**Project Overview**

This project is a **mobile-optimized Angular web application** that displays beer products. It supports:

* Two views: **Detail View** and **Bottle View**
* Sorting products by **price**
* Filtering products **expensive more than €2 per liter**
* Integration with a **.NET Web API** backend fetching external JSON data
* Backend (.NET)

API Endpoints

GET https://localhost:7015/api/Products

* Frontend (Angular)

| **User Story** | **Description** |
| --- | --- |
| View beer products | Web app fetches and displays beer products in two formats |
| Toggle view | Switch between "Detail" and "Bottle" views |
| Sort by price | Sort articles ascending/descending by price |
| Filter expensive beers | Only show beers more than €2 per liter |
| Responsive mobile design | Styled for mobile viewing |
| Uses backend API | Fetches and processes data through .NET API |

**Step 1 : Backend Code Explanation**  
  
Added Models, Dto folder and file

Step 2:

**ProductRepository.cs**

* Fetches external product JSON data from:  
  https://flapotest.blob.core.windows.net/test/ProductData.json
* Deserializes JSON into Product and Article models

Step 3:

**Service Layer**

**ProductService.cs**

* Transforms raw product data into ArticleDto and implemented following business logics
  + **Filtering** (< 2 €/L)
  + **Sorting** (asc/desc)

Step 4:

**API Controller**

**ProductsController.cs**

* Defines the GET /api/Products endpoint
* Accepts optional query params:
  + sort=asc|desc
  + expensiveThan2PerLiter=true|false
* Returns following response code based on condition with Json Data:
  + 200 OK with articles
  + 400 if invalid sort
  + 404 if no products
  + 500 for internal error

**Frontend Code Explanation**

**Step 5:**

**ProductListComponent**

UI Component to:

* + **Toggle views**
  + **Sort products**
  + **Filter expensive beers**

**ProductService**

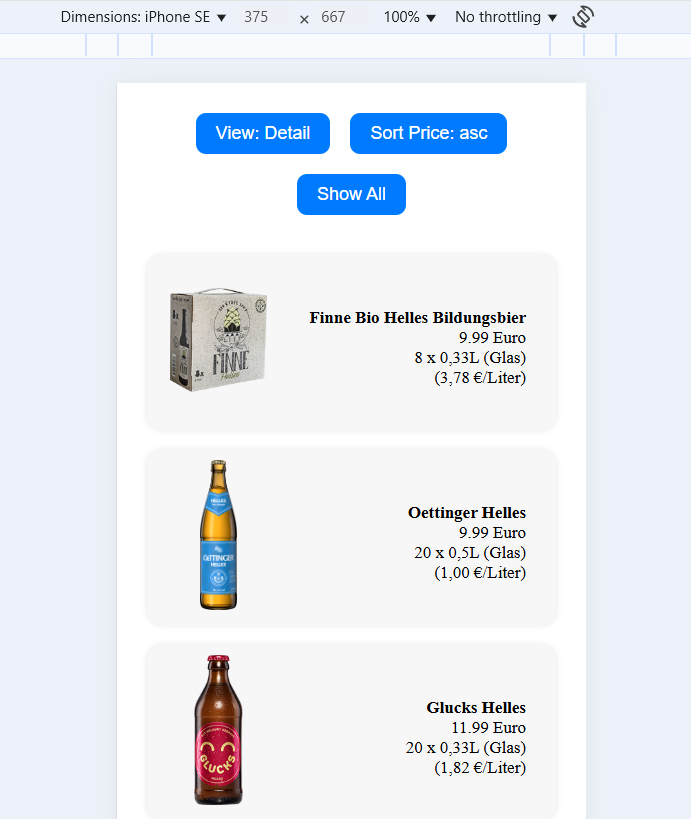
* Calls the backend API using HttpClient
* Constructs query parameters for:
  + Sort
  + Filtering
* URL: https://localhost:7015/api/Products

**To Run the Project**

I have used Visual Studio for backend API and Visual Studio code for Angular.

Node modules not included in the github it can be added to the project using npm install command

Output of the Task

A screenshot of a cellphone

AI-generated content may be incorrect.