<Group08>

<Clothing Selling Website>
Software Architecture Document

Version <1.3>

Revision History

Date	Version	Description	Author
<05/04/2021>	<1.0>	Complete FrontEnd GUI + Controller	Lê Hồng Quang + Lê Thị Thùy Dương
<06/04/2021>	<1.1>	Complete Architectural Goals and Constraints+ Introduction+Use-case model	Nguyễn Đăng Triều
<09/04/2021>	<1.2>	Complete Backend Route + Controller	Nguyễn Lê Đức Hoàng +Nguyễn Bá Tín
<17/04/2021>	<1.3>	Update section 5 and 6 for PA04	Nguyễn Lê Đức Hoàng+Nguyễn Bá Tín + Lê Thị Thùy Dương

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Software Architecture Document

1. Introduction

- Purpose:

The software architecture document provides a comprehensive overview of the architecture of the Cloth-Selling system. It serves as a communication medium between the software architect and other project team members regarding architecturally significant decisions which have been made on the project.

- Scope:

This Software Architecture Document provides an architectural overview of the Cloth-Selling System. The Cloth-Selling System is being developed by Group8 to support online shopping.

- References:

Software Architecture Document

1. Lecture Slides of Introduction to Software Engineering subject, Teacher Nguyen Minh Huy and Ho Tuan Thanh, 2021, VNUHCM-University Of Science.
2. Requirements of PA1,Teacher Nguyen Minh Huy and Ho Tuan Thanh, 2021, VNUHCM-University Of Science.
3. Tutorial Video named PA3-PA4, Teacher Ho Tuan Thanh,2021, VNUHCM-University Of Science.

- Overview:

The report will present a detailed analysis of the architecture of the Cloth-Selling system.

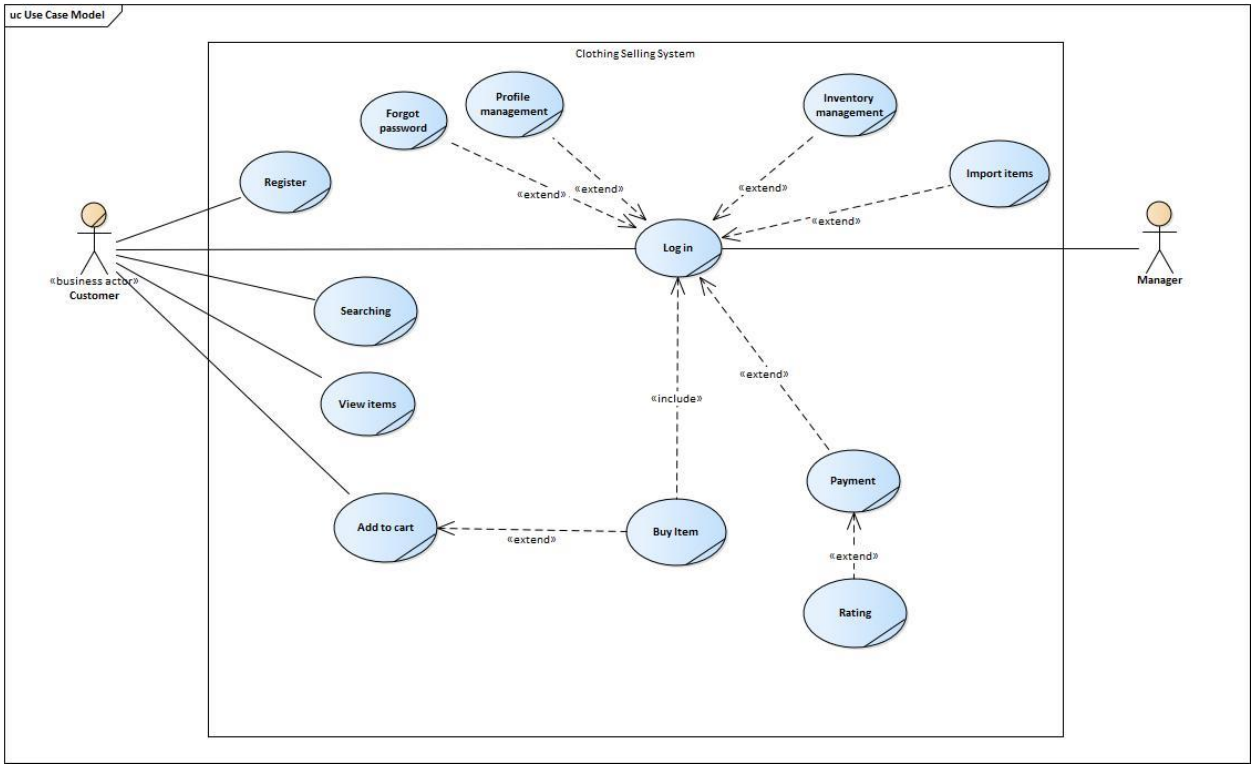
Further sections cover the architecture representation of the project including architectural representation, architecture goals and constraints and use case realizations. The later sections cover the detailed specific details of the 4 main views (logical view, process view, deployment view and implementation view) of the system.

2. Architectural Goals and Constraints

There are some key requirements and system constraints that have a significant bearing on the architecture. They are:

1. All users must be available from both local campus PCs and remote PCs with internet dial up connections.
2. The Cloth-Selling System must ensure complete protection of data from unauthorized access. All remote accesses are subject to user identification and password control.
3. The Cloth-Selling System will be implemented as a client-server system. The client portion resides on PCs and the server portion must operate on the Website Server.
4. All performance and loading requirements, as stipulated in the Vision Document and the Supplementary Specification, must be taken into consideration as the architecture is being developed.

3. Use-Case Model



4. Logical View

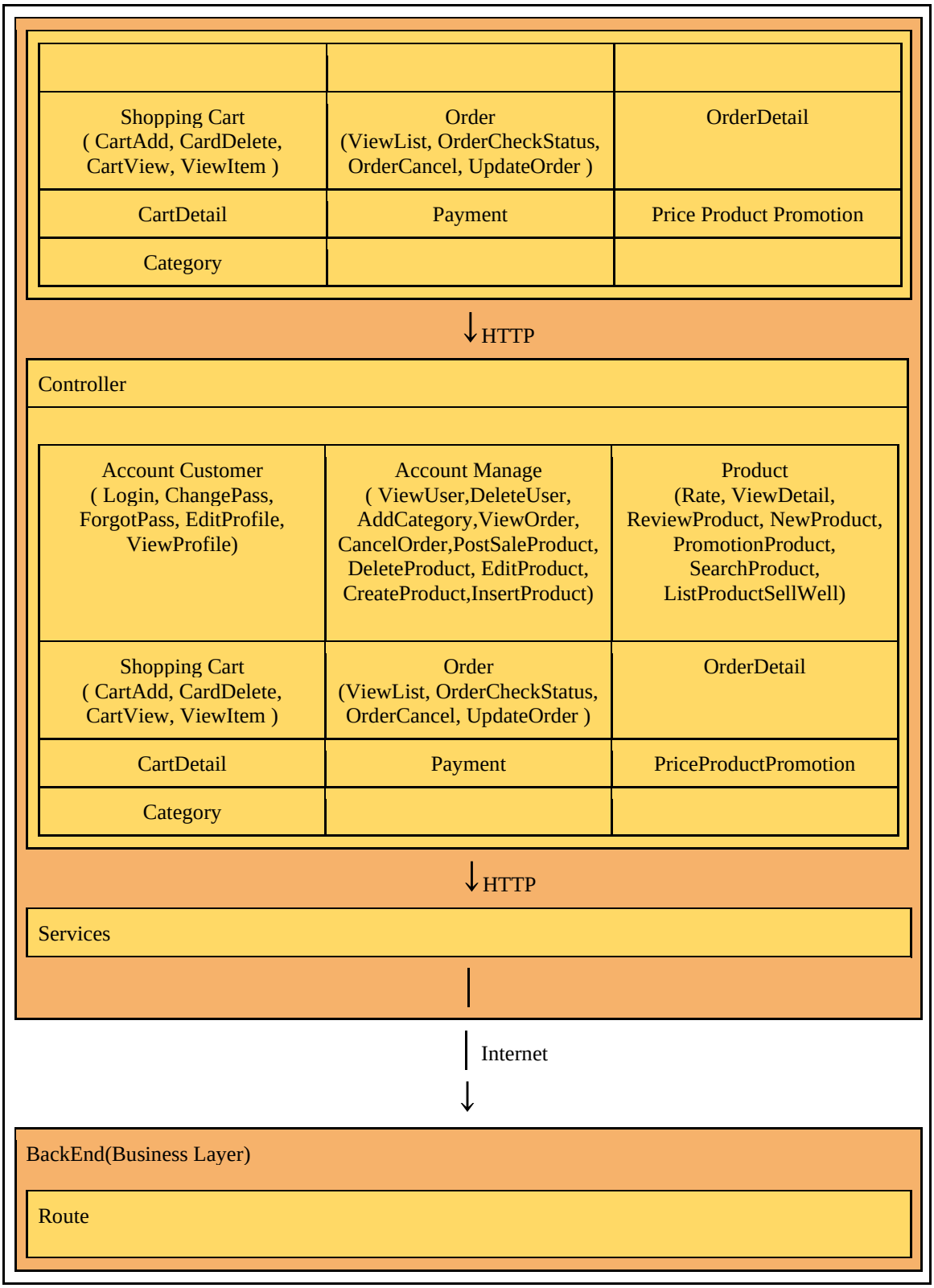
- The Clothing Selling Website(CSW) System is divided into 3 layers. The layering model of the CSW system is based on a responsibility layering strategy that associates each layer with a particular responsibility. This strategy has been chosen because it isolates various system responsibilities from one another, so that it improves both system development, reusability and maintenance.

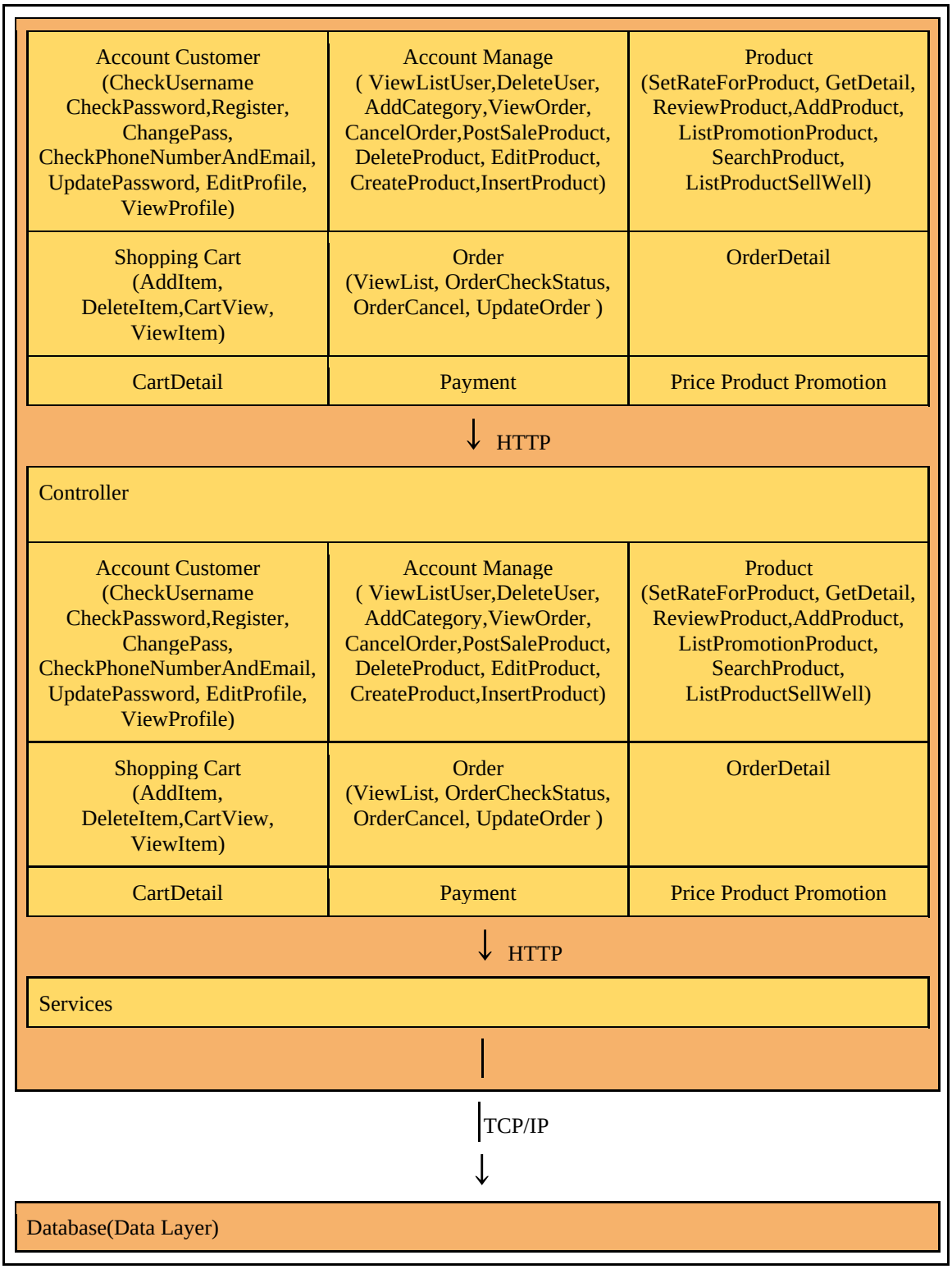
System

FrontEnd(Client Layer)

GUI

Account Customer (Login, Register, ChangePass, ForgotPass, EditProfile, ViewProfile)	Account Manage (ViewUser,DeleteUser, AddCategory,ViewOrder, CancelOrder,PostSaleProduct, DeleteProduct, EditProduct, CreateProduct,InsertProduct)	Product (Rate, ViewDetail, ReviewProduct, NewProduct, PromotionProduct, SearchProduct, ListProductSellWell)


Shopping Cart (CartAdd, CardDelete, CartView, ViewItem)
Order (ViewList, OrderCheckStatus, OrderCancel, UpdateOrder)
OrderDetail
CartDetail
Payment
Price Product Promotion
Category
HTTP
Controller
Account Customer (Login, ChangePass, ForgotPass, EditProfile, ViewProfile)
Account Manage (ViewUser,DeleteUser, AddCategory,ViewOrder, CancelOrder,PostSaleProduct, DeleteProduct, EditProduct, CreateProduct,InsertProduct)
Product (Rate, ViewDetail, ReviewProduct, NewProduct, PromotionProduct, SearchProduct, ListProductSellWell)
Shopping Cart (CartAdd, CardDelete, CartView, ViewItem)
Order (ViewList, OrderCheckStatus, OrderCancel, UpdateOrder)
OrderDetail
CartDetail
Payment
PriceProductPromotion
Category
HTTP
Services
Internet
BackEnd(Business Layer)
Route


Account Customer (CheckUsername CheckPassword,Register, ChangePass, CheckPhoneNumberAndEmail, UpdatePassword, EditProfile, ViewProfile)
Account Manage (ViewListUser,DeleteUser, AddCategory,ViewOrder, CancelOrder,PostSaleProduct, DeleteProduct, EditProduct, CreateProduct,InsertProduct)
Product (SetRateForProduct, GetDetail, ReviewProduct,AddProduct, ListPromotionProduct, SearchProduct, ListProductSellWell)
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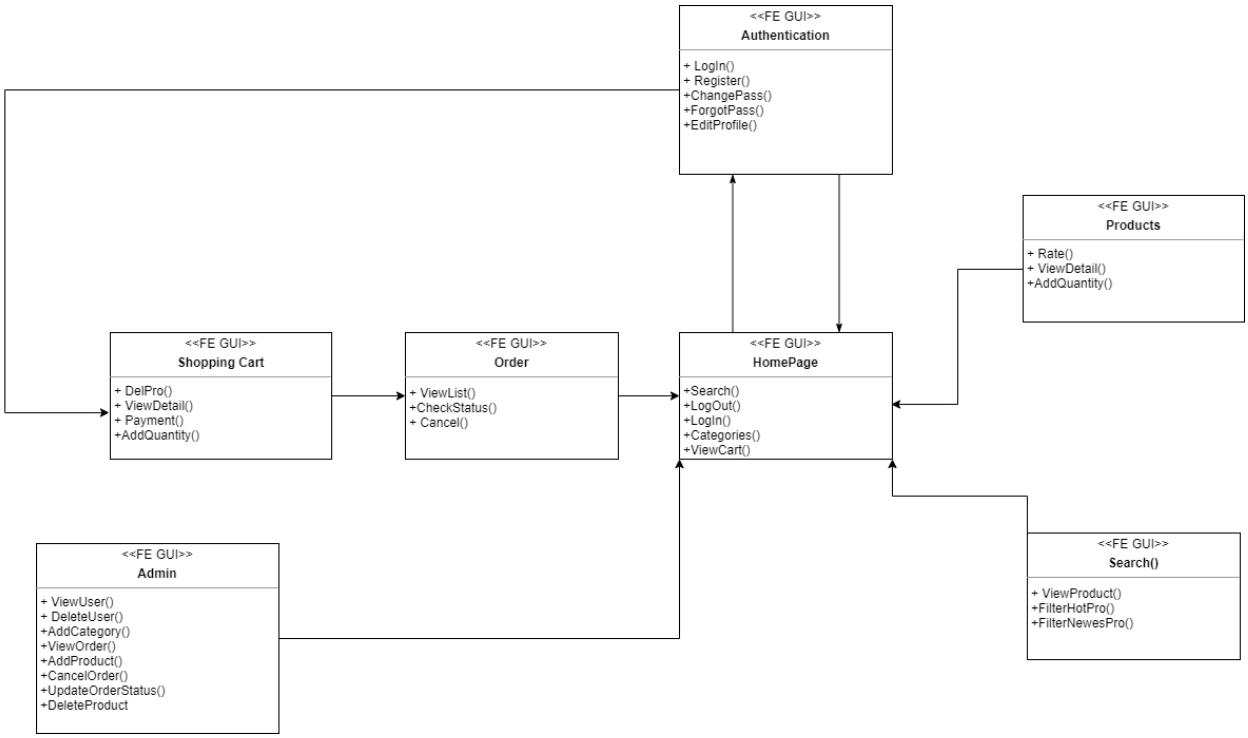
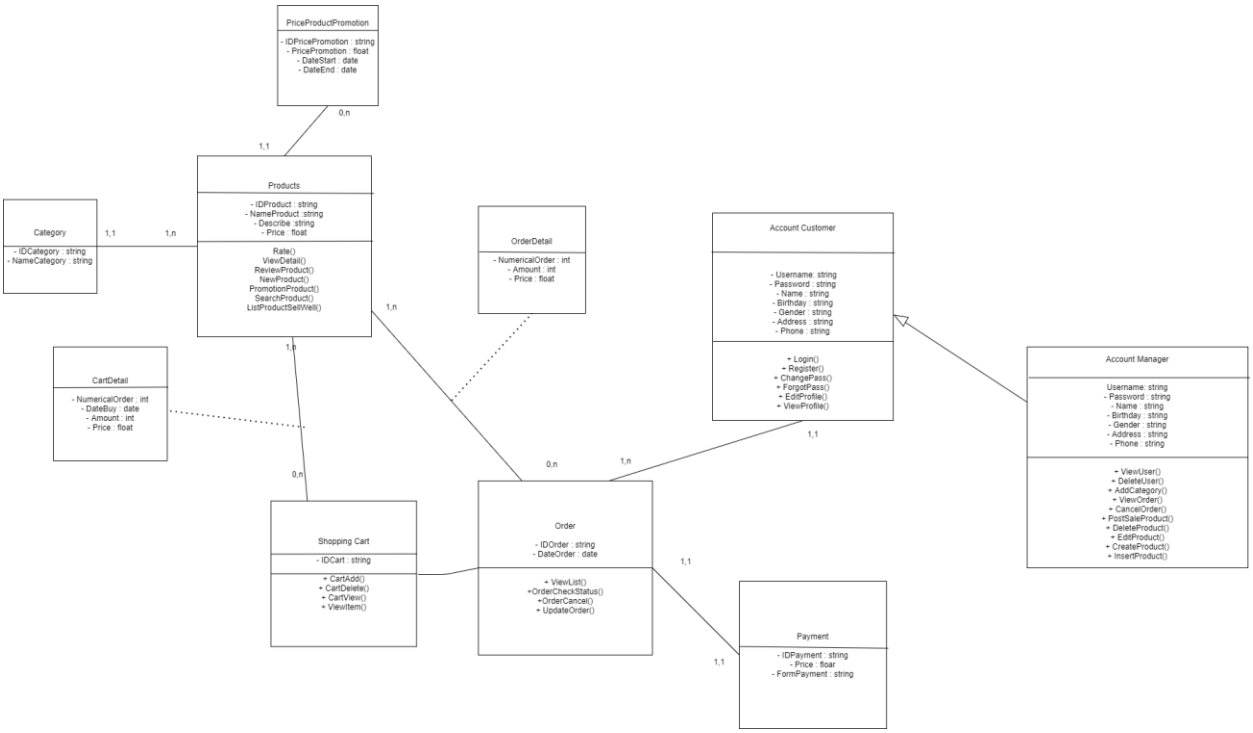
Product (SetRateForProduct, GetDetail, ReviewProduct,AddProduct, ListPromotionProduct, SearchProduct, ListProductSellWell)
Shopping Cart (AddItem, DeleteItem,CartView, ViewItem)
Order (ViewList, OrderCheckStatus, OrderCancel, UpdateOrder)
OrderDetail
CartDetail
Payment
Price Product Promotion
HTTP
Services
TCP/IP
Database(Data Layer)

4.1 Component: FrontEnd - GUI



- Homepage class: Homepage screen,Supports some functions such as search for products/items,login account,logout account, view categories, view shopping cart.
- Authentication class:Authentication screen supports any user to login, register an account, change the password, take back password if user forget it and edit/update user's profile.
- Products class: Product screen supports to add ratings, view detail of any product and add quantity.
- Search class: Search Screen supports to view products, filter top hottest products and top newest products.
- Admin class: Admin screen supports to view list of users, delete user, add category, view order list, add product, cancel order, delete product, update status of order.
- Shopping cart class: Shopping cart screen supports to delete selected product,view detail of product, payment, add quantity.
- Order class: order screen supports to view list of order, check status of order and cancel order.

4.2 Component:FrontEnd- Controller



Account Customer : User account with functions intended for users such as login, registration, change password, ...

Account Customer
- Username: string - Password : string - Name : string - Birthday : string - Gender : string - Address : string - Phone : string
+ Login() + Register() + ChangePass() + ForgotPass() + EditProfile() + ViewProfile()

Account Manager : Manage accounts with functions intended for manager such as post sale product, view user, ...

Account Manager
- Username: string - Password : string

- Name : string - Birthday : string - Gender : string - Address : string - Phone : string
+ ViewUser() + DeleteUser() + AddCategory() + ViewOrder() + CancelOrder() + PostSaleProduct() + DeleteProduct() + EditProduct() + CreateProduct() + InsertProduct()

PriceProductPromotion : Contains promotional prices of products for a period of time

Price Product Promotion
- IDPricePromotion : string - PricePromotion : float - DateStart : date - DateEnd : date

Product : Contains information about the product, information about the new product, information about the list product sold well,...

Products
- IDProduct : string - NameProduct :string - Describe :string - Price : float
Rate() ViewDetail() ReviewProduct() NewProduct() PromotionProduct() SearchProduct() ListProductSellWell()

Category : Contains information about category product such as clothes for men or women

Category
- IDCategory : string - NameCategory : string

Order : Contains information about order and view order’s status,...

Order

- IDOrder : string - DateOrder : date
+ ViewList() +OrderCheckStatus() +OrderCancel() + UpdateOrder()

OrderDetail : details of the order contains amount, price, product, on any order

OrderDetail
- NumericalOrder : int - Amount : int - Price : float

Payment : how to pay for the goods

Payment
- IDPayment : string - Price : floar - FormPayment : string

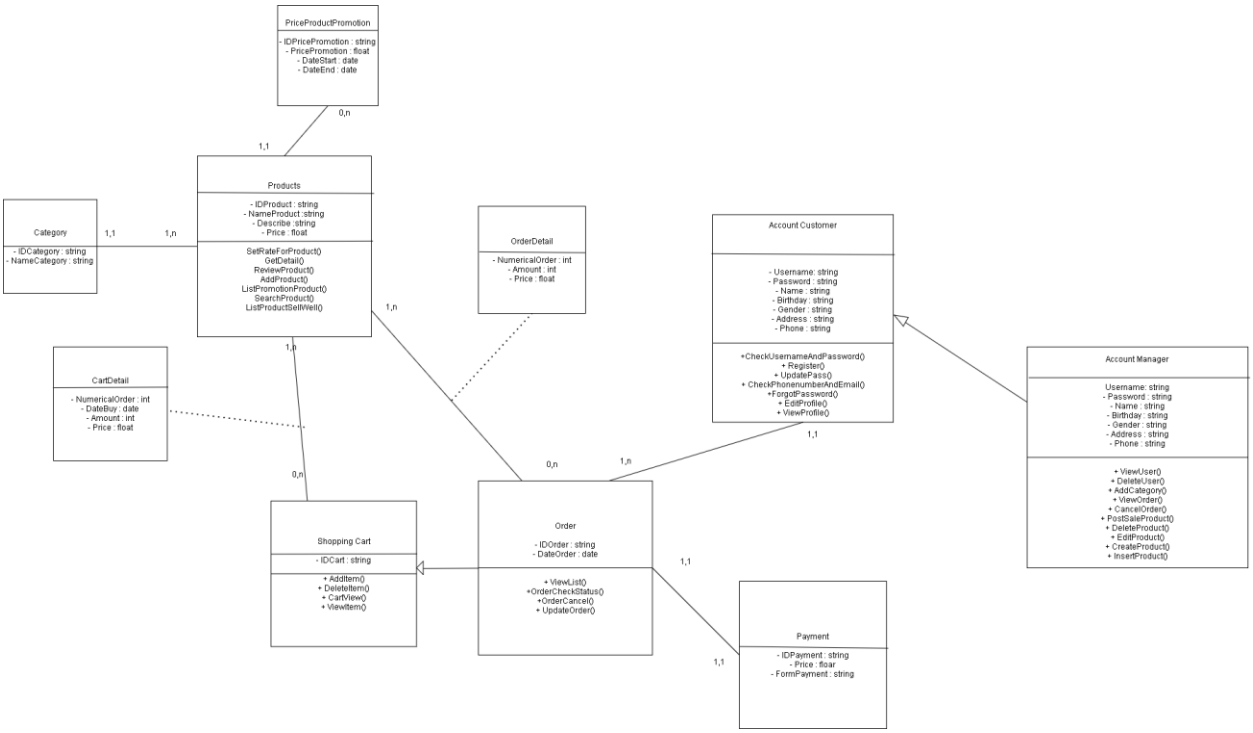
Shopping cart : A class for shopping cart to manage the shopping cart

Shopping Cart
- IDCart : string
+ CartAdd() + CartDelete() + CartView() + ViewItem()

CartDetail : detail of the cart contains date buy, amount of product, price product,..

CartDetail
- NumericalOrder : int - DateBuy : date - Amount : int - Price : float

4.3 Component : BackEnd Route - Controller



Account Customer : User account with functions intended for users such as login, registration, change password, ...

Account Customer
- Username: string - Password : string - Name : string - Birthday : string - Gender : string - Address : string - Phone : string
+ CheckUsernameAndPassWord() + Register() + UpdatePass() +CheckPhoneNumberAndEmail() + ForgotPassWord + EditProfile() + ViewProfile()

Account Manager : Manage account with functions intended for manager such as post sale product, view user, ...

Account Manager
- Username: string

- Password : string - Name : string - Birthday : string - Gender : string - Address : string - Phone : string
+ ViewUser() + DeleteUser() + AddCategory() + ViewOrder() + CancelOrder() + PostSaleProduct() + DeleteProduct() + EditProduct() + CreateProduct() + InsertProduct()

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Shopping cart : A class for shopping cart to manage the shopping cart

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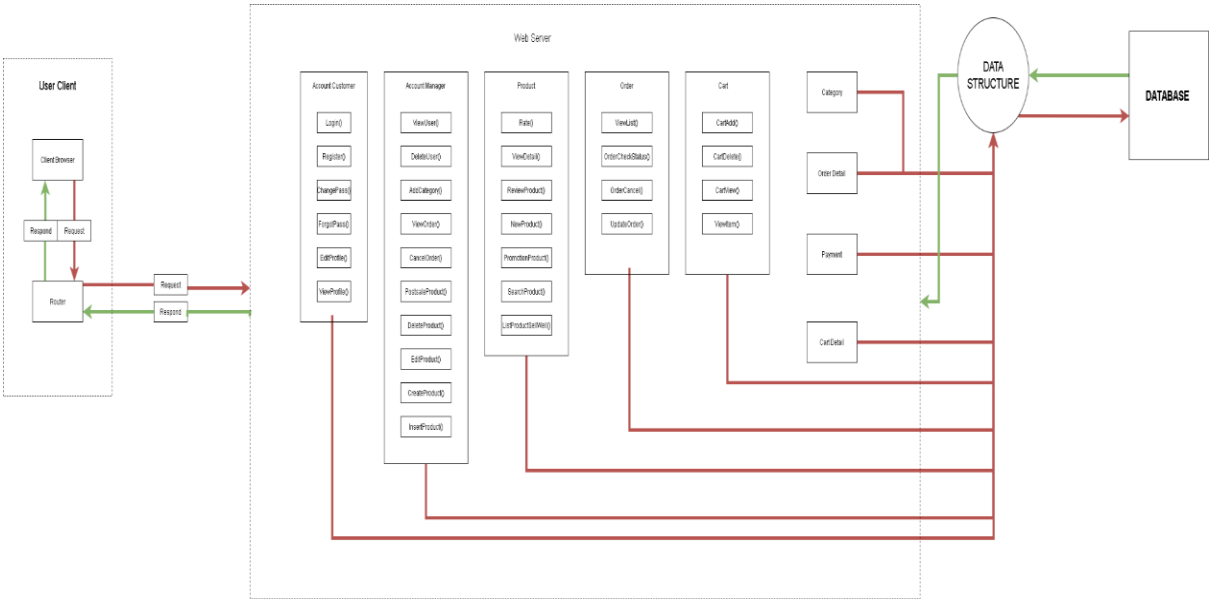
- IDCart : string
+ AddItem() + DeleteItem() + CartView() + ViewItem()

CartDetail : detail of the cart contains date buy, amount of product, price product,..

CartDetail
- NumericalOrder : int - DateBuy : date - Amount : int - Price : float

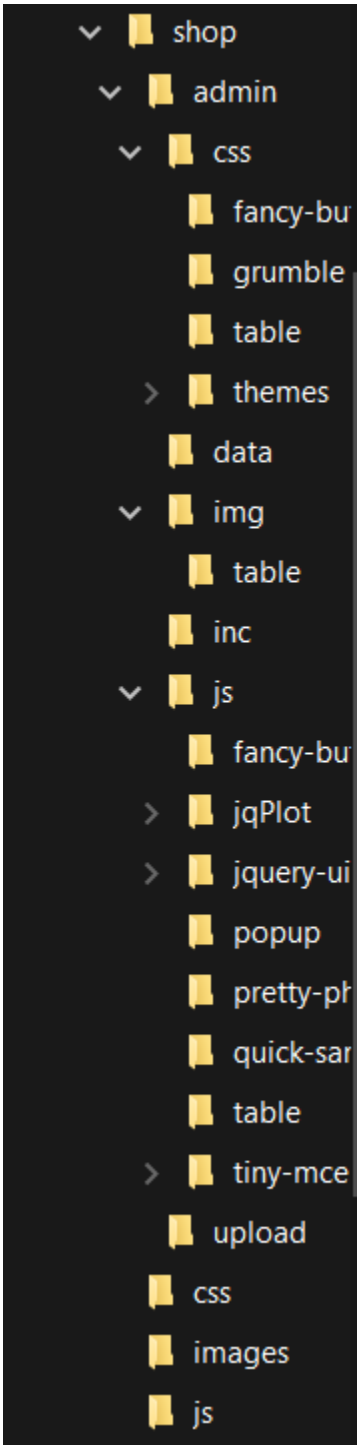
5. Deployment



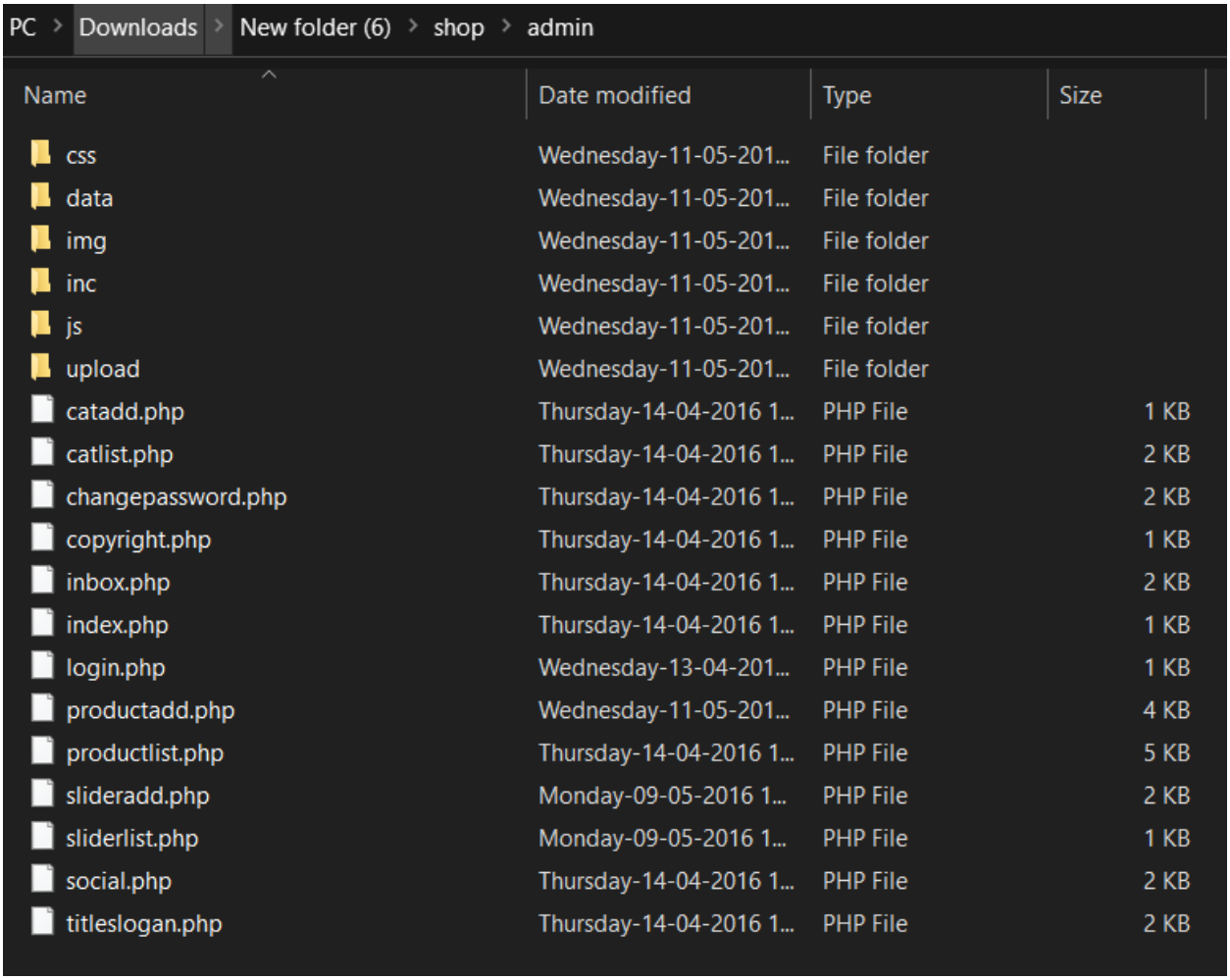
detail photo link: https://drive.google.com/file/d/10eGipyogv7YpipKFaVLX4sTViQQb1fk-/view?usp=sharing

6. Implementation View

- directory structure

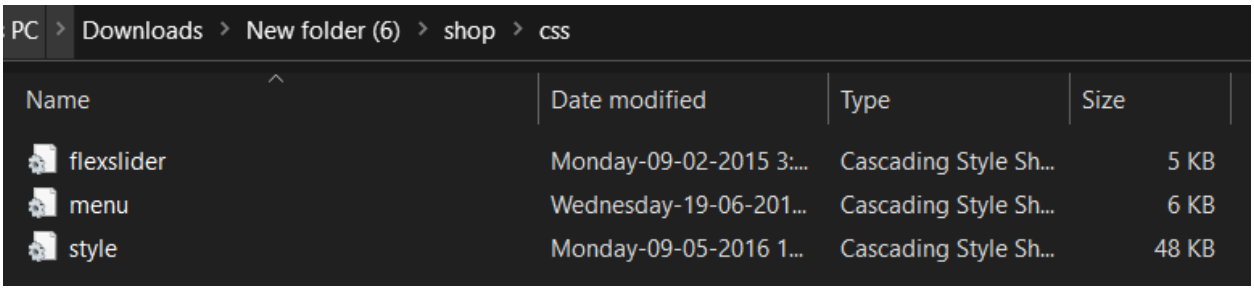


admin directory has no source code back-end

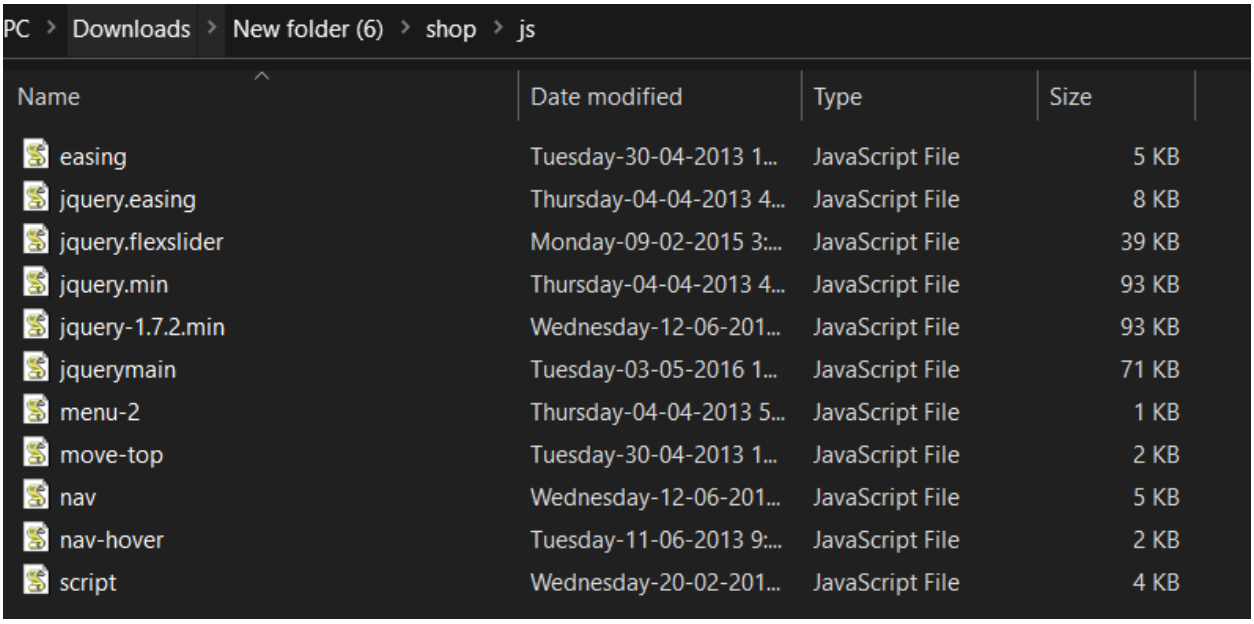
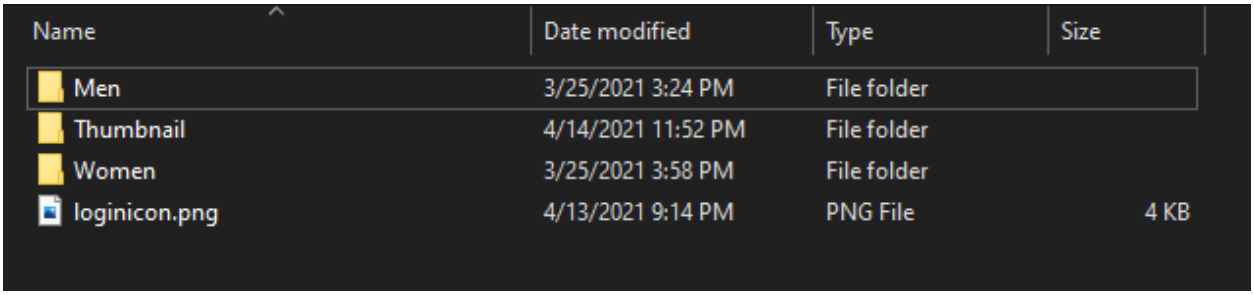
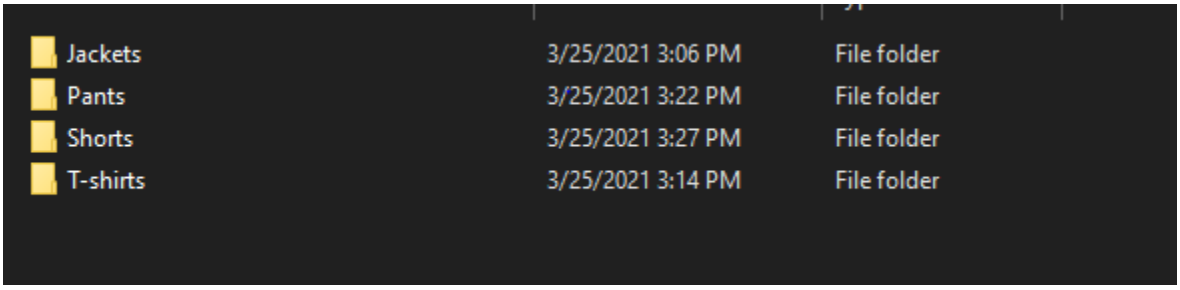


- the folder css, js, images contains the images to upload

folder css



folder js



folder images