Technical Write-Up

This project I started as .NET 8.0. When going through the documentation, I decided to develop one by one module, first I was creating customer management, order management and last admin functions. For database wise, I was decided to use SQL Server earlier on, but I found I didn’t setup on my local PC, so I decided to use PostgreSQL, so it will be using Npgsql. Firstly, I was creating the project structure like below.

CustomerPortal/

----- Controllers/ # All here are storing API endpoints

----- Models/ # Entity models and also DTOs

----- Data/ # Database context, seeder and configurations for table

----- Exceptions/ # Custom exception

----- Extensions/ # It’s for claims context to store the user information

----- Middleware/ # Custom middleware for account checking whether user deactivated can still access API or not and global exception handling

----- Migrations/ # Database migration

----- Services/ # Interface layer and inside got one more “Implementation”, it’s for service layer

Challenges and solutions

1. Order status transitions

* When I was developing this, I can use postman call to actually change the status from any to any, for example, when it’s processing, I can directly set to Delivered (which is 3), by right it should follow step by step, because I was following how Shopee works, so I added a status transition checking.

Bonus feature that was included :

1. Pagination added for customer and orders listing

Bonus feature that wasn’t included

1. Due to lack of time, I was just recently recovered from my virus infection, I was really would like to build email functionality and caching functionality, but I just started this assessment two days ago.