# Software design

# Clothes store system

Version 2.0

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# **Revision history**

| Date  | Authors     | Modifications   | Version |
|-------|-------------|---|---------|
| 23/06 | All members | Select documents, templates and build a database for the system | 1.0     |

| 29/06 | Le Minh Thang                    | View list product,search product by category, product name  | 1.1           |
|-------|----------------------------------|---|---------------|
|       |                                  | Customer add order, checkout                                |               |
| 30/06 | Le Minh Thang +<br>Phan Viet Anh | Update profile + register                                   | 1.2           |
| 30/06 | Phan Viet Anh                    | Verify register, forgot password                            | 1.3           |
| 03/07 | Dao Xuan Phuong                  | Manages product crud product                                | 1.3           |
| 06/07 | Ha Dang Thanh                    | Manage order crud order + Admin Dashboard                   | 1.4           |
| 10/07 | Nguyen The Trung                 | Manage order history  | 1.5           |
| 15/07 | All members                      | Combine members' code together to produce the final product | Final version |

# 1. Document description

This document describes the first version 1.0 for the Online Clothing Store system. It is divided into the following sections:

- In section 2, an overview of the Online Clothing Store system's requirements will be provided, including a list of system users, use cases, use case diagrams, and activity diagrams that describe the most important use case scenarios.
- 2. In section 3, an E-R-D diagram and all tables of the Online Clothing Store system will be presented in detail.
- 3. In section 4, all classes organised in layers and their behaviours (sequence diagrams) for the most important use cases will be presented.
- 4. In section 5, the main screen prototypes will be presented.

### 2. SRS overview

# 2.1. List of system users

#### Roles:

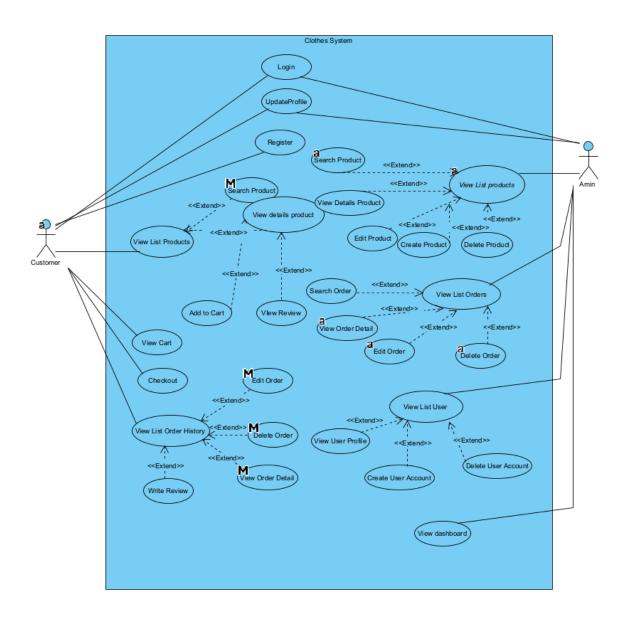
- Admin: The person responsible for managing the Online Clothing Store System, including adding new products, updating product information, and managing orders.
- **Customer:** The person who uses the Online Clothing Store to browse products, place orders, and manage their account.

#### 2.2. List of use cases

- 1. Order processing
- 2. Checkout order
- 3. Manage Order
- 4. Manage Product
- 5. Manage User

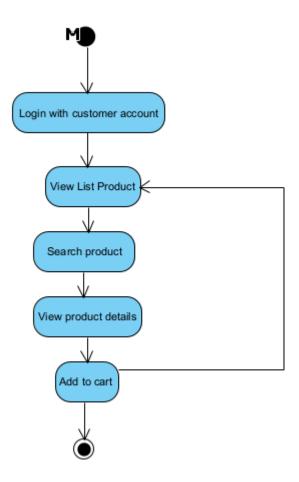
#### 2.3. Use case diagram

#### 2.3.1. Preliminary use case diagram

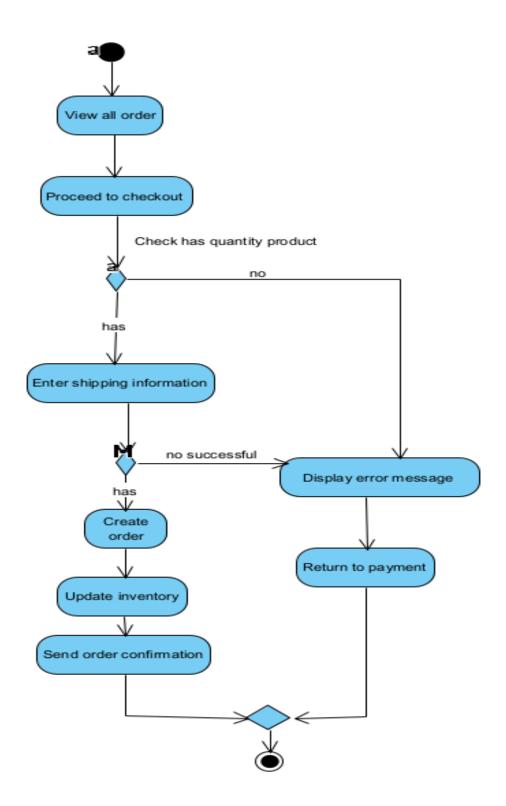


# 2.4. Activity diagrams of use case scenarios

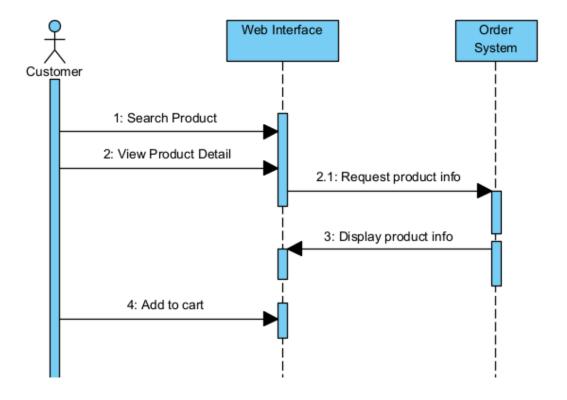
# 2.4.1. Activity diagram for use case "Order Product"



2.4.1. Activity diagram for use case "Checkout Order"

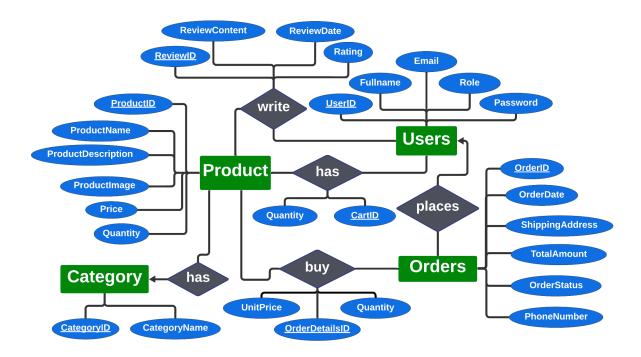


2.5.1. Sequence diagram for use case "Add to cart"



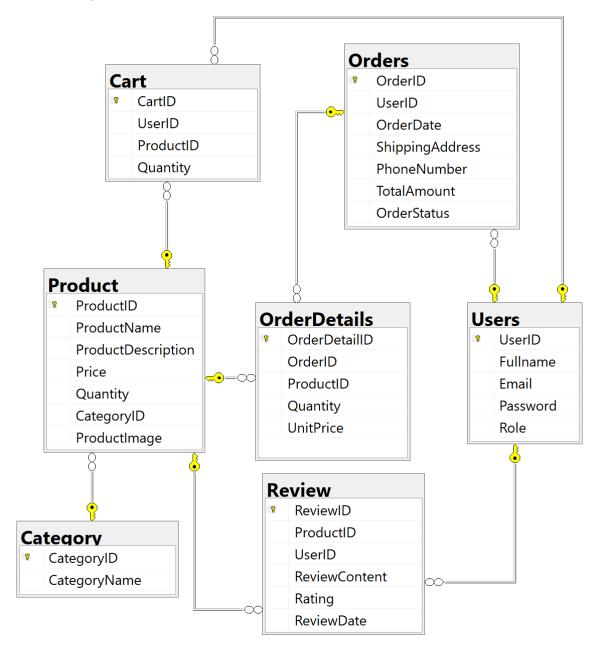
### 3. Data model

# 3.1. Entity Relationship Diagram



#### 3.2. Table details

# Database diagram



Note: Attribute with underline is Primary key

#### 3.2.1. Table name: Cart

| Field Name | Туре    | Length | Note        |
|------------|---------|--------|-------------|
| CartID     | Integer | 10     | Primary key |

| UserID    | Integer | 10 | Foreign key, refers to Users table   |
|-----------|---------|----|--------------------------------------|
| ProductID | Integer | 10 | Foreign key, refers to Product table |
| Quantity  | Integer | 10 | Not null                             |

# 3.2.2. Table name: Category

| Field Name   | Type     | Length | Note        |
|--------------|----------|--------|-------------|
| CategoryID   | Integer  | 10     | Primary key |
| CategoryName | Nvarchar | 50     | Not null    |

# 3.2.3. Table name: Product

| Field Name         | Туре     | Length | Note                                  |
|--------------------|----------|--------|---------------------------------------|
| ProductID          | Integer  | 10     | Primary key                           |
| ProductName        | Nvarchar | 100    | Not null                              |
| ProductDescription | Nvarchar | 500    | Allows Null                           |
| Price              | Double   | 10     | Not null                              |
| Quantity           | Integer  | 10     | Not null                              |
| CategoryID         | Integer  | 10     | Foreign key, refers to Category table |
| ProductImage       | String   | 500    | Allows Null                           |

# 3.2.4. Table name: Orders

| Field Name     | Туре    | Length | Note                               |
|----------------|---------|--------|------------------------------------|
| <u>OrderID</u> | Integer | 10     | Primary key                        |
| UserID         | Integer | 10     | Foreign key, refers to Users table |

| OrderDate       | Datetime | 10  | Not null  |
|-----------------|----------|-----|---|
| ShippingAddress | Nvarchar | 200 | Not null  |
| PhoneNumber     | Varchar  | 20  | Not null  |
| TotalAmount     | Double   | 10  | 8 digits to the left<br>and 2 digits to the<br>right of the decimal<br>point. |
| OrderStatus     | String   | 20  | Not null  |

# 3.2.5. Table name: OrderDetails

| Field Name           | Type    | Length | Note   |
|----------------------|---------|--------|--|
| <u>OrderDetailID</u> | Integer | 10     | Primary key  |
| OrderID              | Integer | 10     | Foreign key, refers to Orders table                                  |
| ProductID            | Integer | 10     | Foreign key, refers to Product table                                 |
| Quantity             | Integer | 10     | Not null   |
| UnitPrice            | Double  | 10     | 8 digits to the left and 2 digits to the right of the decimal point. |

# 3.2.6. Table name: Users

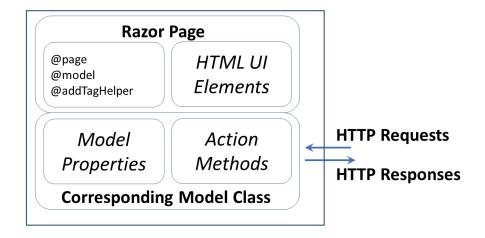
| Field Name    | Туре     | Length | Note        |
|---------------|----------|--------|-------------|
| <u>UserID</u> | Integer  | 10     | Primary key |
| Fullname      | Nvarchar | 50     | Not null    |
| Email         | Varchar  | 100    | Not null    |

| Password | Varchar  | 100 | Not null |
|----------|----------|-----|----------|
| Role     | Nvarchar | 10  | Not null |

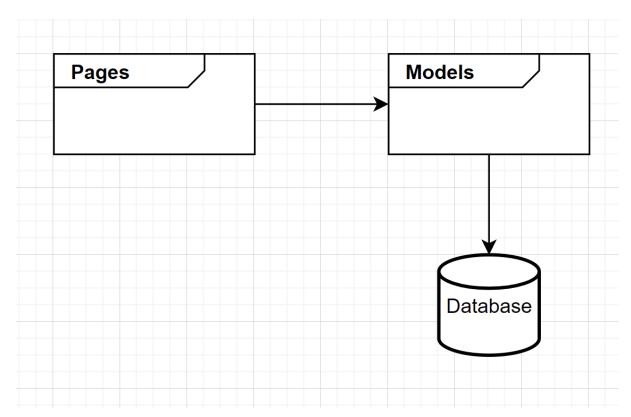
### 3.2.5. Table name: Review

| Field Name | Туре     | Length | Note                                 |
|------------|----------|--------|--------------------------------------|
| ReviewID   | Integer  | 10     | Primary key                          |
| ProductID  | Integer  | 10     | Foreign key, refers to Product table |
| UserID     | Integer  | 10     | Foreign key, refers to Users table   |
| ReviewText | Nvarchar | 1000   | Not null                             |
| Rating     | Integer  | 1      | Value from 1 - 5                     |
| ReviewDate | Datetime | 10     | Not null                             |

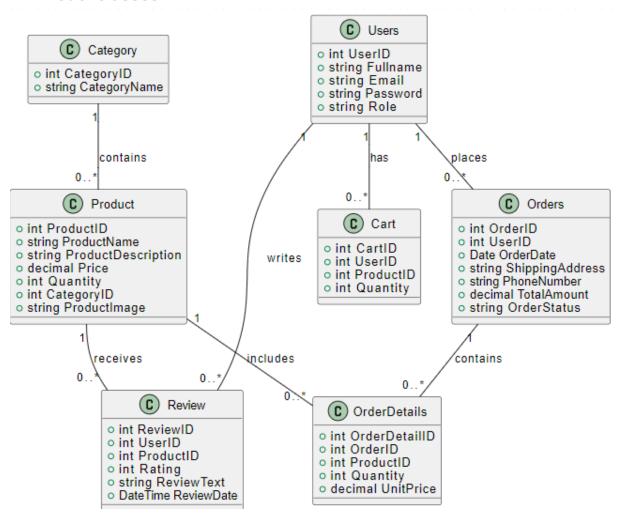
# 4. Class diagram



# 4.1. List of classes in the Layers



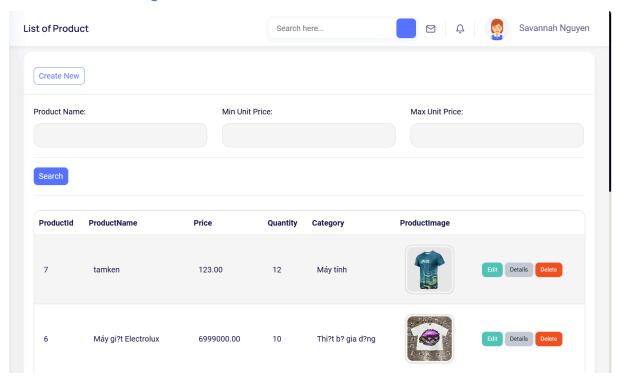
#### 4.2. Model classes



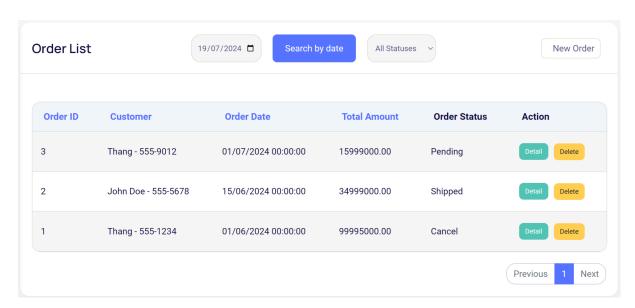
# 5. User Interface Model Design

# 5.1. User interface model design

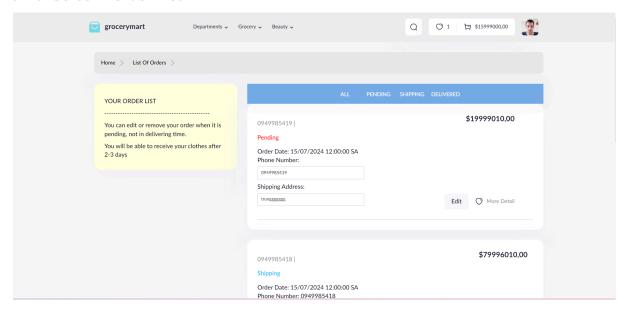
# 5.1.1. Screen " Manage Product"



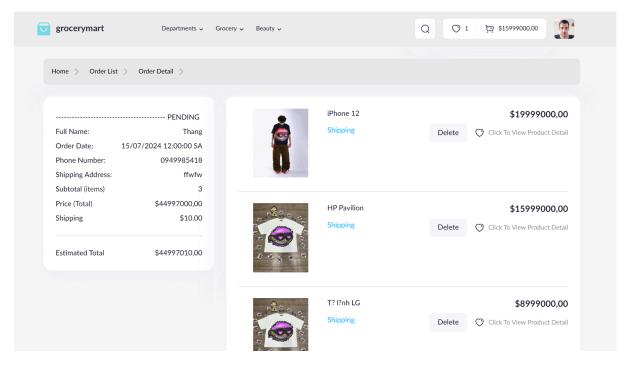
# 5.1.2. Screen "Manage Order"



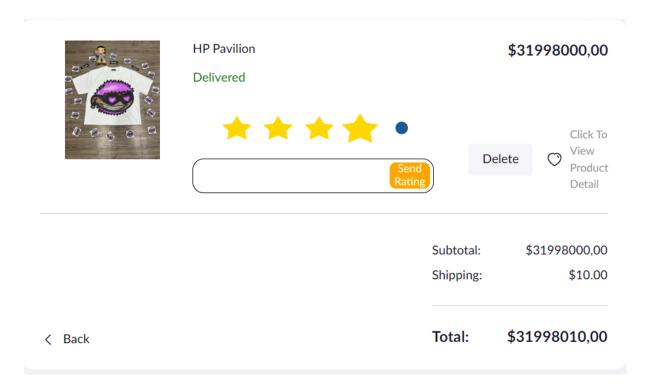
#### 5.1.3. Screen "Order List"



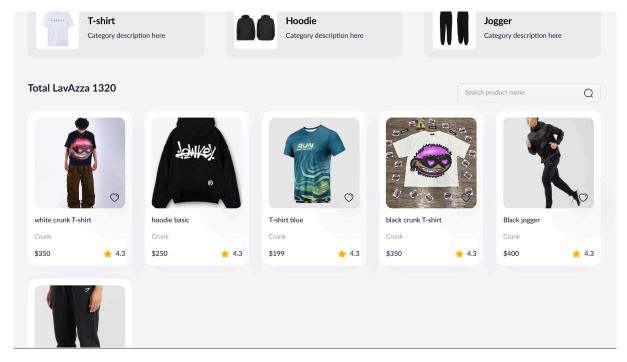
#### 5.1.4. Screen "List Detail"



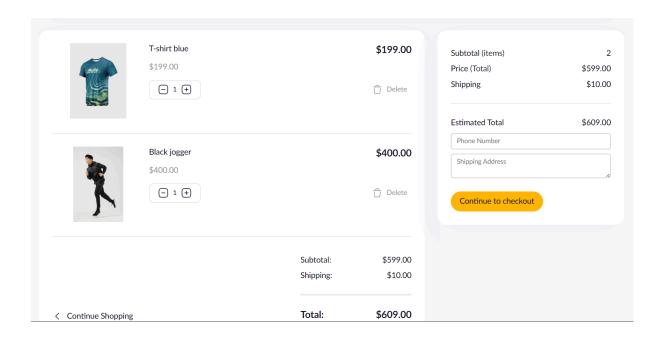
#### 5.1.4. Screen "Review Product"



### 5.1.5. Screen "Product List"

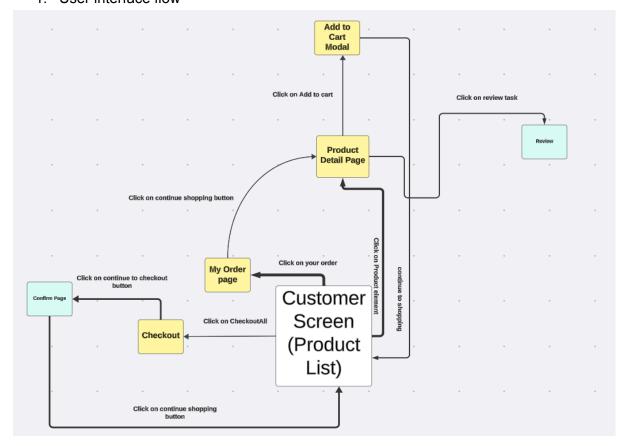


5.1.6. Screen "Checkout Order"



# **5.2. Interface Flow Diagrams**

1. User interface flow



2. Admin interface flow

