Assignment - "FullCart" application

Introduction:

As part of your technical evaluation, we present the following coding assignment. Given the time constraints, we acknowledge that attaining a flawless solution may be challenging, we are interested in your approach to the task.

Guiding Philosophy:

Embrace the opportunity to showcase the depth and breadth of your knowledge, aspects that may not always be explored in traditional interviews. Consider this assignment as a canvas to express your technical, logical, coding talents, and creativity in your own unique style and time.

Project Overview:

"FullCart" is an e-commerce application requiring both frontend and backend solutions. As a developer, your focus will be on delivering a functional backend and the frontend.

Technical Requirements:

- Utilize the latest version of Dot Net as your backend framework to implement Restful API's.
- using EF-Core as your ORM.
- Choose MS-SQL for persistence and Angular for the UI layer.

MileStone 1: Create login and logout functionality with roles for users.

- Create Admin and Customer user roles.
- Create login functionality for these users. Make sure to use authorization and authentication.

● Design, implement and integrate the Login API's to Angular.

MileStone 2: Create solution for Product module to be used by Product Admin, and perform below actions:

● Add a new item to the inventory (The item should require a name, description, and price, Brand, Category as basic fields, Quantity available in inventory, Image etc think of additional information that would be useful). It would be great if you provide the solution for adding items in bulk by uploading excel file.
● Updating an item plus updating the items in bulk by providing an excel file.
● Listing all the items present in inventory.
● Create a download button which will download the items present in inventory in excel format.
● Deleting the items present in inventory.
● Adding new categories. (Category Name, Image)
● Adding new brands. (Brand Name and Image)
● Modifying the category data.
● Modifying the brand data.
● Listing the orders and its details created by the customers with correct status.
● The Admin dashboard with the above functionalities. You can choose the design you want.

MileStone 3: Create a backend solution for Product module to be used by Customer and perform below actions:

● Listing of items present in the inventory based on category.
● Adding the items to the cart and removing it from the cart.
● Creating the order and storing its details in Database (Items, total price, status etc.) with status as order created.
● Listing the orders and its details which are created by that customer.
● Search functionality for Items. Sorting functionality based on Low to high pricing.
● The customer can cancel the order, It will change the status to order cancelled.

Important Notes

- Proper validations should be in place.
- Please follow principles of clean code architecture.
- Please apply design patterns wherever necessary.
- Finally If you get some time, you can focus on creating the documentation.
- Primary thing for us is the code quality and then comes the number of tasks closed.

Submission CheckList

- Make sure your local is up and working on both angular and Dot Net.
- You will be required to showcase the entire project and articulate the technological decisions you made during its development.
- Please share the repository url.