HTTP Request – I Design

```
App.component.html :-

<header><h2> {{title}}</h2></header>


<mat-sidenav-container class="sideContainer" >
    <mat-sidenav class="sideNav" mode="side" opened>


            <mat-nav-list>Home</mat-nav-list>
            <mat-nav-list>Mobile Phones</mat-nav-list>
            <mat-nav-list>Accessories</mat-nav-list>
            <mat-nav-list>Speakers</mat-nav-list>
            <mat-nav-list>Watches</mat-nav-list>
            <mat-nav-list>Login</mat-nav-list>



    </mat-sidenav>
    <mat-sidenav-content>


            <!-- Fill your code here -->


                <mat-card class="card" *ngFor="let item of product">


                    <img class="prod-img" src="{{item.productImage}}">
                    <h2 class="productName">{{item.name}}</h2>
                    <p class="category">Category : {{item.category}}</p>
                    <p class="price">Price : {{item.price}}</p>
                    <p class="quantity">AvailQuantity : {{item.availQuantity}}</p>
                    <button class="buyProd">Buy</button>


                </mat-card>


    </mat-sidenav-content>
  </mat-sidenav-container>


  <footer>Powered by Shopcules.com</footer>
```

```
Product.service.ts :-

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

import { Observable } from 'rxjs';

import { Product } from './product';


@Injectable({

  providedIn: 'root'

})
export class ProductService {

    private url = 'assets/product-mock-data.json';

    constructor (private http: HttpClient){}


    getProducts(): Observable<Product[]> {

      return this.http.get<Product[]>(this.url);

    }

}


Product.ts :-

//Create a product class with the following attributes,

export class Product {

    id : number;

    name : string;

    category : string;

    price : number;

    productImage : string;

    availQuantity : number;

}


App.component.ts :-

import { Component, OnInit } from '@angular/core';

import { Product } from './product';

import { ProductService } from './product.service';


@Component({
```

```typescript
  selector: 'app-root',

  templateUrl: './app.component.html',

  styleUrls: ['./app.component.css']

})
export class AppComponent implements OnInit {


  title="Welcome to Online shopping website"

  product: Product[] = [];


  constructor (private productService: ProductService){}


  ngOnInit(): void {

    this.productService.getProducts().subscribe(products => {

      this.product = products;

    })

  }


}
```

Assets/product-mock-data.json :-

```json
 [
    { "id": 1, "name": "Samsung Galaxy Note 10", "category": "Mobile Phones" ,"price":69900,"availQuantity":5,"productImage":"../assets/img/product1.jpg" },
    { "id": 2, "name": "SkullCandy BT Inkd Plus" ,"category": "Headset" ,"price":1999,"availQuantity":10,"productImage":"../assets/img/product2.jpg" },
    { "id": 3, "name": "JBL Flip 3 Bluetooth" ,"category": "Speakers" ,"price":5999,"availQuantity":15,"productImage":"../assets/img/product4.jpg" },
    { "id": 4, "name": "Conekt Volt Power Bank" ,"category": "Mobile Phones" ,"price":1350,"availQuantity":9,"productImage": "../assets/img/product5.jpg" },
    { "id": 5, "name": "Anker Soundbuds Rise" ,"category": "Headset" ,"price":2750,"availQuantity":20,"productImage": "../assets/img/product3.jpg" },
    { "id": 6, "name": "Apple Watch Series" ,"category": "Watch" ,"price":5290,"availQuantity":14,"productImage": "../assets/img/product6.jpg" },
    { "id": 7, "name": "IBall Slide Spirit X2" ,"category": "Mobile Phones" ,"price":4750,"availQuantity":16,"productImage": "../assets/img/product7.jpg" },
    { "id": 8, "name": "Skullcandy Set 2.0 " ,"category": "Headset" ,"price":1500,"availQuantity":8,"productImage": "../assets/img/product8.jpg" },
    { "id": 9, "name": "Infinix Smart 3 plus" ,"category": "Mobile Phones" ,"price":2790,"availQuantity":0,"productImage": "../assets/img/product9.jpg" },
```

```json
    { "id": 10, "name": "Timex Three Hand" ,"category": "Watch" ,"price":2540,"availQuantity":3,"productImage": "../assets/img/product10.jpg"},

    { "id": 11, "name": "Sony XB01 EXTRA BASS" ,"category": "Speakers" ,"price":8777,"availQuantity":18,"productImage": "../assets/img/product11.jpeg" },

    { "id": 12, "name": "Xiaomi Mi A3", "category": "Mobile Phones" ,"price":12990 ,"availQuantity":25,"productImage":"../assets/img/product11.jpg"},

    { "id": 13, "name": "Samsung Galaxy M10", "category": "Mobile Phones" ,"price":8090,"availQuantity":13,"productImage":"../assets/img/product12.jpg"},

    { "id": 14, "name": "One Plus 7", "category": "Mobile Phones" ,"price":32090,"availQuantity":19,"productImage":"../assets/img/product13.jpg"},

    { "id": 14, "name": "Brainwavz Jive", "category": "Headset" ,"price":3500,"availQuantity":21,"productImage":"../assets/img/product14.png"}
]
```

HTTP Request – I Assess

```html
// app/app.component.html

<div class="container">
  <div class="row">
    <div class="col-md-12">
      <h1 class="text-center">ABL Online Library - Book List</h1>
    </div>
  </div>
  <div class="row">
    <app-book-list-http></app-book-list-http>
  </div>
</div>
```

```ts
// app/book-list-http/book-list-http.component.ts
import { Component, OnInit } from '@angular/core';
import { LibraryService } from 'src/assets/services/library.service';
import { IBook } from 'src/app/book-interface';


@Component({
  selector: 'app-book-list-http',
  templateUrl: './book-list-http.component.html',
  styleUrls: ['./book-list-http.component.css']
})
export class BookListHttpComponent implements OnInit {
```

```typescript
  books: IBook[] = [];

  constructor(private libraryService: LibraryService) { }

  ngOnInit(): void {
    this.libraryService.getBooks().subscribe(books => {
      this.books = books;
      console.log(this.books); // Check if the books array is being populated
correctly
    });
  }
}
```

```html
// app/book-list-http/book-list-http.html

<div class="row">
  <div class="col-md-4" *ngFor="let book of books; let i = index">
    <div class="card" id="book-card">
      <img src="assets/icons/book-pic.jpg" alt="Book Cover" id="book-image">
      <div class="card-body">
        <h5 class="card-title" id="book-title-{{i}}">{{book.title}}</h5>
        <p class="card-text" id="book-author-
{{i}}">Author: {{book.author}}</p>
        <p class="card-text" id="book-desc-{{i}}">{{book.description}}</p>
        <button class="btn btn-primary" id="btn-rent-
{{i}}" (click)="onRentClick(book.id)">Rent</button>
        <button class="btn btn-secondary" id="btn-wish-
{{i}}" (click)="onWishListClick(book.id)">Wishlist</button>
      </div>
    </div>
  </div>
</div>
```

```typescript
// app/book-interface.ts
export interface IBook {
  id: number;
  title: string;
  author: string;
  description: string;
}
```

```typescript
// assets/services/library.services.ts
import { Injectable } from '@angular/core';
import { HttpClient } from '@angular/common/http';
import { IBook } from 'src/app/book-interface';
import { Observable } from 'rxjs';

@Injectable({
  providedIn: 'root'
})
export class LibraryService {
  private apiUrl = 'assets/data/books.json';

  constructor(private http: HttpClient) { }

  getBooks(): Observable<IBook[]> {
    return this.http.get<IBook[]>(this.apiUrl);
  }
}
```