

**ONLINE STORE FOR**

**MOTHERS AND BABIES**

**Software Requirements Specification**

– Ho Chi Minh City, May 2024 –

**RECORD OF CHANGES**

| **Date** | **A\* M, D** | **In charge** | **Change Description** |
| --- | --- | --- | --- |
| 7/May | A | TriLDM, HieuMT | Write overview |
|  | M | HoangPX, NhuNQ | Modified overview |
|  |  |  |  |
| 8/May | A | HoangPX | Add Context Diagram |
|  | A | NhuNQ, TriLDM | Add Screen Flow |
|  | A | All | Write Screen Details |
|  |  |  |  |
| 9/May | M | HieuMT | Modified Screen Details |
|  |  |  |  |
| 10/May | A | NhuNQ, HieuMT | Write User Authorization |
|  |  |  |  |
| 11/May | M | TriLDM, HoangPX | Modified User Authorization |
|  | A | HieuMT, HoangPX | Write Non-screen Functions |
|  | M | TriLDM, NhuNQ | Modified Non-screen Functions |
|  |  |  |  |
| 12/May | A | TriLDM | Add Entity Relationship Diagram |
|  | A | HoangPX, HieuMT | Write Entity Description |
|  | M | NhuNQ, TriLDM | Modified Entity Description |
|  |  |  |  |
| 16/May | A | NhuNQ | Write Functional Requirements 1-5 |
|  | A | HieuMT | Write Functional Requirements 6-10 |
|  | A | HoangPX | Write Functional Requirements 11-15 |
|  | A | TriLDM | Write Functional Requirements 16-20 |
|  |  |  |  |
| 17/May | M | All | Modified Functional Requirements |
|  |  |  |  |
| 24/May | A | NhuNQ, TriLDM | Write Functional Requirements 21-28 |
|  |  |  |  |
| 25/May | M | HoangPX, HieuMT | Modified Functional Requirements |

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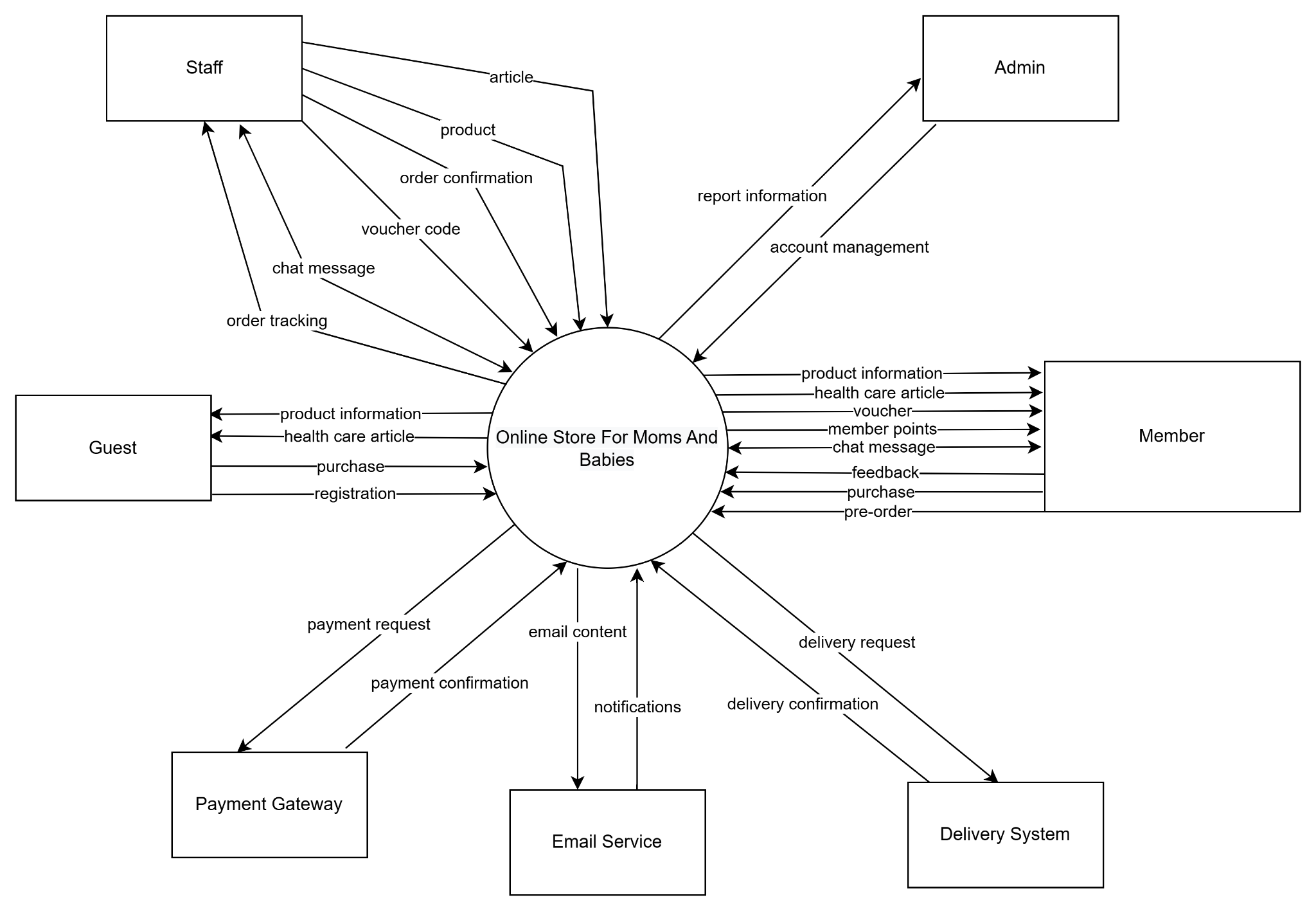
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# I. Overview

## 1. Introduction

The Moms & Babies Store System is an innovative web application revolutionizing the shopping experience for mothers and babies. Our platform provides the process of acquiring essential items, offering a selection of high-quality products from trusted brands. Built on the expectation of a high demand for convenience and user-friendliness, the system aims to cater to every mothers regardless of tech-savvy level. Popular credentials and payment methods are integrated. As the system evolves, our vision includes expanding product offerings and enhancing features to meet the evolving needs of our customers.

**Context Diagram**

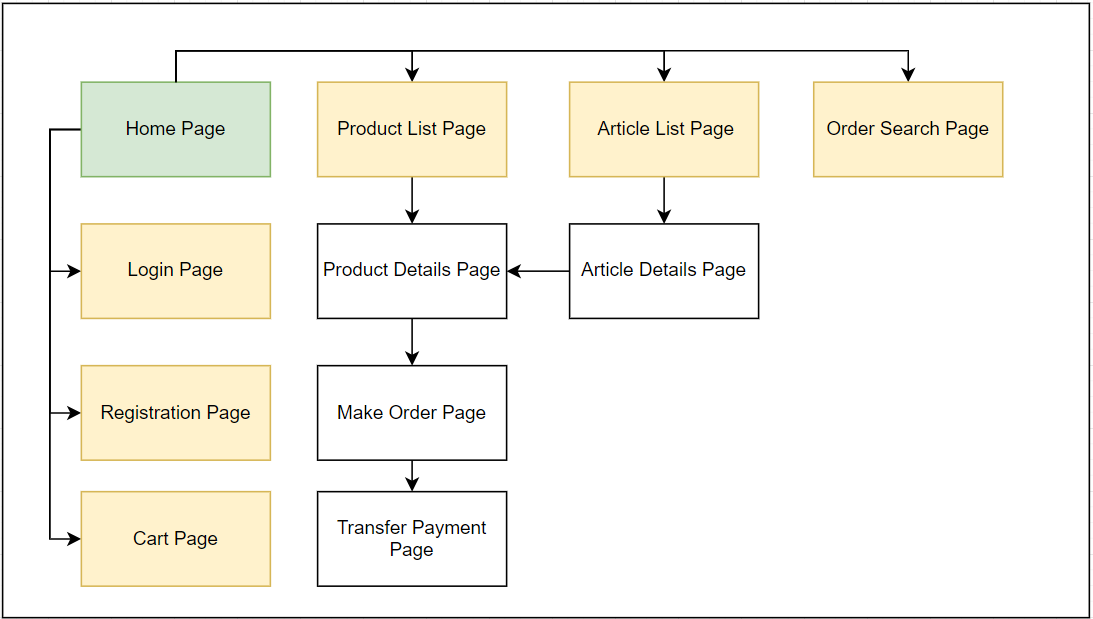
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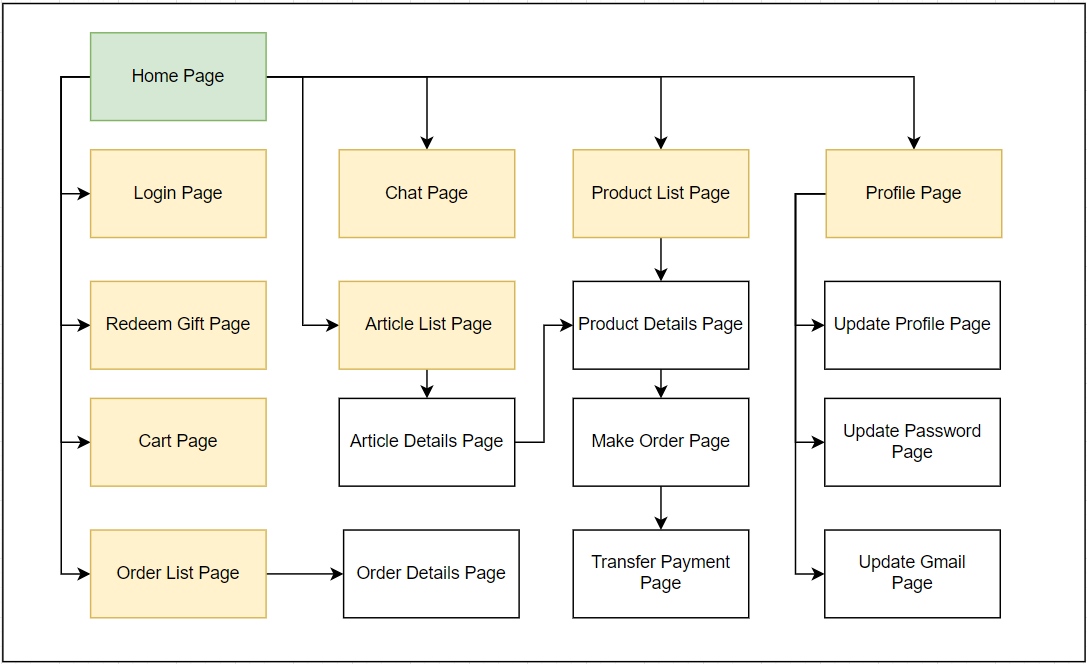
## 2. System Functions

### a. Screen Flow

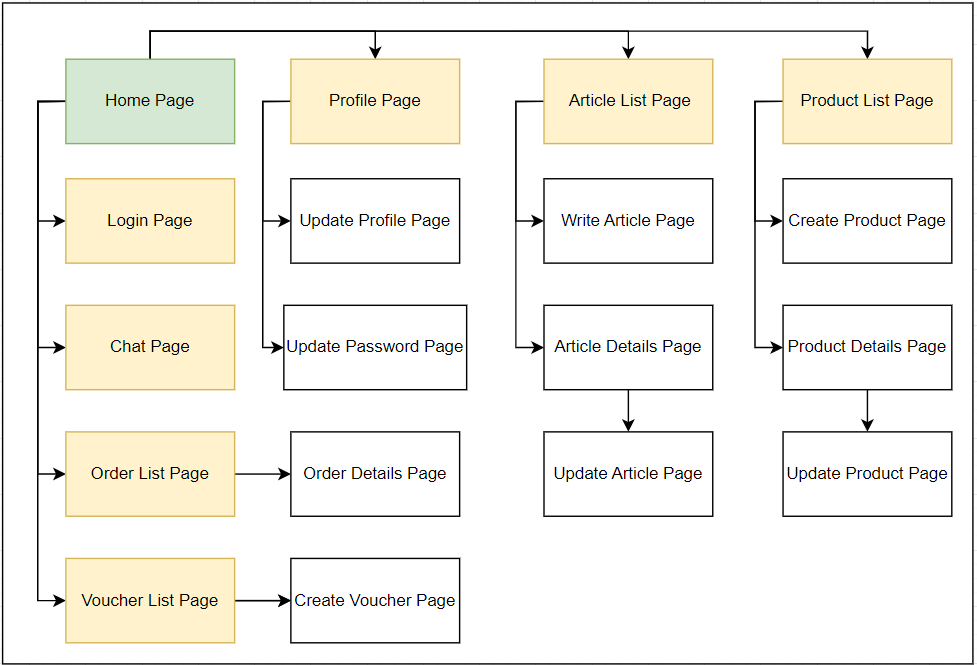
**Guest Screen Flow**

****

**Member Screen Flow**

****

**Staff Screen Flow**

****

**Admin Screen Flow**

## 

### b. Screen Details

| **#** | **Feature** | **Screen** | **Description** |
| --- | --- | --- | --- |
| 1 | Search product | Home page | All users are allowed to search for products by text |
| 2 | Logout | Home page | Logged-in users can logout after pressing logout button |
| 3 | Register | Registration page | Guests can create member account via gmail or phone number after fulfilling required information |
| 4 | Login | Login page | All logged-in users can login after providing gmail/phone number and password |
| 5 | View product list | Product list page | All products will be displayed here |
| 6 | View product details | Product details page | All information of a product will be displayed here |
| 7 | Write feedback | Product details page | Members can post feedback about bought products with comments and images |
| 8 | View feedback | Product details page | Feedback by members about a product will be showed |
| 9 | Add product | Create product page | Staff are allowed to create and upload new products |
| 10 | Update product | Update product page | Staff are allowed to update products information |
| 11 | View article list | Article list page | All articles will be displayed here |
| 12 | Delete article | Article list page | Staff are allowed to delete uploaded articles |
| 13 | Write article | Article list page | Staff are allowed to write and upload new articles |
| 14 | View article details | Article details page | All information about an article will be showed |
| 15 | Update article | Article details page | Admin and staff are allowed to update articles information |
| 16 | Create order | Create order page | Guests and members can create order to buy products |
| 17 | Choose payment | Create order page | Guests and members are allowed to choose payment method (ship COD or E-payment) while creating order |
| 18 | Transfer payment | Transfer payment page | Guests and members can transfer by scanning QR code to create order after choosing the transfer payment method |
| 19 | View cart | Cart page | A list of products added to cart will be displayed |
| 20 | View order list | Order list page | A list of orders done by a member will be displayed |
| 21 | View order details | Order details page | All information of an order will be displayed |
| 22 | Confirm order | Order details page | Staff can confirm customers’ orders before transferring those order information to the shipping company |
| 23 | Chat | Chat page | Guests and members can communicate with Staff |
| 24 | Redeem gift | Redeem gift page | Members are allowed to redeem gift using their points accumulated through successful orders |
| 25 | Revenue statistics | Statistics page | Statistics of revenue will be showed for admin |
| 26 | View account list | Account list page | The registered account list will be shown for admin |
| 27 | Create staff account | Create staff account page | Only admin can create new accounts for staff |
| 28 | Update staff account | Update staff account page | Admin are allowed to update staff account’s information |
| 39 | View account details | Account details page | Only admin are allowed to view all the registered account’s information |
| 30 | View profile | profile page | All logged-in users can view their profile information |
| 31 | Update profile | Update profile page | All logged-in users can update their profile information (name, mail, phone number, address) |
| 32 | Change  password | Update password page | All logged-in users can change their account password |
| 33 | Change gmail | Update gmail | Members can change their linked gmail |
| 34 | Password recovery | Password recovery page | Members can recover their password in case they forget it |
| 35 | View Voucher List | Voucher List Page | Staff can view all the created vouchers |
| 36 | Create Voucher | Create Voucher Page | Staff are allowed to create new vouchers |

#### 

### c. User Authorization

| **Screen Activity** | **Screen** | **Guest** | **Member** | **Staff** | **Admin** |
| --- | --- | --- | --- | --- | --- |
| Search product | Home page | x | x | x |  |
| Logout | Home page |  | x | x | x |
| Register | Registration page | x |  |  |  |
| Login | Login page | x |  |  |  |
| View product list | Product list page | x | x | x |  |
| View product details | Product details page | x | x | x |  |
| Write feedback | Product details page |  | x |  |  |
| View feedback | Product details page | x | x | x |  |
| Add product | Create product page |  |  | x |  |
| Update product | Update product page |  |  | x |  |
| View article list | Article list page | x | x | x |  |
| Delete article | Article list page |  |  | x |  |
| Write article | Article list page |  |  | x |  |
| View article details | Article details page | x | x | x |  |
| Update article | Article details page |  |  | x |  |
| Make order | Make order page | x | x |  |  |
| Choose payment | Make order page | x | x |  |  |
| Transfer payment | Transfer payment page | x | x |  |  |
| View cart | Cart page | x | x |  |  |
| View order list | Order list page |  | x | x |  |
| View order details | Order details page | x | x | x |  |
| Confirm order | Order details page |  |  | x |  |
| Chat | Chat page | x | x | x |  |
| Redeem gift | Redeem gift page |  | x |  |  |
| Revenue statistics | Statistics page |  |  |  | x |
| View account list | Account list page |  |  |  | x |
| Create staff account | Create staff account page |  |  |  | x |
| Update staff account | Update staff account page |  |  |  | x |
| View account details | Account details page |  |  |  | x |
| View profile | Profile page |  | x | x | x |
| Update profile | Update profile page |  | x | x | x |
| Change password | Update password page |  | x | x | x |
| Change gmail | Update gmail page |  | x |  |  |
| Password recovery | Password recovery page |  | x |  |  |
| View Voucher List | Voucher List Page |  |  | x |  |
| Create Voucher | Create Voucher Page |  |  | x |  |

In which:

* **Guest**: Customer who accesses the website without login.
* **Member**: Customer who already has an account and login on the website.
* **Staff**: Who has the right to manage products, articles and chat with Customers.
* **Admin**: Who can manage user accounts and revenue statistics of the store.

### d. Non-Screen Functions

| **#** | **Feature** | **System Function** | **Description** |
| --- | --- | --- | --- |
| 1 | Accumulate Point | Calculation | Points is automatically accumulated to member’s account after staff confirm their order |
| 2 | Calculate Order Price | Calculation | Final price of an order, include product price and shipping price (voucher applied if any) is calculated |
| 3 | Send mail | Notification | Verify mail, OTP mail and order confirmation mail will be sent to guest and member |
| 4 | Statistics data | Calculate | Revenue, profit, capital, quantity of product sold are calculated |
| 5 | Hide expired voucher | Status tracking | The status of expired vouchers is changed from "enabled" to "disabled," preventing them from being displayed and used |
| 6 | Transaction Handling | Logic | Manages the transactional processes within the system, including handling payment, and other financial transactions. This function ensures that transactions are processed accurately and securely, maintaining the integrity of the system's financial data. |
| 7 | Create shipping orders | Create | Generates shipping orders for products that need to be shipped to customers. |
| 8 | Update order status | Status tracking | The status of order is automatically changed whenever a condition is revoked |
| 9 | Create a ready cart ID | Create | Generates a unique identifier for a new cart that is retained in the system until used or exiting the website |

## 

## 

## 3. Entity Relationship Diagram

**Entities Description**

| **#** | **Entity** | **Description** |
| --- | --- | --- |
| 1 | Customer | Individuals who interact with system by purchasing products, placing orders, or accessing services. |
| 2 | Product | Items which are displayed on the website and have attributes such as name, description, price, for customer reference and purchase. |
| 3 | Order | A transaction which is initiated by a customer purchase one or more products and it includes amount of product, total price,... It can be either successfully paid or not paid yet. |
| 4 | Voucher | Items which are created for customer to apply to get a discounted price for their orders. |
| 5 | Brand | An organization which has a unique name and owns various products. |
| 6 | Category | A classification of products that share similar characteristics and can be grouped together based on common features, functions, or target markets. |
| 7 | Article | An informational content such as blog posts, news articles, or product reviews that might be published on the system's website or platform. |
| 8 | Gift | An item which can be exchanged by shopping points collected from completed orders. |

# II. Functional Requirements

## 1. Register Feature

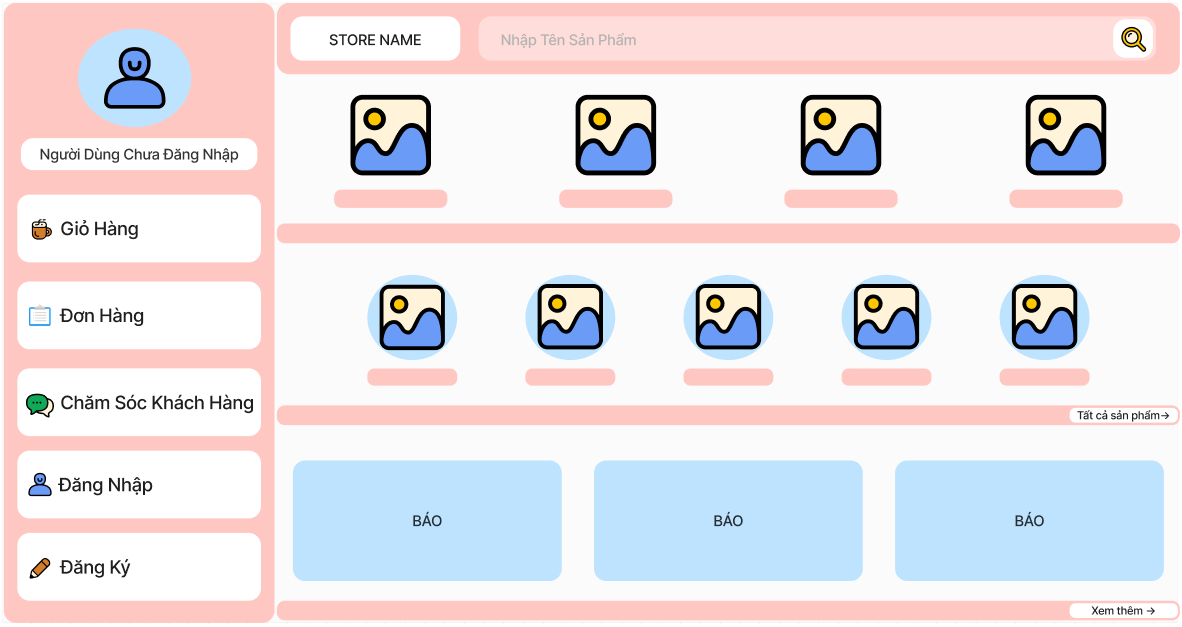
* **Function trigger:** button.
* **Function description:** guests can create an account
* **Screen layout:**

****

* **Function Details:** user fills in required information then presses the button to creates account. In the case that the information is invalid (Gmail: malformed, does not exist; Phone Number: malformed; Password: must be 8-32 characters, including word and number; Confirm password fail), user will have to fill in again.

## 2. Search Product Feature

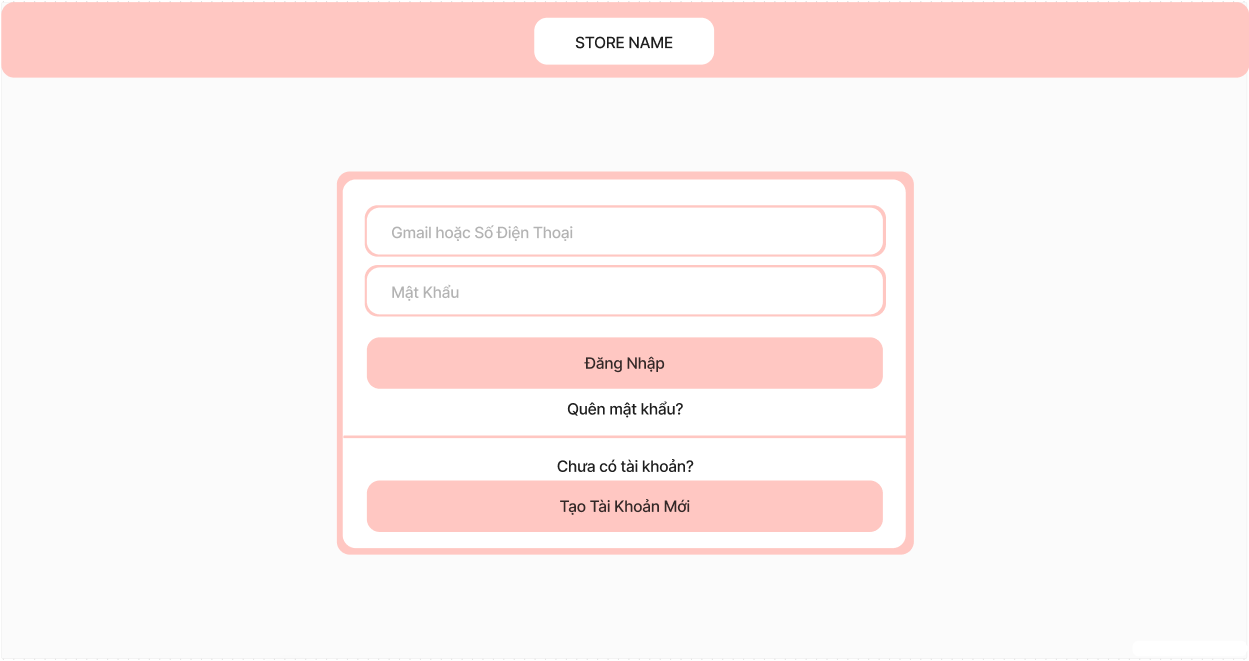
* **Function trigger:** button.
* **Function description:** guests and members can search for products
* **Screen layout:**

****

* **Function Details:** guests and members enter one character or a string into the search bar then press the button. If the search bar is blank, nothing will happen.

## 3. Login Feature

* **Screen layout:**

****

### a. Login via Gmail

* **Function trigger:** button.
* **Function description:** customers who have already created an account can login via Gmail and Password.
* **Function Details:** user fills in required information then presses the button to creates account. In the case that the information is invalid (Gmail: malformed, does not exist; Password failed), user will have to fill in again.

### b. Login via Phone Number

* **Function trigger:** button.
* **Function description:** customers who have already created an account can login via Phone Number and Password.
* **Function Details:**  user fills in required information then presses the button to creates account. In the case that the information is invalid (Phone Number: malformed, does not exist; Password failed), user will have to fill in again.

## 4. View Product List Feature

### Customer

* **Screen layout:**

****

### View All Products

* **Function trigger:** button or navigation path.
* **Function description:** all the products will be shown.
* **Function Details:** after customers click on “show all products”, they will be redirected to the product list page.

### View All Product by Brand

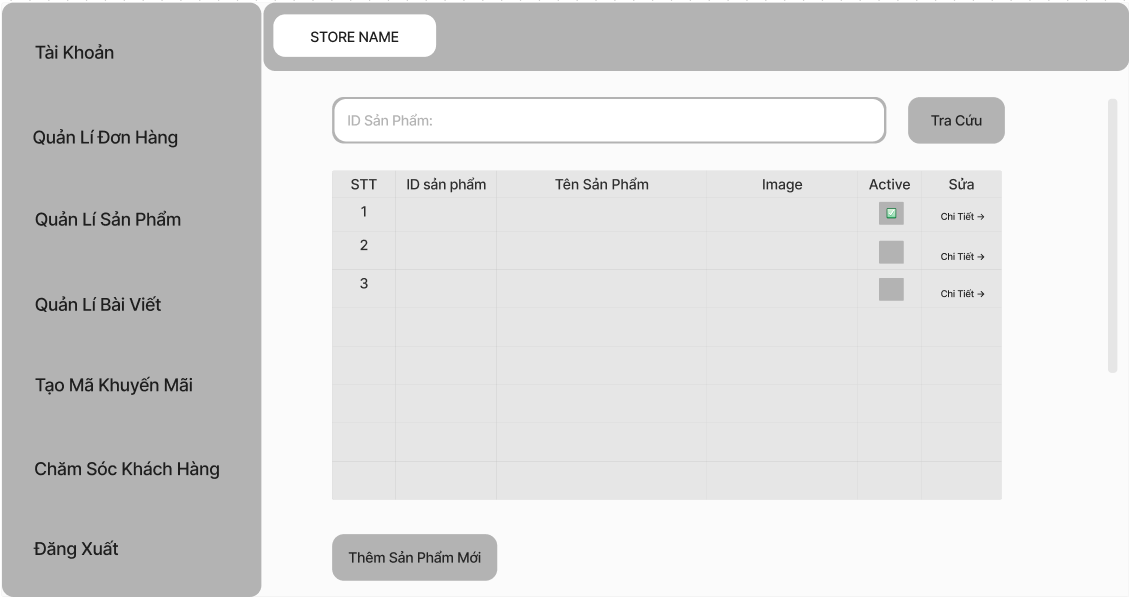
* **Function trigger:** button or navigation path.
* **Function description:** all the products in a brand will be shown.
* **Function Details:** after customers click on a brand, they will be redirected to the product list page of that brand

### View All Product by Category

* **Function trigger:** button or navigation path.
* **Function description:** all the products in a category will be shown.
* **Function Details:** after customers click on a category, they will be redirected to the product list page of that category.

### Staff

* **Function trigger:**button or navigation path
* **Function description**: staff can view all products in the managing interface.
* **Screen layout:**

****

* **Function Details:** staffs click “Manage Product” so they can redirect to the product list page, and the table of products will be shown.

## 5. View Product Details Feature

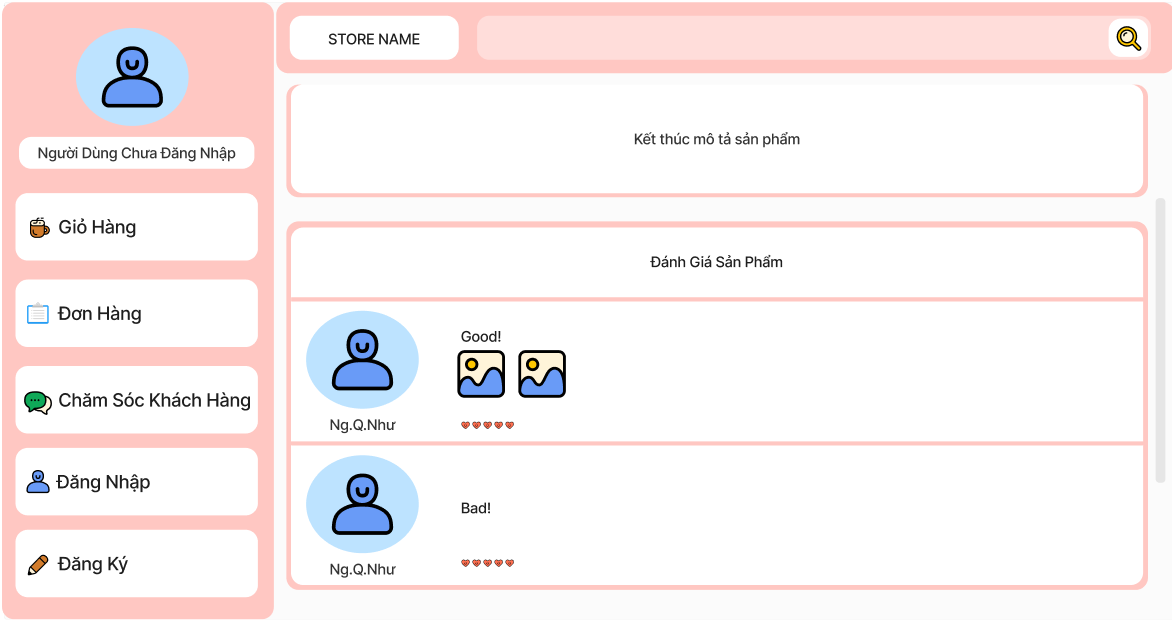
* **Function trigger:** button or navigation path.
* **Function description:** information about a product will be shown.
* **Screen layout:**

****

* **Function Details:** detailed product information, including name, price, feedback, status, description will be shown.

## 6. View Feedback Feature

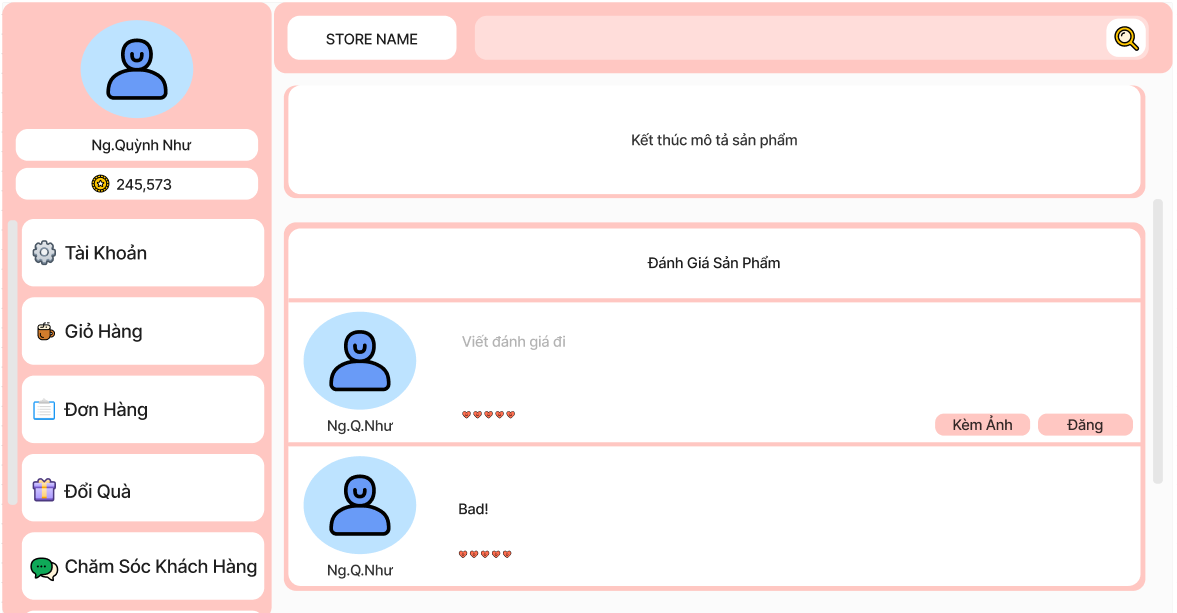
* **Function trigger:**button
* **Function description**: Members, guests and staffs can see all feedbacks below the product details.
* **Screen layout:**

**

* **Function Details:**Guests, members and staffs access to the product details and scroll down to view all feedbacks.

## 7. Write Feedback Feature

* **Screen layout:**

****

### a. Feedback with Text

* **Function trigger:**button
* **Function description**: Members can give their opinions about the purchased product into the text box .
* **Function Details:**After buying, a textbox will appear in the feedback part below the product details for members to write their opinions in, then click the “Upload” button.

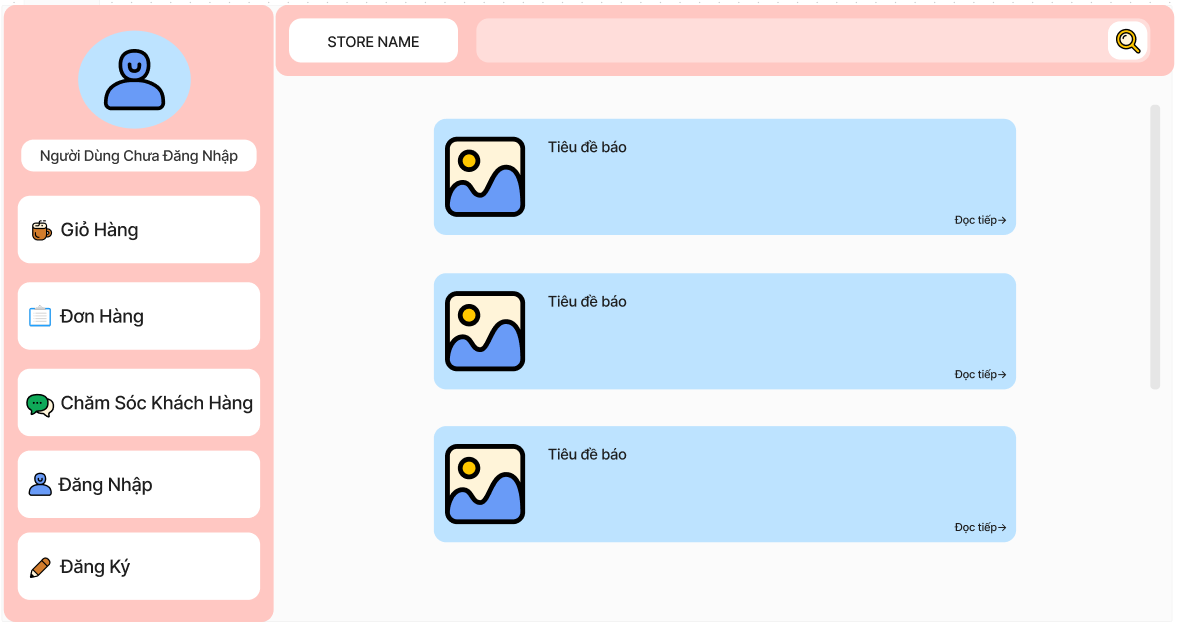
### b. Feedback with Image

* **Function trigger:**button
* **Function description**: Members can upload their purchased product for others members know about quality of good
* **Function Details:**Members click the “Add Image” button to upload photos into the textbox then click the “Upload” button.

## 8. View Article List Feature

### Customer

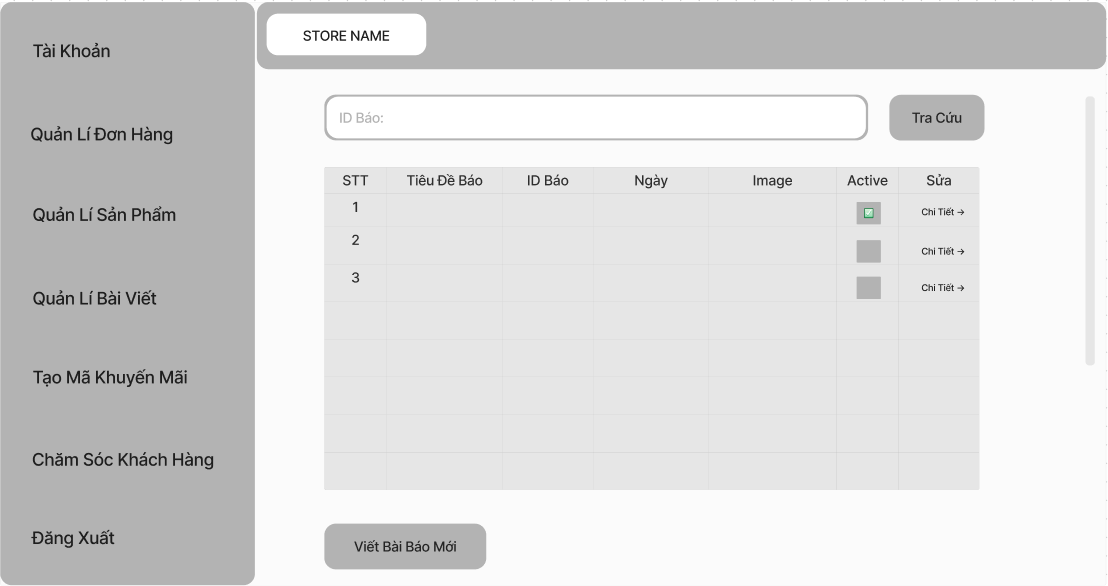
* **Function trigger:**button or navigation path
* **Function description**: Members, guests and staffs can view articles
* **Screen layout:**

****

* **Function Details:** Guests, members and staffs click “View all articles” in the homepage so they can redirect to article list to see all blogs.

### Staff

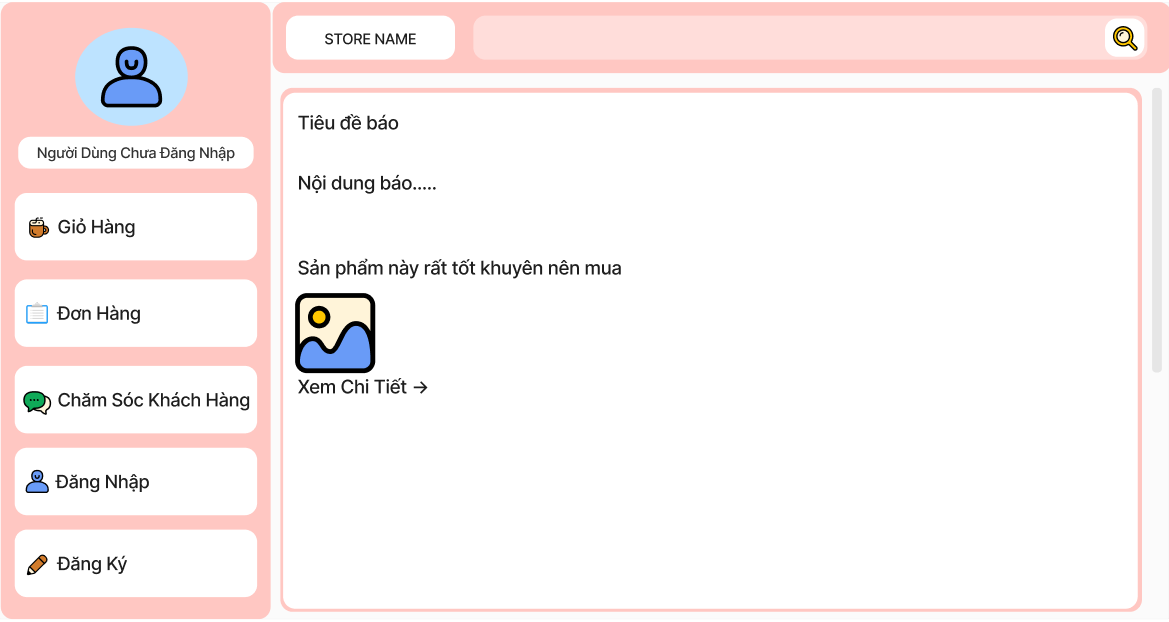
* **Function trigger:**button or navigation path
* **Function description**: staff can view all articles in the managing interface.
* **Screen layout:**

****

* **Function Details:** staffs click “Manage Article” so they can redirect to the article list page, and the table of articles will be shown.

## 9. View Article Details Feature

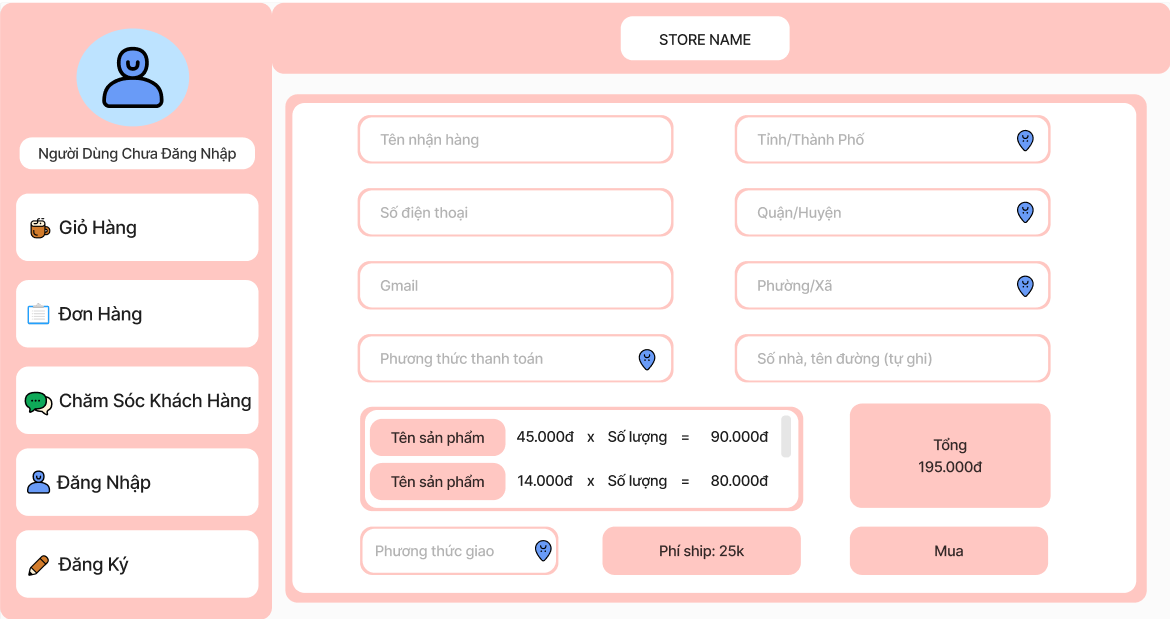
* **Function trigger:**button or navigation path
* **Function description**: Members, guests and staffs can view the information which is written in an article.
* **Screen layout:**

****

* **Function Details:** Guests, members, and staff click “Read more” in the article list to navigate and view the information in the article.

## 10. Create Order Feature

* **Function trigger:**button
* **Function description**: Members, guests can buy products which are added into the cart
* **Screen layout:**

****

* **Function Details:** Members click “Buy Now” to access Make Order Page then fill required information and click “Checkout” to create order.

## 11. Choose Payment Feature

### a. Ship COD

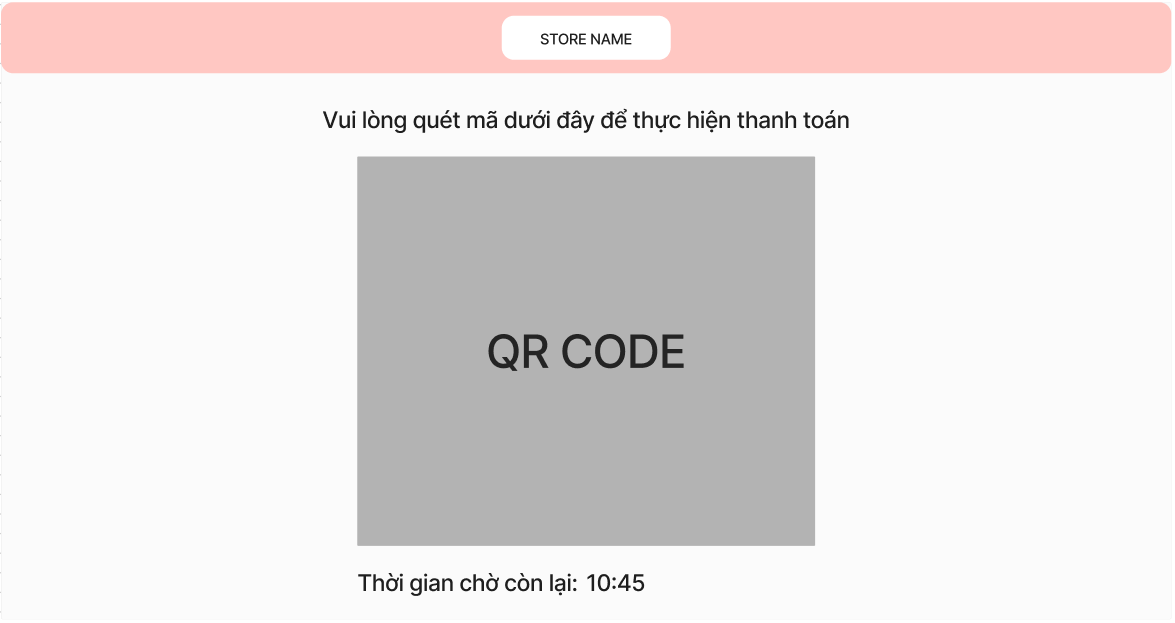
* **Function trigger:** button.
* **Function description:** guests and members can choose the payment method as cash on delivery.
* **Function Details:** While creating an order, customers can click on the COD payment method, meaning the order will be delivered to the customer and then collected directly from them.

### b. E-Payment

* **Function trigger:** button.
* **Function description:** guests and members can choose the payment method as electronic payment.
* **Function Details:** While creating an order, the customer can click on the electronic payment method, and after clicking the buy button, the customer will be redirected to the QR code scanning page to proceed with the payment.

## 12. Transfer Payment Feature

* **Function trigger:** button.
* **Function description:** Guests and Members can transfer by scanning QR code.
* **Screen layout:**

****

* **Function Details:**  If choosing the payment method as e-payment when creating an order, the customer is redirected to a page containing the QR code to scan the QR code. After a certain period of time, if the customer does not scan the payment code, your order will not be successful.

## 13. View Cart Feature

* **Function trigger:**  button or navigation path.
* **Function description:** A list of products added to cart will be displayed.
* **Screen layout:**

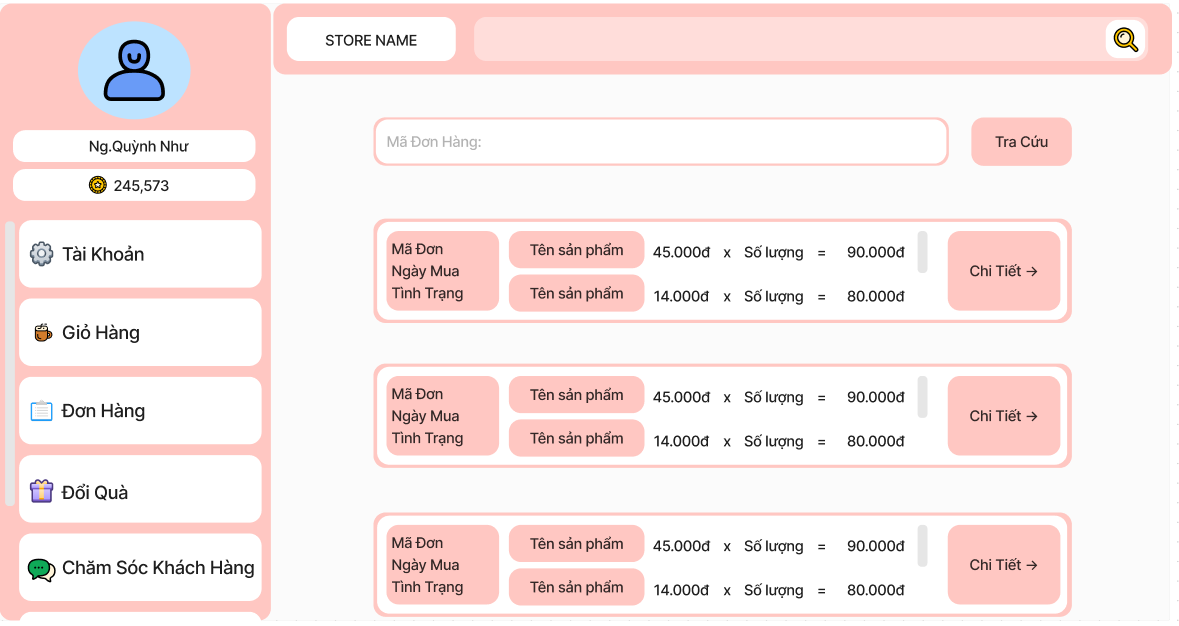
****

* **Function Details:** The products selected by the customer will appear on this page, including the quantity and price of each product and the total amount of the cart.

## 14. View Order List Feature

### Member

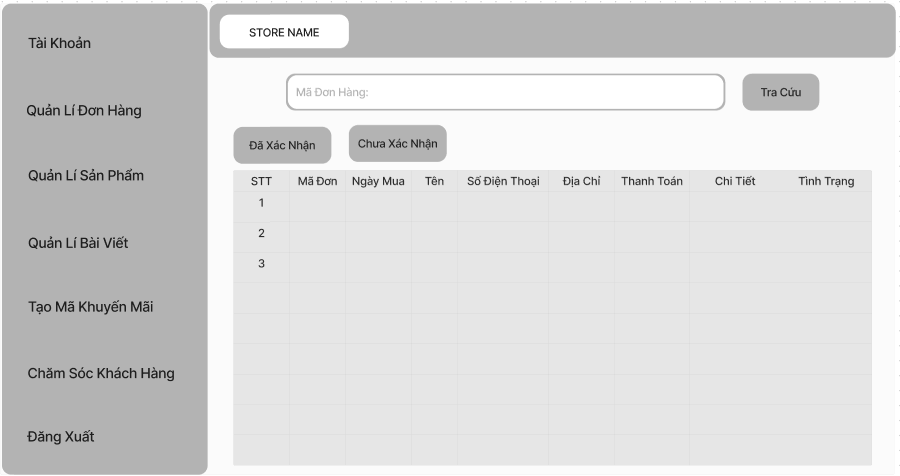
* **Function trigger:** button or navigation path.
* **Function description:** A list of orders done by a member will be displayed.
* **Screen layout:**

****

* **Function Details:** The member's purchase history will be displayed on the page, including information about the products in the order, and you can also view more details of each order.

### Staff

* **Function trigger:** button or navigation path.
* **Function description:** staff can view all orders in the managing interface.
* **Screen layout:**

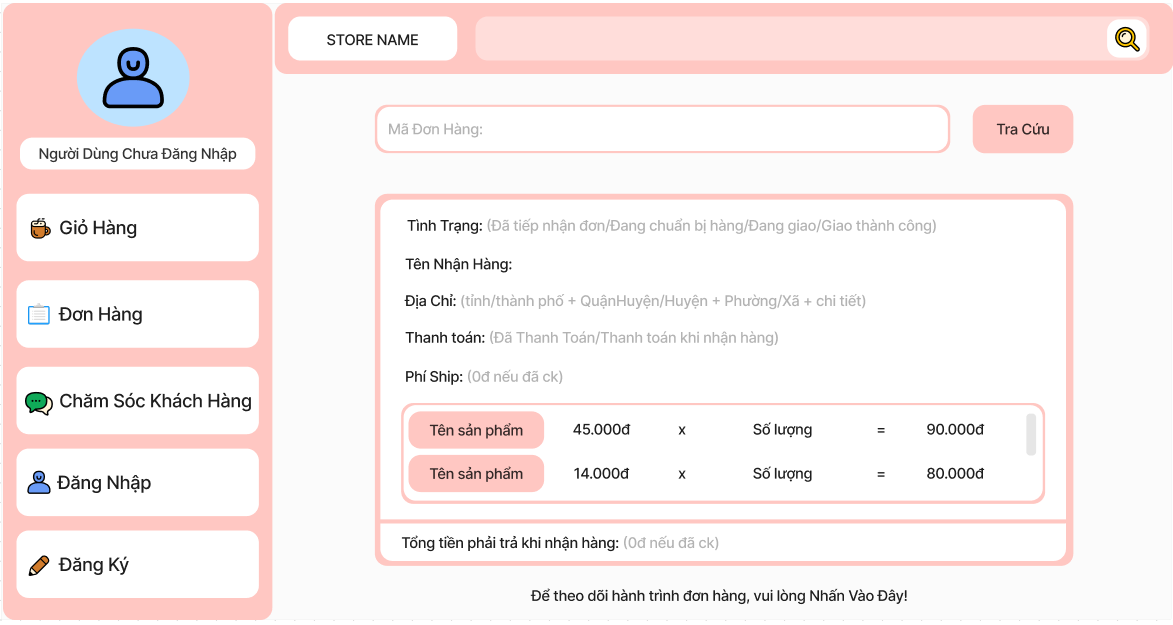
****

* **Function Details:** staffs click “Manage Order” so they can redirect to the order list page, and the table of orders will be shown.

## 15. View Order Details Feature

### Customer

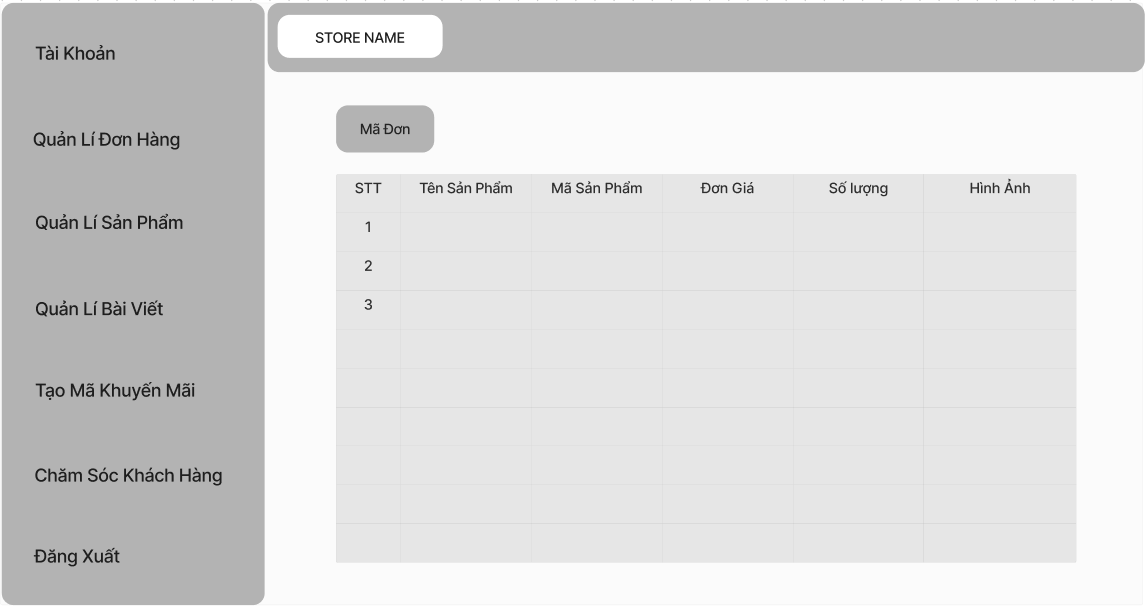
* **Function trigger:** button or navigation path.
* **Function description:** All information of an order will be displayed.
* **Screen layout:**

****

* **Function Details:** When the customer enters the order code and clicks the search button, the order information will appear, including information about the buyer and product, order status, and tracking.

### Staff

* **Function trigger:** button or navigation path.
* **Function description:** All information of an order will be displayed in the managing interface.
* **Screen layout:**

****

* **Function Details:** Staff click “Detail” of an order in the order list page so they can redirect to the order detail page, and the detail of that order will be shown.

## 16. Chat Feature

* **Function trigger:** Button and navigation path.
* **Function description:** Guests and logged-in users can start a conversation with staff.
* **Screen layout:**

****

****

* **Function Details:** When a user clicks on the Customer Service button, they will be redirected to the messaging page where they are able to text and interact with staff. Chat history will not be saved and will be discarded as soon as the user closes the chat tab.

## 17. Redeem Gift Feature

* **Function trigger:** Button and navigation path.
* **Function description:** A logged-in member can exchange points for some non-system product gifts.
* **Screen layout:**

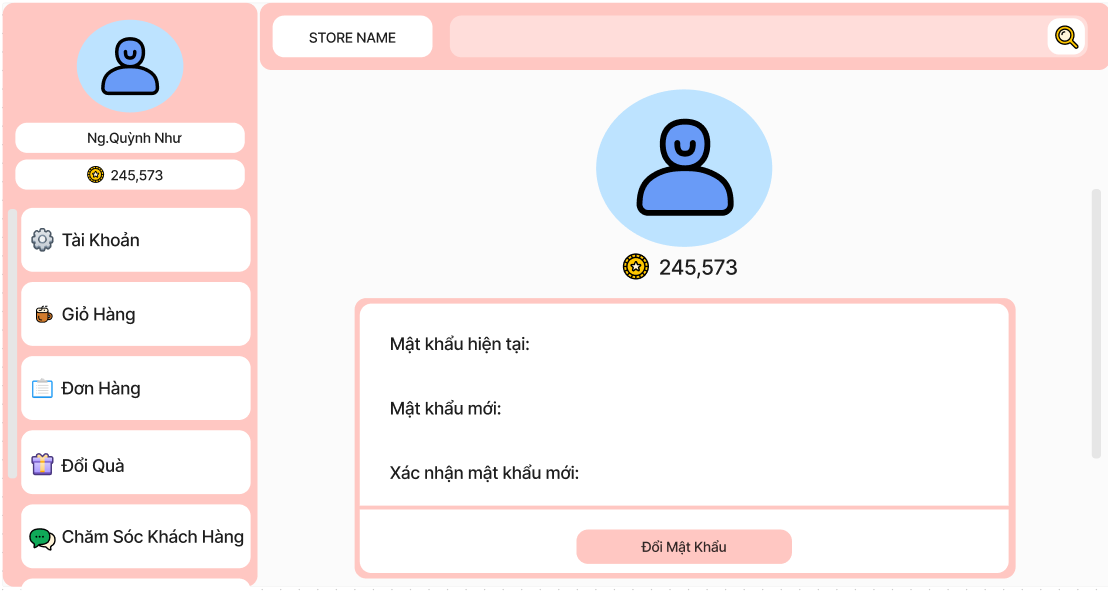
****

* **Function Details:** Users can use shopping points to exchange any products listed in the gift screen. They cannot revert gifts back to points once they accept the exchange confirmation. The gifts will be sent to the active cart of the user. They cannot remove or adjust the quantity of gifts in the cart.

## 18. Change Password Feature

### Function trigger: Button.

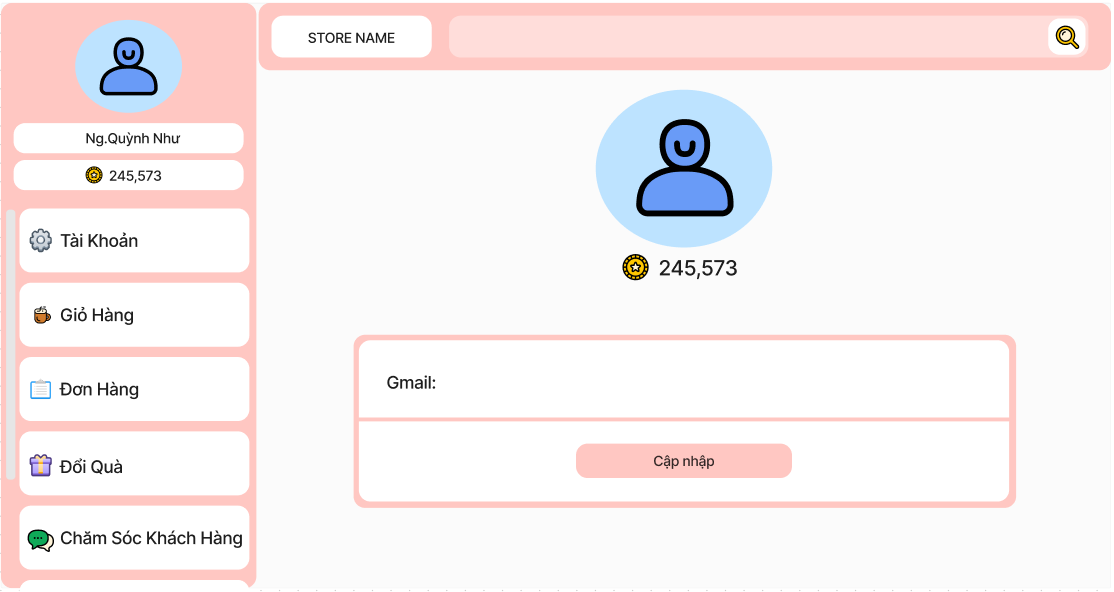
* **Function description:** A logged-in member wants to change the password of their account.
* **Screen layout:**

****

* **Function Details:** User types in their current password, new password and confirms the new one. The new password must satisfy password criteria and must not match the current password. If either the current password is not typed in properly or the new password does not satisfy those criteria, the user cannot proceed to change it.

## 19. Change Gmail Feature

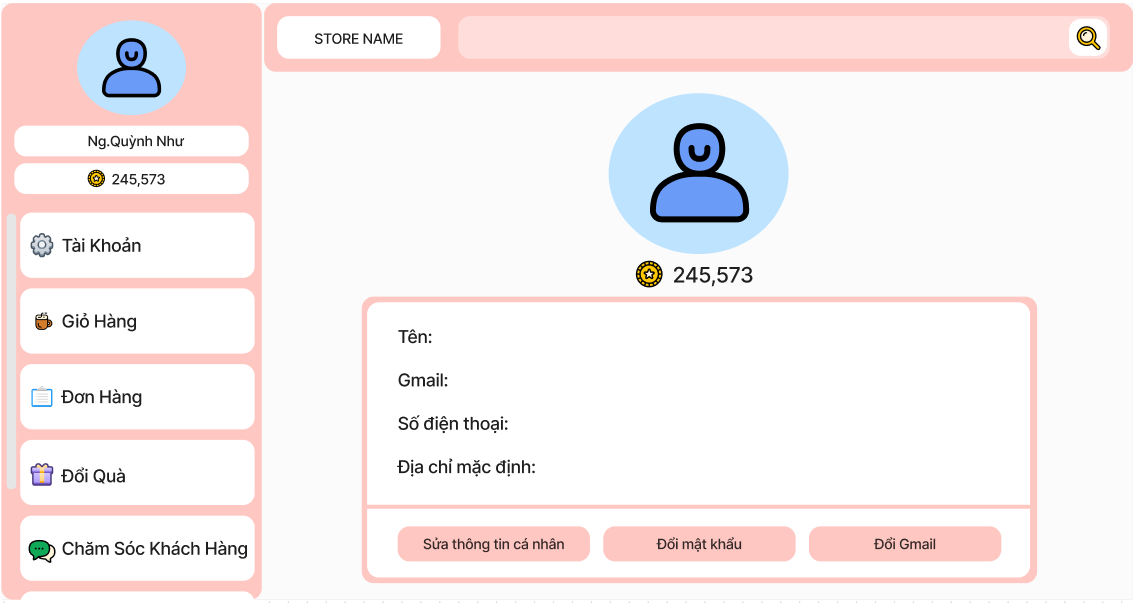
* **Function trigger:** Button.
* **Function description:** A logged-in member wants to change the Gmail address linked to their account.
* **Screen layout:**

****

* **Function Details:** User types in their desired email address. The system will send a message to this email with a 6-digit confirmation code. If a user types in a matching code, the updating gmail process will be completed.

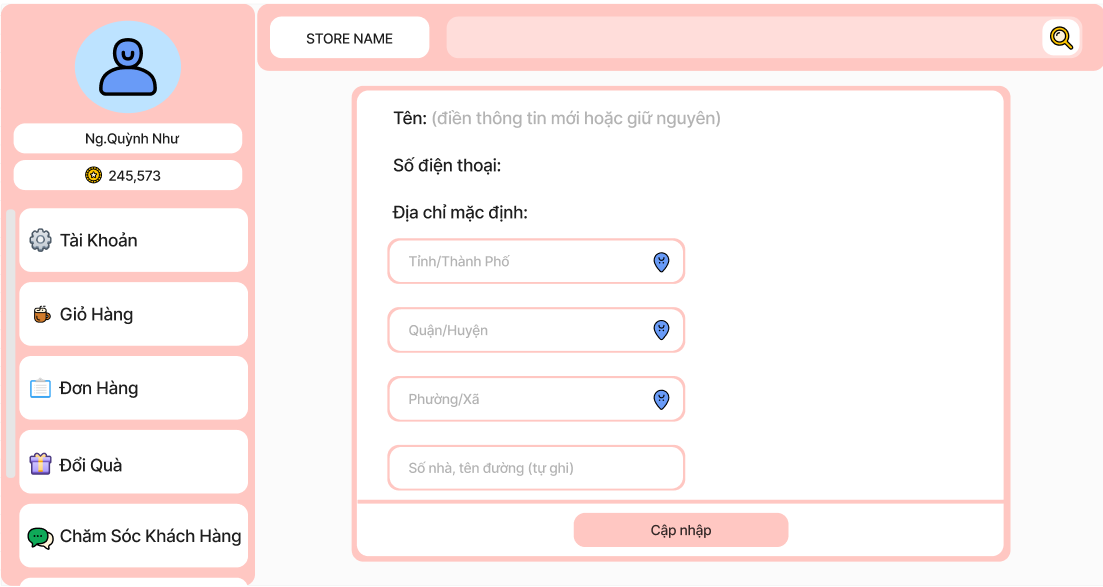
## 20. View Profile Feature

* **Function trigger:** Button.
* **Function description:** A logged-in member wants to view their account information.
* **Screen layout:**

****

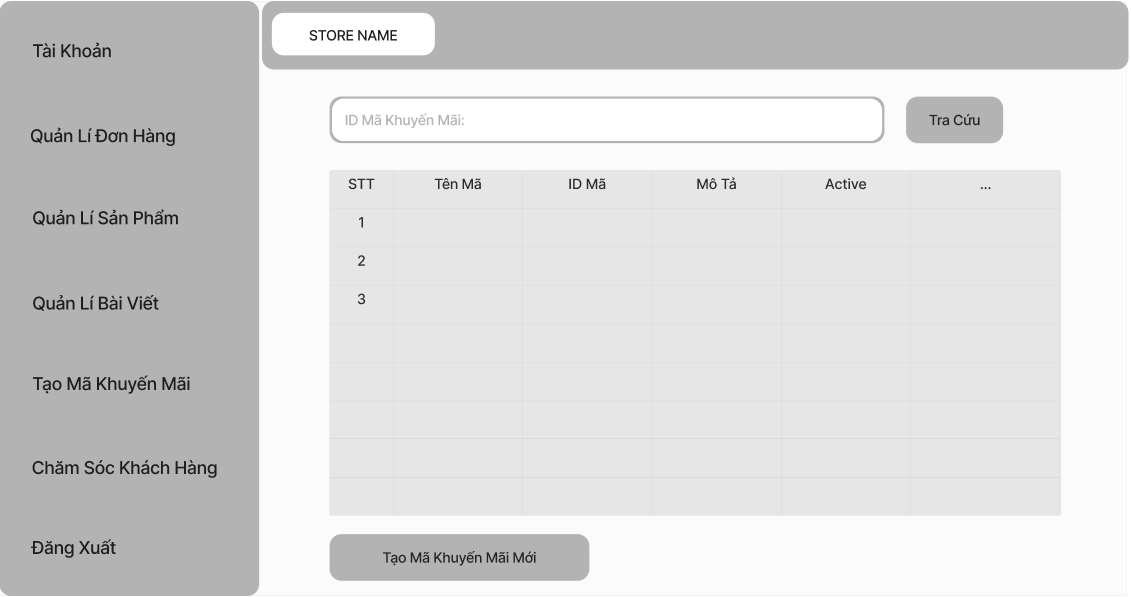
* **Function Details:** User’s basic information will be displayed, including their display name, phone, mail and delivery address.

## 21. Update Profile Feature

* **Function trigger:** Button.
* **Function description:** A logged-in member wants to change their account information.
* **Screen layout: **
* **Function Details:** Users can change their basic information including display name, phone and delivery address. They click on the Update button to confirm the changes.

## 22. View Voucher List Feature

* **Function trigger:** Button and navigation path.
* **Function description:** staff can view all vouchers in the managing interface.
* **Screen layout:**

****

* **Function Details:** staffs click “Manage Voucher” so they can redirect to the voucher list page, and the table of vouchers will be shown.

## 23. Create Voucher Feature

* **Function trigger:** Button.
* **Function description:** staff can create a voucher.
* **Screen layout:**

****

* **Function Details:** Staff click “Create voucher” to access Create Voucher Page then fill required information and click “Create” to create voucher.

## 24. Update Article Feature

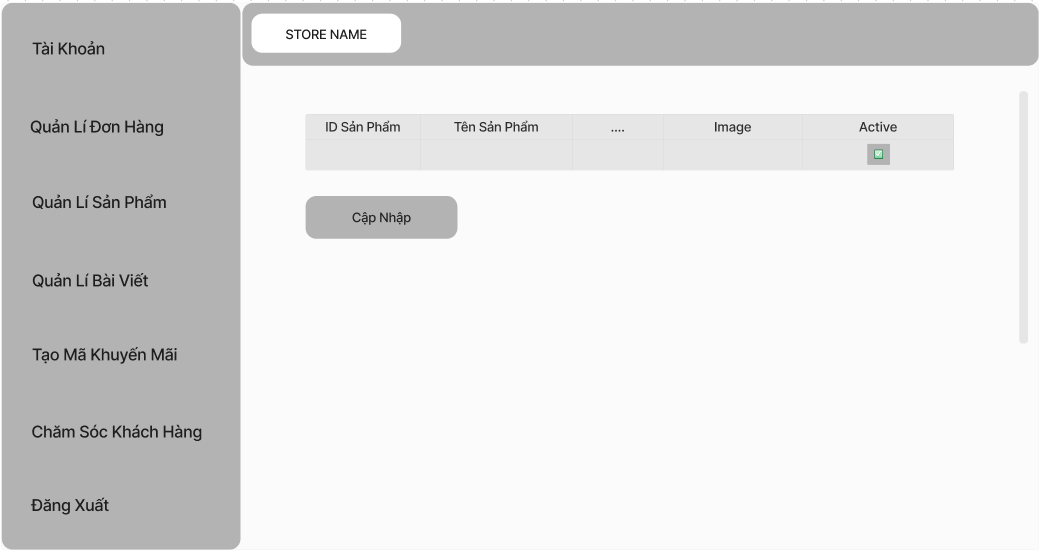
* **Function trigger:** Button.
* **Function description:** staff can update an article.
* **Screen layout:**

****

* **Function Details:** Staff can modify an article, including its information and content. Then click on the Update button to confirm the changes.

## 25. Update Product Feature

* **Function trigger:** Button.
* **Function description:** staff can update a product.
* **Screen layout:**

****

* **Function Details:** Staff can update an article, including its information and images. Then click on the Update button to confirm the changes.

## 26. Write Article Feature

* **Function trigger:** Button.
* **Function description:** staff can write an article.
* **Screen layout:**

****

* **Function Details:** Staff can create an article by filling in the required information, writing content, and adding images. Then click “Add” to create an article.

## 27. Create Product Feature

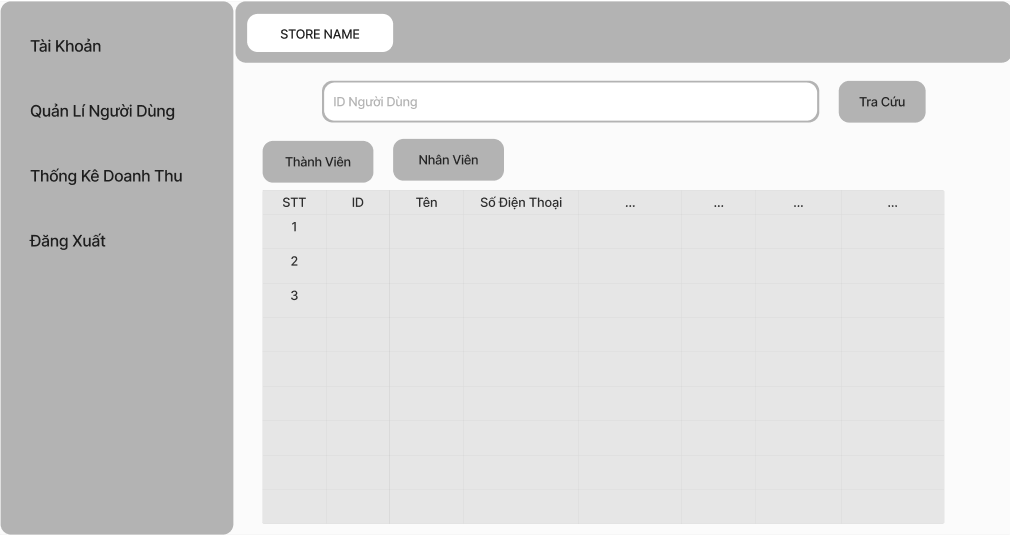
* **Function trigger:** Button.
* **Function description:** staff can add a product.
* **Screen layout:**

****

* **Function Details:** Staff click “Add product” to access Create Product Page then fill required information and click “Add” to create product..

## 28. View Account List Feature

* **Function trigger:** Button.
* **Function description:** The registered account list will be shown for admin.
* **Screen layout:**

****

* **Function Details:** admin click “Manage Account” so they can redirect to the account list page, and the table of account will be shown.