './components/login-status/login-status.component';
import { UpdateProductComponent } from './components/update-product/update-
product.component';
import { RemoveProductComponent } from './components/remove-product/remove-
product.component';
import { AddProductComponent } from './components/add-product.component';
import { CheckOutComponent } from './components/check-out/check-out.component';
const routes: Routes = [
 {path: 'login', component: LoginComponent},
  {path: 'register', component: RegisterComponent},
  {path: 'checkout', component: CheckOutComponent},
  {path: 'add-product', component: AddProductComponent},
  {path: 'remove-product/:id', component: RemoveProductComponent},
  {path: 'update-product/:id', component: UpdateProductComponent},
  {path: 'cart-details', component: CartDetailsComponent},
  {path: 'products/:id', component: ProductDetailsComponent},
  {path: 'search/:keyword', component: ProductListComponent},
  {path: 'category/:id', component: ProductListComponent},
  {path: 'category', component: ProductListComponent},
  {path: 'products', component: ProductListComponent},
  {path: '', redirectTo: '/products', pathMatch: 'full'},
  {path: '**', redirectTo: '/products', pathMatch: 'full'}
];
@NgModule({
 declarations: [
   AppComponent,
   ProductListComponent,
   ProductCategoryMenuComponent,
   SearchComponent,
   ProductDetailsComponent,
   CartStatusComponent,
   CartDetailsComponent,
   RegisterComponent,
    LoginComponent,
    LoginStatusComponent,
```

```
UpdateProductComponent,
    RemoveProductComponent,
    AddProductComponent,
    CheckOutComponent
  ],
  imports: [
    RouterModule.forRoot(routes),
    BrowserModule,
    FormsModule,
    ReactiveFormsModule,
    HttpClientModule,
    NgbModule
  ],
  providers: [ProductService],
  bootstrap: [AppComponent]
export class AppModule { }
```

### cart.service.ts:

```
import { Injectable } from '@angular/core';
import { CartItem } from '../common/cart-item';
import { Subject } from 'rxjs';
@Injectable({
 providedIn: 'root'
})
export class CartService {
  cartItems: CartItem[] = [];
  totalPrice: Subject<number> = new Subject<number>();
  totalQuantity: Subject<number> = new Subject<number>();
  constructor() { }
  addToCart(theCartItem: CartItem) {
    // check if we already have the item in our cart
    let alreadyExistsInCart: boolean = false;
    let existingCartItem: CartItem = undefined;
    if (this.cartItems.length > 0) {
      // find the item in the cart based on item id
      existingCartItem = this.cartItems.find( tempCartItem => tempCartItem.id ===
theCartItem.id );
      // check if we found it
      alreadyExistsInCart = (existingCartItem != undefined);
    }
```

```
if (alreadyExistsInCart) {
     // increment the quantity
     existingCartItem.quantity++;
   else {
     // just add the item to the array
     this.cartItems.push(theCartItem);
    // compute cart total price and total quantity
    this.computeCartTotals();
  computeCartTotals() {
    let totalPriceValue: number = 0;
    let totalQuantityValue: number = 0;
   for (let currentCartItem of this.cartItems) {
      totalPriceValue += currentCartItem.quantity * currentCartItem.price;
     totalQuantityValue += currentCartItem.quantity;
   // publish the new values ... all subscribers will receive the new data
   this.totalPrice.next(totalPriceValue);
    this.totalQuantity.next(totalQuantityValue);
   // log cart data just for debugging purposes
   this.logCartData(totalPriceValue, totalQuantityValue);
  logCartData(totalPriceValue: number, totalQuantityValue: number) {
    console.log('Contents of the cart');
   for (let tempCartItem of this.cartItems) {
     const subTotalPrice = tempCartItem.quantity * tempCartItem.price;
     console.log(`name: ${tempCartItem.name}, quantity=${tempCartItem.quantity},
price=${tempCartItem.price}, subTotalPrice=${subTotalPrice}`);
    console.log(`totalPrice: ${totalPriceValue.toFixed(2)}, totalQuantity:
${totalQuantityValue}`);
    console.log('----');
  }
  decrementQuantity(theCartItem: CartItem) {
    theCartItem.quantity--;
   if (theCartItem.quantity === 0) {
      this.remove(theCartItem);
    else {
     this.computeCartTotals();
```

```
}
}
remove(theCartItem: CartItem) {

// get index of item in the array
   const itemIndex = this.cartItems.findIndex( tempCartItem => tempCartItem.id ===
theCartItem.id );

// if found, remove the item from the array at the given index
   if (itemIndex > -1) {
        this.cartItems.splice(itemIndex, 1);

        this.computeCartTotals();
   }
}
```

# login.service.ts:

```
import { Injectable } from '@angular/core';
import { HttpClient } from '@angular/common/http';
import { User } from '../common/user';
import { Observable } from 'rxjs';
import { map } from 'rxjs/operators';
@Injectable({
 providedIn: 'root'
export class LoginService {
  private baseUrl = 'http://localhost:8080/api/users';
  private baseUrlController = "http://localhost:8080/api/v1/users";
  constructor(private httpClient: HttpClient) { }
  getUser(username: string): Observable<User[]> {
   // search url
   const searchUrl = `${this.baseUrl}/search/findByUsername?username=${username}`;
   return this.httpClient.get<GetResponseUser>(searchUrl).pipe(
     map(response => response._embedded.users)
    );
  createUser(user: User): Observable<Object>{
    return this.httpClient.post(`${this.baseUrlController}`, user);
```

```
interface GetResponseUser {
  _embedded: {
    users: User[];
  }}
```

# product.service.ts:

```
import { Injectable } from '@angular/core';
import { HttpClient } from '@angular/common/http';
import { Product } from '../common/product';
import { Observable } from 'rxjs';
import { map } from 'rxjs/operators';
import { ProductCategory } from '../common/product-category';
@Injectable({
 providedIn: 'root'
})
export class ProductService {
 private baseUrl = 'http://localhost:8080/api/products';
 private categoryUrl = 'http://localhost:8080/api/cuisines';
 private newURL = "http://localhost:8080/api/v1/products";
  getListURL:string = null;
  constructor(private httpClient: HttpClient) { }
  updateProduct(id: number, product: Product): Observable<Object>{
    return this.httpClient.put(`${this.newURL}/${id}`, product);
  addProduct(product: Product): Observable<Object>{
    return this.httpClient.post(`${this.newURL}`, product);
  deleteProduct(id: number): Observable<Object>{
    return this.httpClient.delete(`${this.newURL}/${id}`);
  getProduct(theProductId: number): Observable<Product> {
    // need to build URL based on product id
    const productUrl = `${this.baseUrl}/${theProductId}`;
```

```
return this.httpClient.get<Product>(productUrl);
 getProductCuisine(theProductId: number): Observable<ProductCategory> {
  // need to build URL based on product id
   const productUrl = `${this.baseUrl}/${theProductId}/cuisine`;
   return this.httpClient.get<ProductCategory>(productUrl);
 }
 getProductListPaginate(thePage: number,
                        thePageSize: number,
                        theCategoryId: number,
                        sortingMethod: string): Observable<GetResponseProducts> {
   if(sortingMethod == "First Created"){
       // need to build URL based on category id, page and size
    this.getListURL = `${this.baseUrl}/search/findByCuisine?cuisine=${theCategoryId}`
      + `&page=${thePage}&size=${thePageSize}`;
   else if(sortingMethod == "Last Created"){
     this.getListURL =
${this.baseUrl}/search/findByCuisineOrderByDateCreatedDesc?cuisine=${theCategoryId}`
    + `&page=${thePage}&size=${thePageSize}`;
  else{
    this.getListURL =
${this.baseUrl}/search/findByCuisineOrderByNameAsc?cuisine=${theCategoryId}`
     + `&page=${thePage}&size=${thePageSize}`;
   return this.httpClient.get<GetResponseProducts>(this.getListURL);
 getAllProductListPaginate(thePage: number,
   thePageSize: number,
   theCategoryId: number,
   sortingMethod: string): Observable<GetResponseProducts> {
     if(sortingMethod == "First Created"){
       // need to build URL based on category id, page and size
     this.getListURL = `${this.baseUrl}`;
   else if(sortingMethod == "Last Created"){
     this.getListURL =
${this.baseUrl}/search/findAllByOrderByDateCreatedDesc?page=${thePage}&size=${thePageSize
```

```
else{
     this.getListURL =
${this.baseUrl}/search/findAllByOrderByNameAsc?page=${thePage}&size=${thePageSize}`;
   return this.httpClient.get<GetResponseProducts>(this.getListURL);
 getProductList(theCategoryId: number): Observable<Product[]> {
   // need to build URL based on category id
   const searchUrl = `${this.baseUrl}/search/findByCategoryId?id=${theCategoryId}`;
   return this.getProducts(searchUrl);
 searchProducts(theKeyword: string): Observable<Product[]> {
   // need to build URL based on the keyword
   const searchUrl = `${this.baseUrl}/search/findByNameContaining?name=${theKeyword}`;
   return this.getProducts(searchUrl);
 searchProductsPaginate(thePage: number,
                        thePageSize: number,
                        theKeyword: string): Observable<GetResponseProducts> {
   // need to build URL based on keyword, page and size
   const searchUrl = `${this.baseUrl}/search/findByNameContaining?name=${theKeyword}`
                   + `&page=${thePage}&size=${thePageSize}`;
   return this.httpClient.get<GetResponseProducts>(searchUrl);
 private getProducts(searchUrl: string): Observable<Product[]> {
   return this.httpClient.get<GetResponseProducts>(searchUrl).pipe(map(response =>
response._embedded.products));
 }
 getProductCategories(): Observable<ProductCategory[]> {
   return this.httpClient.get<GetResponseProductCategory>(this.categoryUrl).pipe(
     map(response => response._embedded.cuisines)
   );
```

```
interface GetResponseProducts {
    _embedded: {
        products: Product[];
    },
    page: {
        size: number,
        totalElements: number,
        totalPages: number,
        number: number
    }
}
interface GetResponseProductCategory {
    _embedded: {
        cuisines: ProductCategory[];
    }
}
```