

VIETNAM INTERNATIONAL UNIVERSITY - HO CHI MINH CITY
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WEB APPLICATION DEVELOPMENT PROJECT ONLINE RETAIL WEBSITE

Members

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GitHub Repository: <https://github.com/HoenMike/WebProject>

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A report submitted to the School of Computer Science and Engineering
in partial fulfillment of the requirements for the Final Project
in Web Application Development course

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I. INTRODUCTION

1. About us

Welcome to Daily Store! We are an online convenience store dedicated to bringing the ease of in-store shopping directly to your doorstep. With just a few clicks, you can browse and get what you need, all from the comfort of your home.

Understanding all customer's needs, at Daily Store, we offer a wide range of essential products perfect for families and individual uses. From household necessities to personal items, we strive to make your shopping experience seamless and convenient.

Our goal is simple: to provide our customers with an effortless shopping experience no matter where they are. Daily Store is here to make your life easier with reliable delivery and a full range of products.

2. Programming language

HTML

a markup language for the web that defines the structure of web pages using components like headings, paragraphs, links, and other content.

CSS

It is used to style the HTML elements, controlling the controls, colors, fonts, and other visual aspects of the web page, and ensure that the user interface is attractive and responsive.

C#

An object-oriented programming language used for back-end development. C# helps build robust, scalable, and secure server-side applications that handle business logic, data processing, and database interactions.

3. Framework, Database and Library

.NET

A free cross-platform, open-source framework that provides a rich ecosystem of libraries and tools for building web applications.

Azure SQL Database

A fully managed relational database service provided by Microsoft, utilizing SQL (Structured Query Language) to manage data across multiple tables. Azure SQL Database offers high availability, scalability, and security, making it an excellent choice for storing and managing large volumes of data in our application.

MudBlazor

A Material Design component library for Blazor, a framework for building interactive web UIs using C#. It provides a set of pre-designed UI components that help create modern, responsive, and visually appealing interfaces without the need to design components from scratch.

4. Tools

Visual Studio Code

An Integrated Development Environment (IDE) that provides a comprehensive suite of tools for developing, editing, debugging, and running applications. It supports multiple programming languages such as C# and includes utilities like a debugger and compiler.

Azure Web App

A fully managed platform-as-a-service (PaaS) by Microsoft that allows you to quickly build, deploy, and scale web applications. It supports various programming languages and frameworks and offers built-in security, automatic scaling, and high availability, ensuring your website runs smoothly.

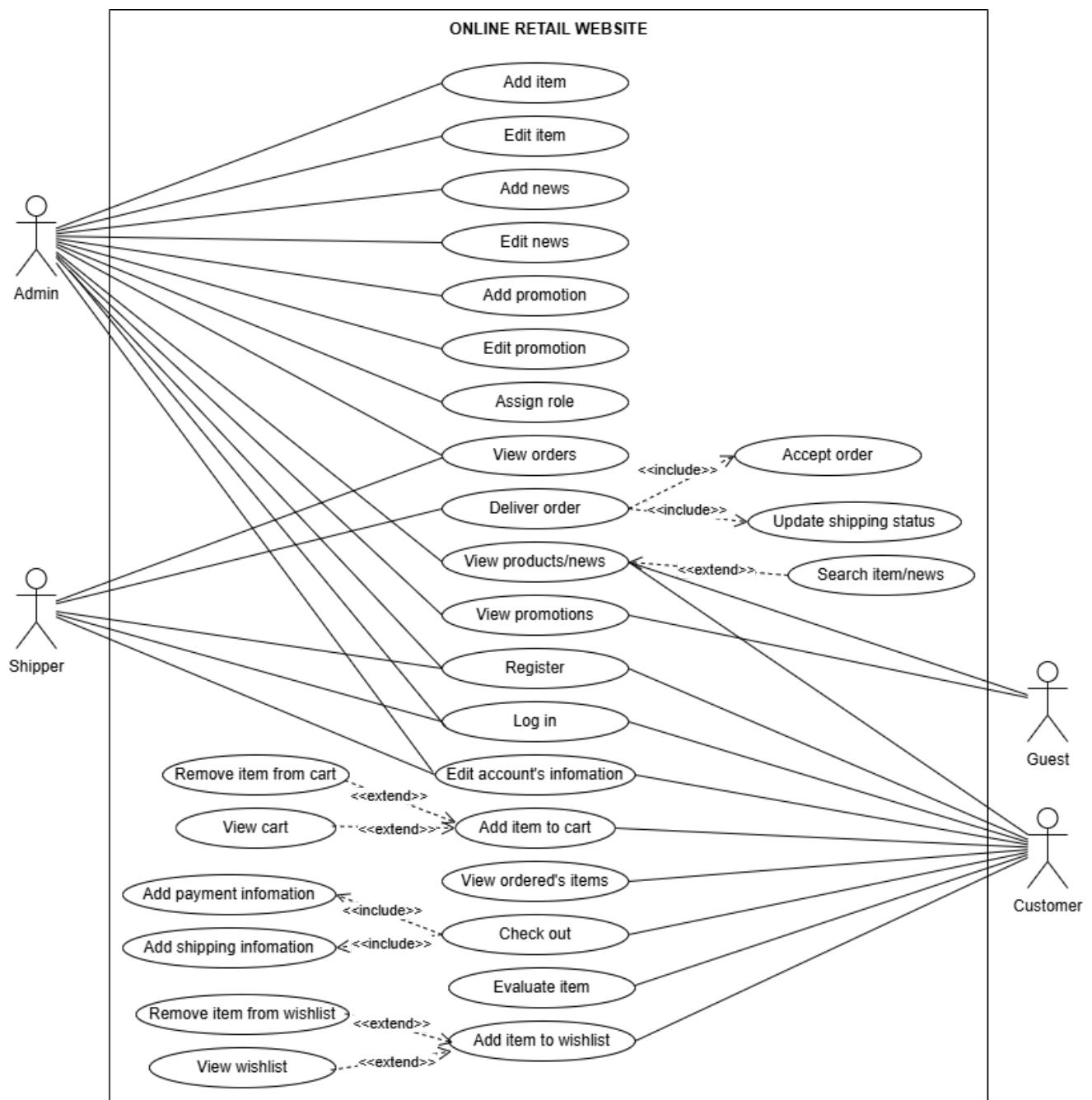
Github

A cloud-based platform where you can store, share, and work with others to write code. It allows our team to manage and track changes to the codebase, collaborate with team members, and maintain a history of revisions.

II. REQUIREMENT ANALYSIS AND DESIGN

1. Requirement Analysis

Use Case Diagram:



Use Case 1: Log in

Input:

- User's name
- Password

Output:

- Home page (success)
- Login page (fail)

Basic course:

User	System
Open the “Login” page	Display the “Login” page
Enter username and password	
Submit	Check the user’s input - Success: display the “Home” page - Fail: display the “Login” page
Click “Login later”	Display the “Home” page

Pre-condition: The user has a registered account.

Post-condition: None

Use Case 2: Register Account

Input:

- User’s name
- Password
- Confirm Password

Output:

- Home page (success)
- Register page (fail)

Basic course:

User	System
Open the “Register” page	Display the “Register” page
Enter username, password, and confirm password	
Submit	Check the user’s input - Success: display the “Home” page - Fail: display the “Register” page

Pre-condition: None

Post-condition: Database updated; user can log in with the registered account

Use Case 3: Edit Account information

Input:

- Password
- New Password
- Confirm Password

Output: Display message that user has successfully updated information.

Basic course:

User	System
Click on “username” button on navigation bar	Display the “Change your account settings” page
Enter password, new password, and confirm password	
Submit	Display message that user has successfully updated information.

Pre-condition: The user has a registered account.

Post-condition: Database updated, user can log in with new password

Use Case 4: View items/news/promotions

Input: None

Output: Home/Item Browse/News page

Basic course:

User	System
Open “Home” page	Display newest items, latest news and active promotions
Open “Item Browse” page	Display all items
Click on the item	Display details of that item
Open “News” page	Display all news
Click on the news	Display the content of that news

Pre-condition: None

Post-condition: None

Use Case 5: Search item/news by keyword

Input: keyword

Output: Home/Item Browse/News page with related items/news

Basic course:

User	System
Click “Search” bar on the head of the pages	
Enter keyword	Display list of related items/news

Pre-condition: None

Post-condition: None

Use Case 6: Add/ Remove item to/from wish list/cart and view wishlist/cart

Input: None

Output:

- Display message that user has successfully added/removed items to shopping cart /wishlist
- Display items on Wishlist/Cart page

Basic course:

User	System
Click the “Cart” icon in each item (default to add 1 product, but you can adjust the quantity)	<ul style="list-style-type: none"> - If logged in, add items to the user’s shopping cart - Else display “Must log in” message
Click the “Heart” icon in each item	<ul style="list-style-type: none"> - If logged in, add/remove items to the user’s wishlist when click on grey/red “Heart” - Else display “Must log in” message
Open “Cart” page	Display “Cart” page
Click the “Delete” icon in each item	Remove item from cart
Open “Wishlist” page	Display “Wishlist” page
Click the “Delete” icon in each item	Remove item from wishlist

Pre-condition: User is logging in an registered account

Post-condition:

- Items added/removed from the shopping cart/wish list
- Database updated
-

Use Case 7: Add card for payment.

Input:

- Card Holder Name
- Card Number
- Expiry Date
- CVV

Output: Display message that user has successfully added card

Basic course:

User	System
Open “Payment Infomation” page	Display “Payment Infomation” page
Enter card infomation (tick “Set as primary card”)	
Submit	Display message that user has successfully added card
Click “Remove” button on existing card	Display message that user has successfully removed card

Pre-condition: User is logging in an registered account

Post-condition: Database updated

Use Case 8: Add shipping information

Input:

- Receiver Name
- Address
- Phone Number

Output: Display message that user has successfully updated shipping information

Basic course:

User	System
Open “Shipping Infomation” page	Display “Shipping Infomation” page
Enter shipping information	
Submit	Display message that user has successfully updated shipping information

Pre-condition: User is logging in an registered account

Post-condition: Database updated

Use Case 9: Check out

Input: None

Output: Display message that user has successfully checked out

Basic course:

User	System
Open “Cart” page	Display “Cart” page

Tick to select items	Update selected item quantity and total cost
Sumit check out	<ul style="list-style-type: none"> - Success: Display check out dialog - Fail: Display message that user need to select items to check out/Display information page user have not filled
Click "Edit" icon	Display information page user want to edit
Select to pay by Cash/Credit Card	
Submit	Display message that user has successfully checked out
Open "Ordered Items" page	Display "Ordered Items" page

Pre-condition:

- User is logging in an registered account
- Cart is not empty
- User have filled shipping and payment information

Post-condition: Database updated

Use Case 10: Evaluate item

Input: Comment and rating

Output: Display message that user has successfully rated item

Basic course:

User	System
Click on item to open item details	Display details of that item
Rate by click on star and comment	
Submit	<ul style="list-style-type: none"> - Success: Display message that user has successfully rated item - Fail: Display message that user has not commented

Pre-condition: User is logging in an registered account

Post-condition: Database updated

Use Case 11: Add item

Input:

- Name
- Price
- Description
- Image URL
- Stock Quantity

Output:

- Success: Display message that item has been successfully added
- Fail: Display message about empty input

Basic course:

User	System
Open “Item Management” page	Display “Item Management” page
Click “Add Item” button	Open “Add Item” dialog
Enter item information	
Submit	<ul style="list-style-type: none">- Success: Display message that item has been successfully added- Fail: Display message about empty input

Pre-condition: User is logging in as Admin role.

Post-condition: Database updated

Use Case 12: Edit Item

Input: Edit information

Output:

- Success: Display message that item has been successfully edited
- Fail: Display message about empty input

Basic course:

User	System
Open “Item Management” page	Display “Item Management” page
Click “Edit” button	Open “Edit Item” dialog
Edit item information	
Submit	<ul style="list-style-type: none">- Success: Display message that item has been successfully edited- Fail: Display message about empty input
Click “Remove” button	<ul style="list-style-type: none">- Display message that item has been successfully removed

Pre-condition:

- User is logging in as Admin role.
- The item is added before

Post-condition: Database updated

Use Case 13: Add news

Input:

- Title
- Content
- Image URL

Output: Display message that news has been successfully added

Basic course:

User	System
Open “News Management” page	Display “News Management” page
Click “Add News” button	Open “Add News” dialog
Enter news information	
Submit	<ul style="list-style-type: none">- Success: Display message that news has been successfully added- Fail: Display message about empty input

Pre-condition: User is logging in as Admin role.

Post-condition: Database updated

Use Case 14: Edit News

Input: Edit information

Output:

- Success: Display message that news has been successfully edited
- Fail: Display message about empty input

Basic course:

User	System
Open “News Management” page	Display “News Management” page
Click “Edit” button	Open “Edit News” dialog
Edit news information	
Submit	<ul style="list-style-type: none">- Success: Display message that news has been successfully edited- Fail: Display message about empty input
Click “Remove” button	<ul style="list-style-type: none">- Display message that news has been successfully removed

Pre-condition:

- User is logging in as Admin role
- The news is added before

Post-condition: Database updated

Use Case 15: Add promotion

Input: Image URL

Output:

- Success: Display message that promotion has been successfully added
- Fail: Display message about empty input

Basic course:

User	System
Open “Promotion Management” page	Display “Promotion Management” page
Click “Add Promotion” button	Open “Add Promotion” dialog
Enter promotion information	
Submit	<ul style="list-style-type: none">- Success: Display message that promotion has been successfully added- Fail: Display message about empty input
Active/Inactive the promotion	Display/Remove image of that promotion on “Home” page

Pre-condition: User is logging in as Admin role.

Post-condition: Database updated

Use Case 16: Edit promotion

Input: Another Image URL

Output:

- Success: Display message that promotion has been successfully edited
- Fail: Display message about empty input

Basic course:

User	System
Open “Promotion Management” page	Display “Promotion Management” page
Click “Edit” button	Open “Edit Promotion” dialog
Edit promotion information	
Submit	<ul style="list-style-type: none">- Success: Display message that promotion has been successfully edited- Fail: Display message about empty input

Active/Inactive the promotion	Display/Remove image of that promotion on “Home” page
-------------------------------	---

Pre-condition:

- User is logging in as Admin role.
- The promotion is added before

Post-condition: Database updated

Use Case 17: Assign Roles

Input:

- Username
- Role

Output:

- Success: Display message that role has been successfully assigned
- Fail: Display message about empty input/user not found

Basic course:

User	System
Open “Assign Roles” page	Display “Assign Roles” page
Enter username and role	
Submit “Assign role”	<ul style="list-style-type: none"> - Success: Display message that role has been successfully assigned - Fail: Display message about empty input/user not found
Click “Clear Role” button	<ul style="list-style-type: none"> - Display message that role has been successfully cleared

Pre-condition:

- User is logging in as Admin role
- Assign an existing account.

Post-condition: Database updated

Use Case 18: View Orders

Input: None

Output: Display “Show Orders” page

Basic course:

User	System
Open “Show Orders” page	Display “Show Orders” page - [Admin] Show all orders - [Shipper] Only show pending orders
[Admin] Click “Cancel” to cancel order	Display confirm dialog

Pre-condition: User is logging in as Admin or Shipper role

Post-condition: None

Use Case 19: Deliver orders

Input: None

Output: Display message that shipping status has been successfully updated

Basic course:

User	System
Open “Show Orders” page	Display “Show Orders” page
Click “Accept Order”	Display message that order has been successfully accepted
Open “Shipper Dashboard” page	Display “Shipper Dashboard” page
Click “Delivering”/“Cancel”/“Successful” to update shipping status	Display confirm dialog the display message that shipping status has been successfully updated

Pre-condition: User is logging in as Shipper role

Post-condition: Database updated

Functional Requirement:

User Authentication and Authorization

- Implement role-based access using <AuthorizeView> to display navigation links based on roles like Admin and Shipper.

Navigation Menu

- Display specific links for different roles:
 - Admin: Item Management, News Management, Promotes Manage, Show Orders.
 - Shipper: Shipper Dashboard, Show Orders.
 - All Users: Ordered Items.

Item Management

- Admins can add, edit, delete, and view items.

News Management

- Admins can create, update, delete, and display news articles.

Promotes Management

- Admins can manage promotional content and campaigns.

Order Management

- Shippers and Admins can view and process orders.

Shipper Dashboard

- Shippers can access dashboard features specific to their role, such as order tracking and shipment status.

Non Functional Requirement:

Performance

- Ensure fast load times for navigation and page rendering.

Security

- Protect sensitive data and ensure secure role-based access control.

Usability

- Provide an intuitive and user-friendly interface for easy navigation.

Scalability

- Design the system to handle an increasing number of users and data without performance degradation.

Maintainability

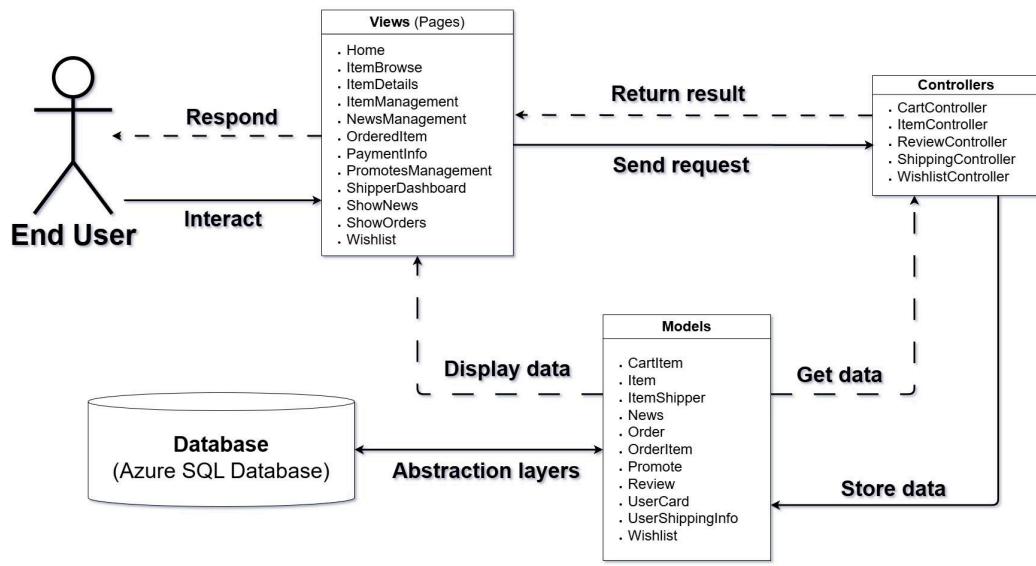
- Write clean, modular code to facilitate easy updates and maintenance.

Compatibility

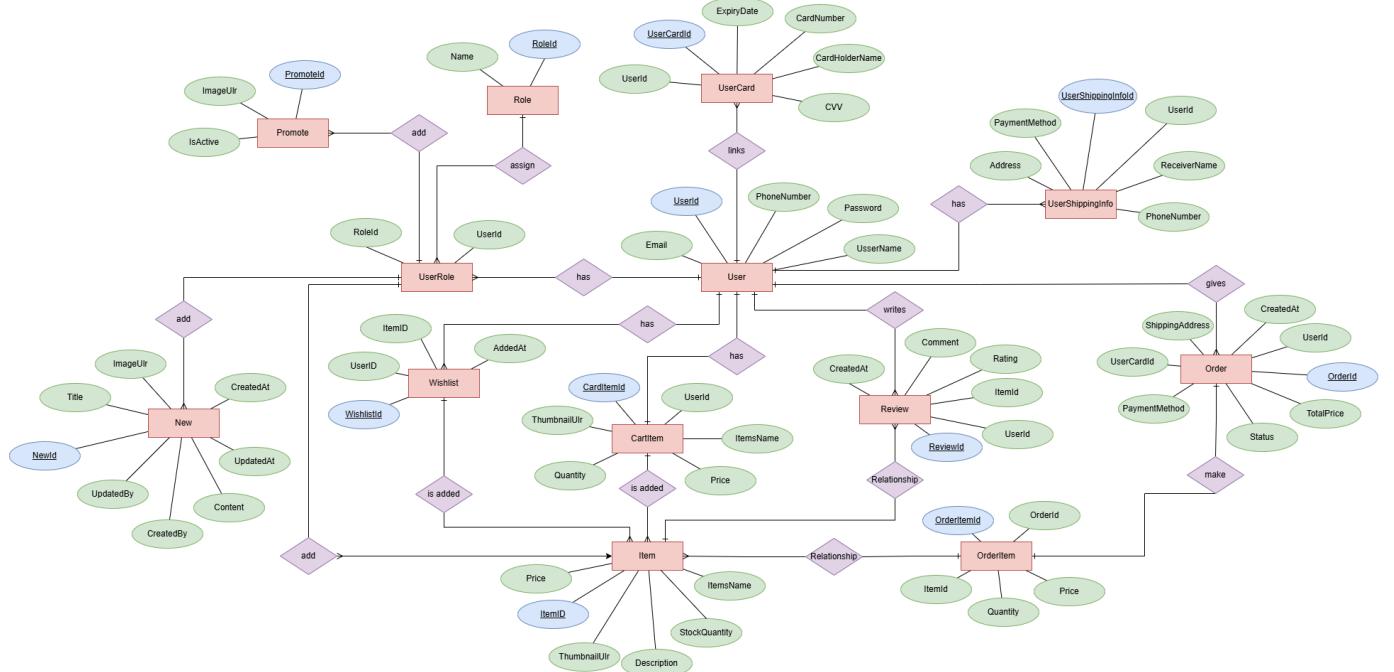
- Ensure the website functions correctly across various browsers and devices.

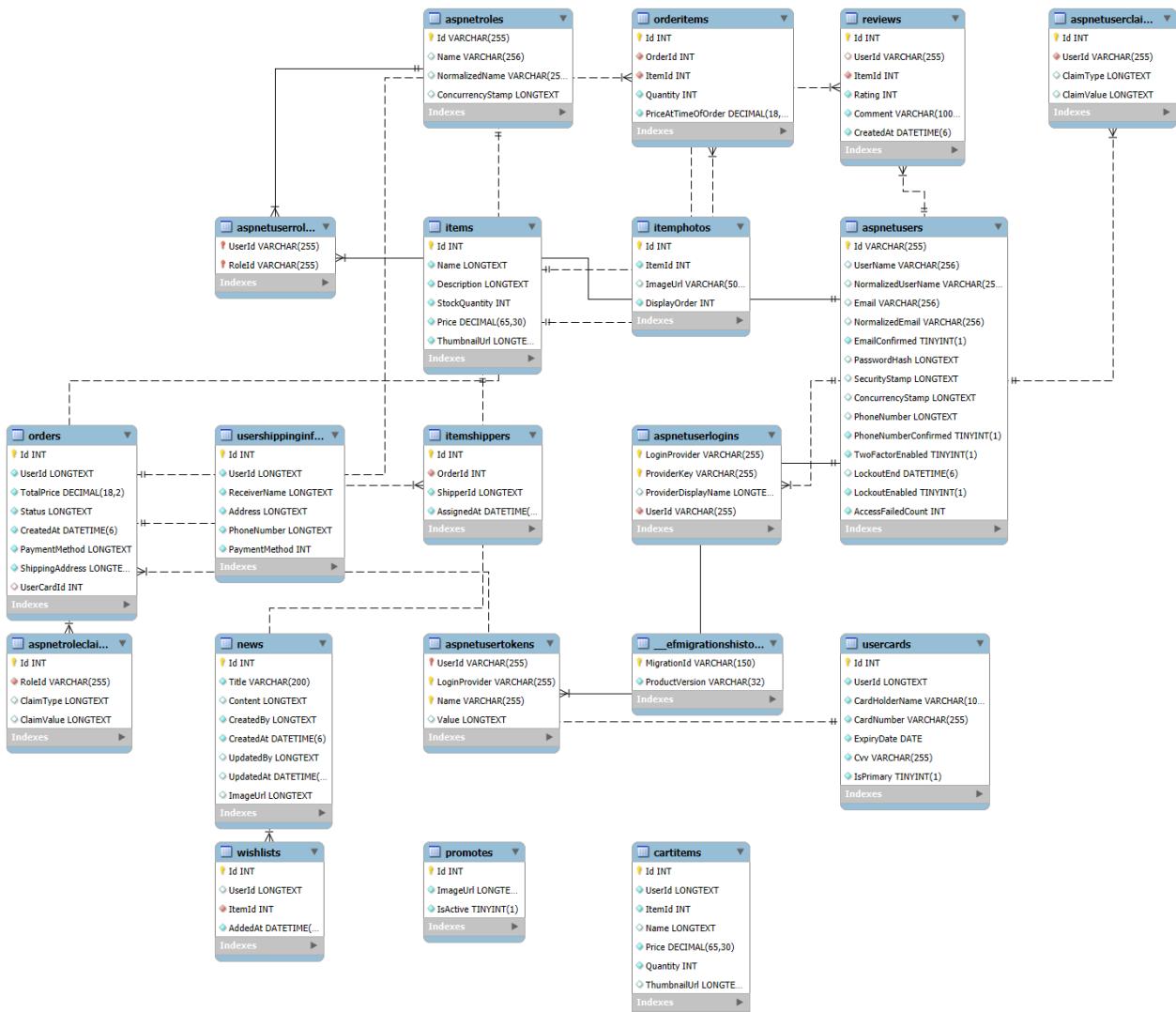
2. Design

2.1. System Architecture Model (MVC Model):



2.2. Entity-Relationship Diagram (ERD):





User(UserId, UserName, Password, PhoneNumber, Email)

UserRole(UserId, RoleId)

Role(RoleId, RoleName)

UserCard(UserCardId, CardNumber, CardHolderName, ExpiryDate, CVV, UserId)

UserShippingInfo(UserShippingInfoId, UserId, ShippingAddress, ReceiverName, PhoneNumber, PaymentMethod)

Wishlist(WishlistId, UserId, ItemId, AddedAt)

Item(ItemId, ItemName, Price, Description, StockQuantity, ThumbnailUrl)

CartItem(CartItem, UserId, ItemId, Quantity, Price)

Order(OrderId, UserId, ShippingAddress, TotalPrice, OrderDate, PaymentMethod, Status, UserCardId)

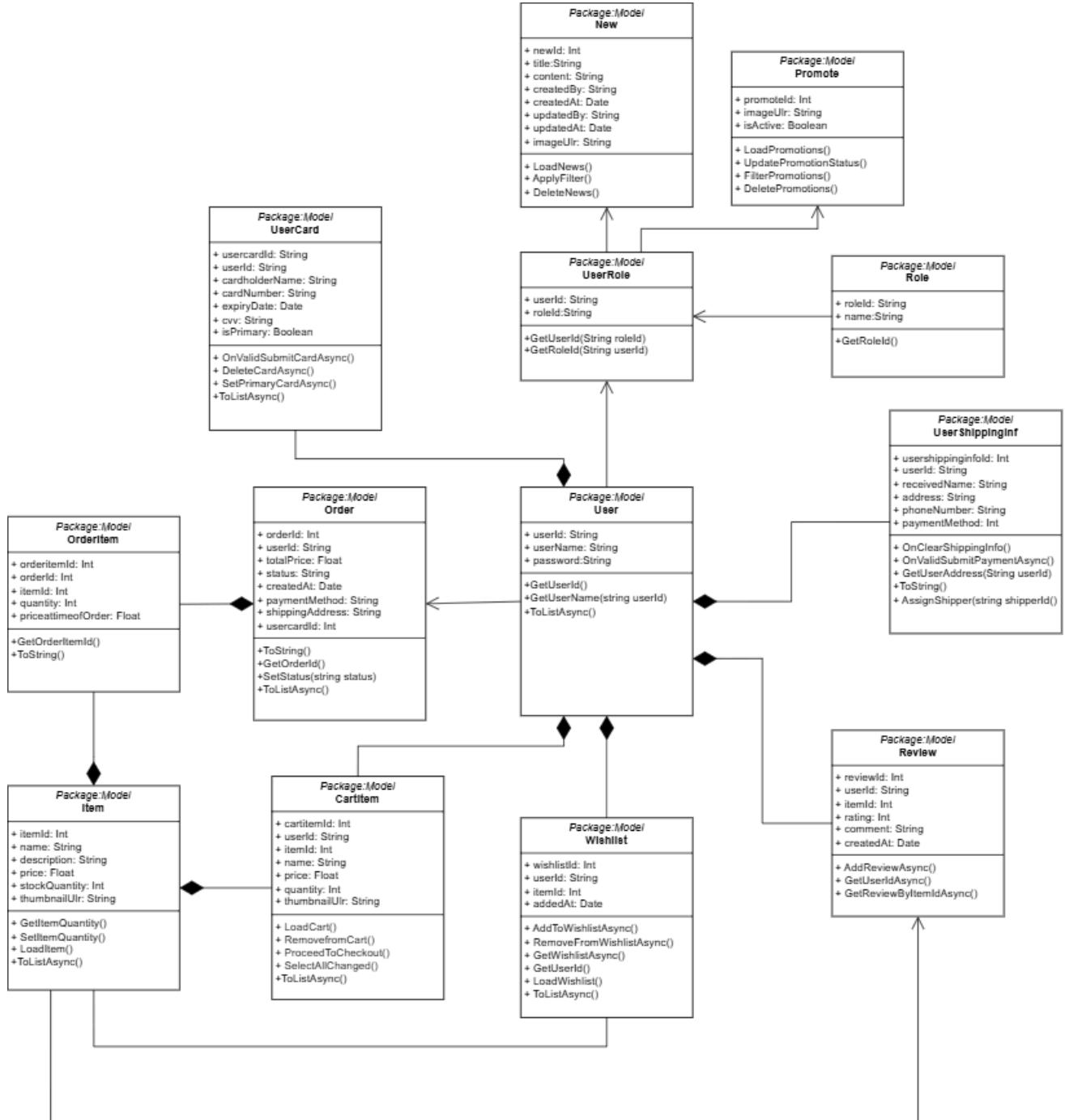
OrderItem(OrderItemId, OrderId, ItemId, Quantity, Price)

Review(ReviewId, UserId, ItemId, Rating, Comment, CreatedAt)

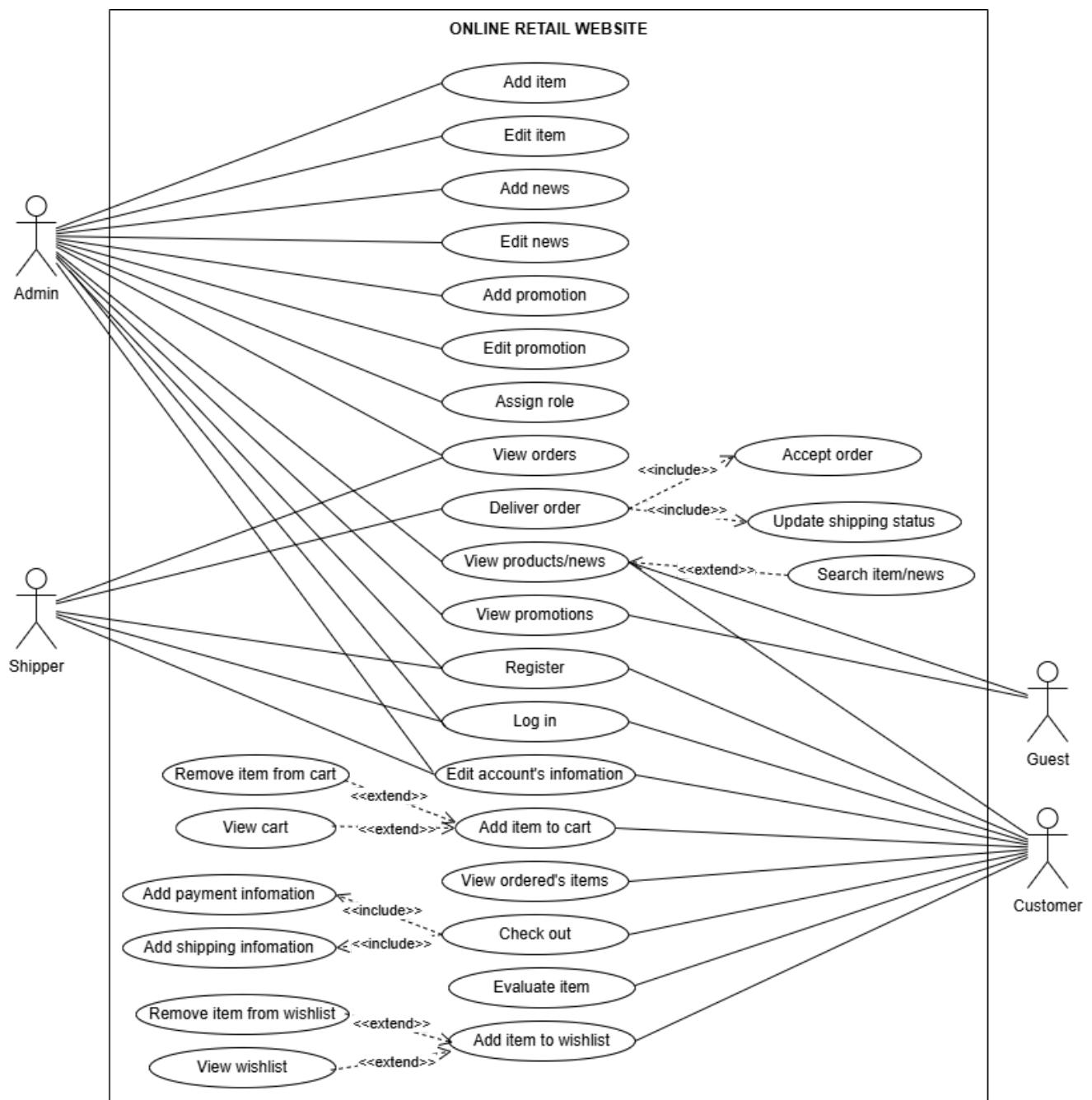
Promote(PromoteId, Title, ImageUrl, IsActive, CreatedAt, UpdatedAt)

New(NewId, Title, ImageUrl, Content, CreatedAt, UpdatedAt, createdBy, UpdatedBy)

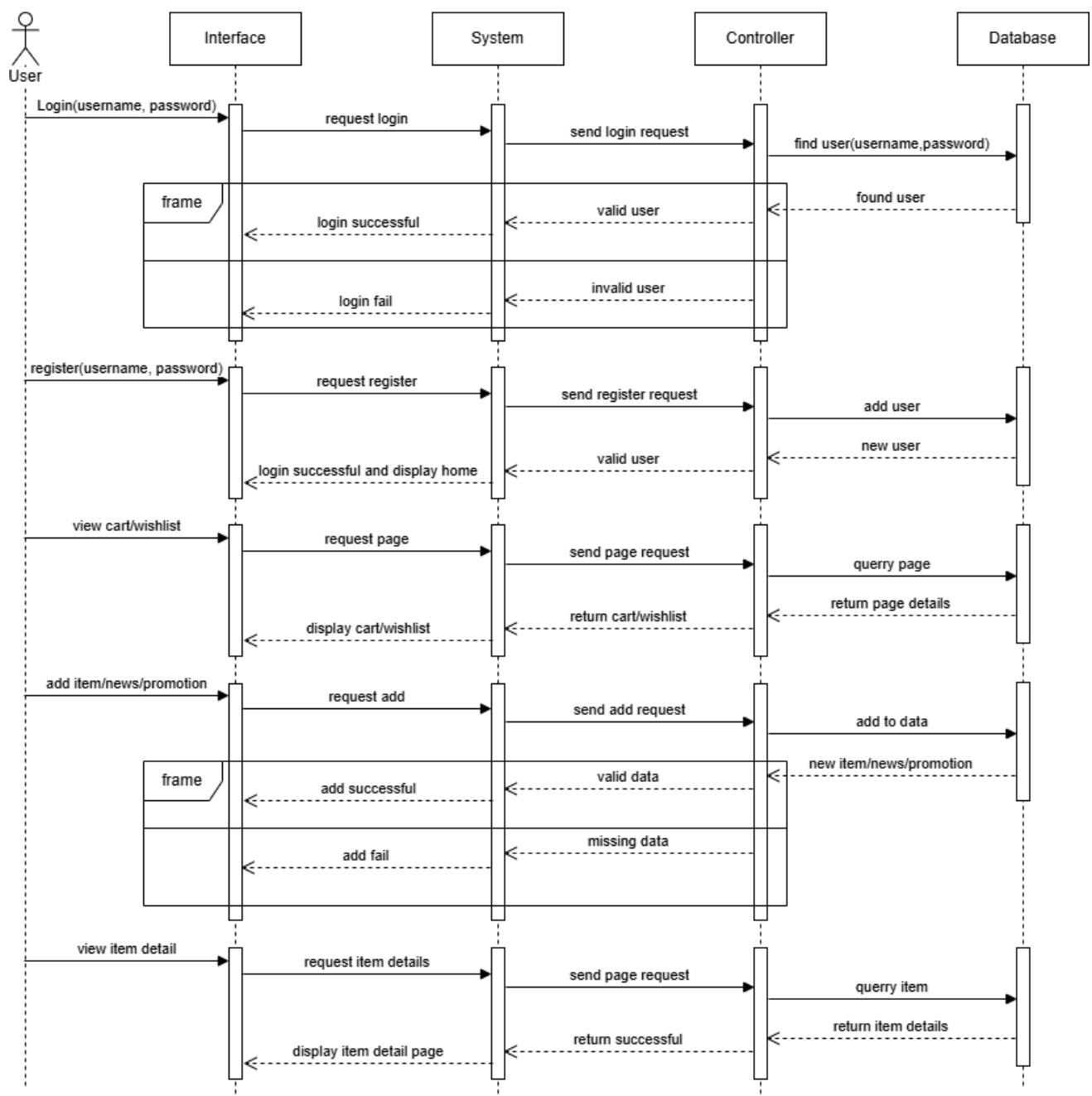
2.3. Class Diagram:

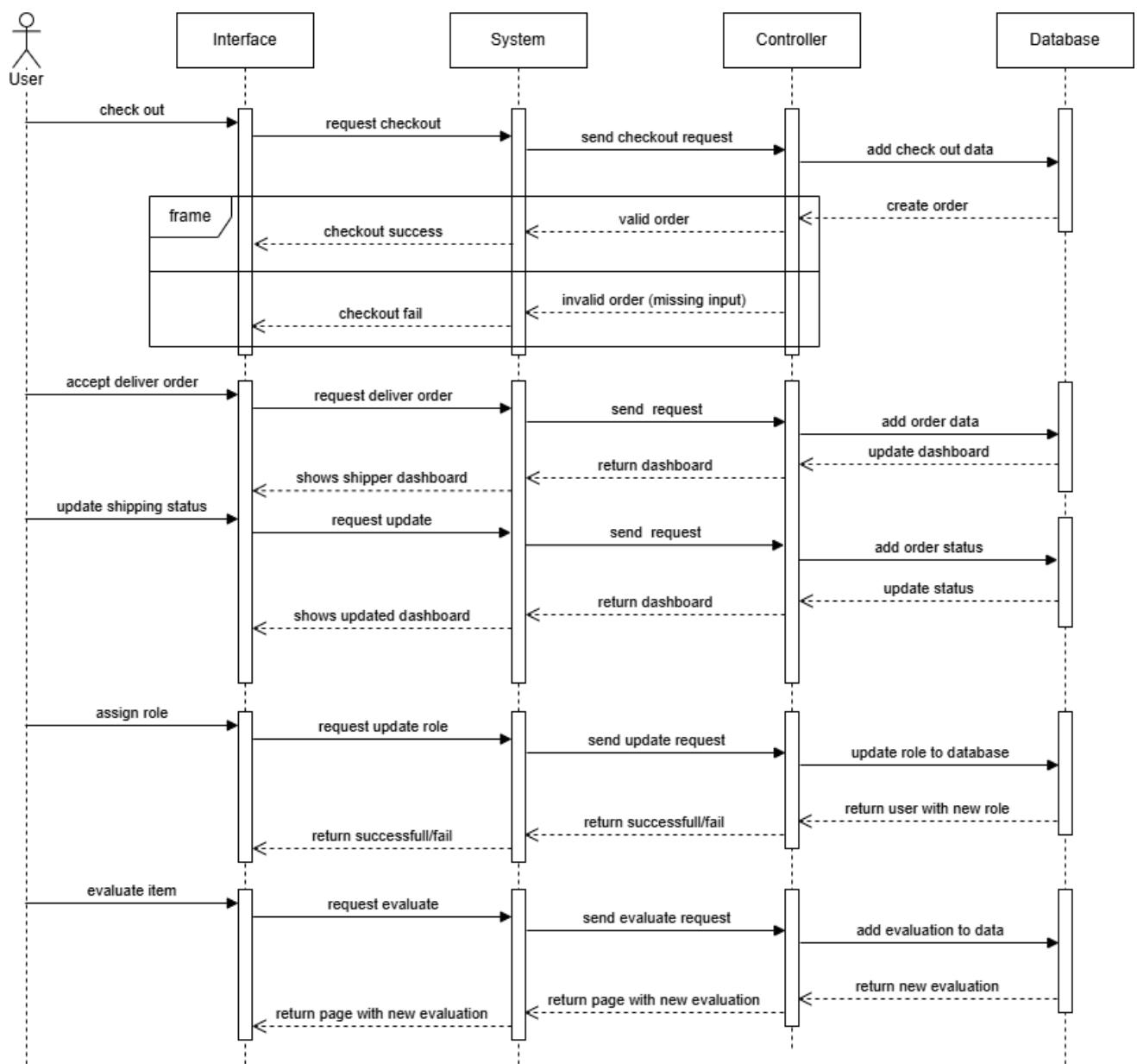


2.4. Use Case Diagram:



2.5. Sequences Diagram:





III. IMPLEMENTATION

1. User's account management functions

Authentication and Authorization:

- Login: Users can log in using their credentials
- Registration: New users can register by providing a username and password.
- Password Management:

- The convenience store website will appear, because the user is a visitor, they will only see 3 main functions: Home, Item Browse and News

DailyStore

Home Item Browse News Register Login

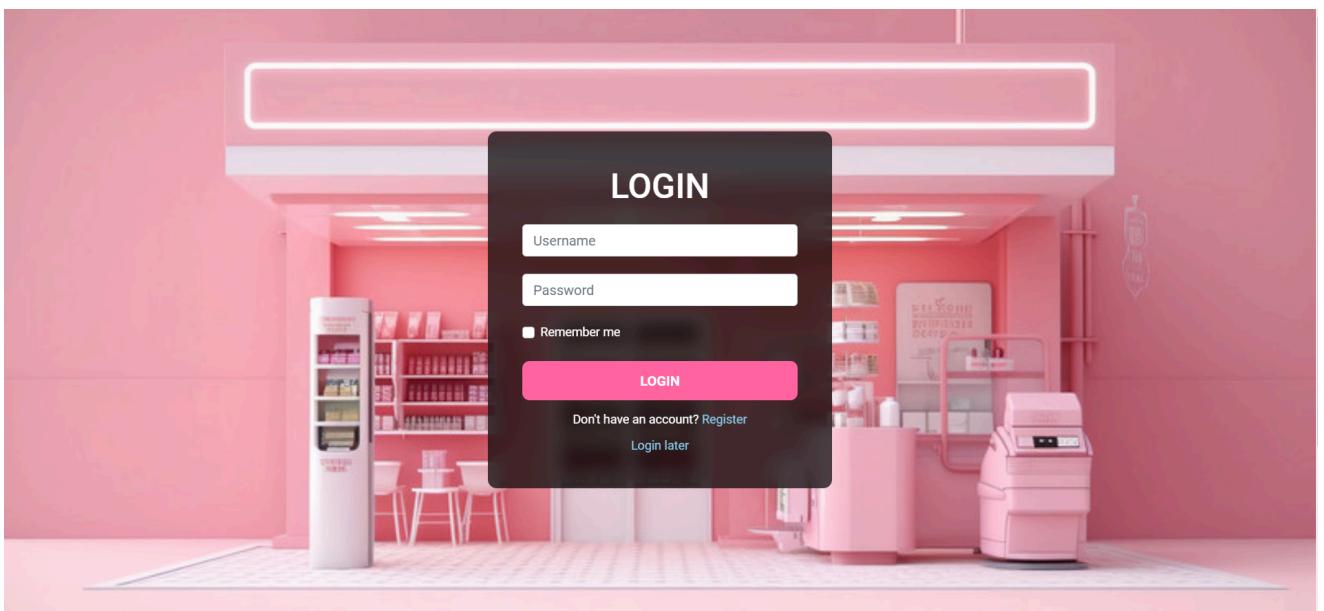
Search Items

The home page features a large central banner for Coca-Cola with the slogan "Enjoy! Coca-Cola". The background of the banner is red, showing a bottle pouring liquid into a glass. The surrounding area has a pink and white theme with various food icons like donuts, cakes, and pastries.

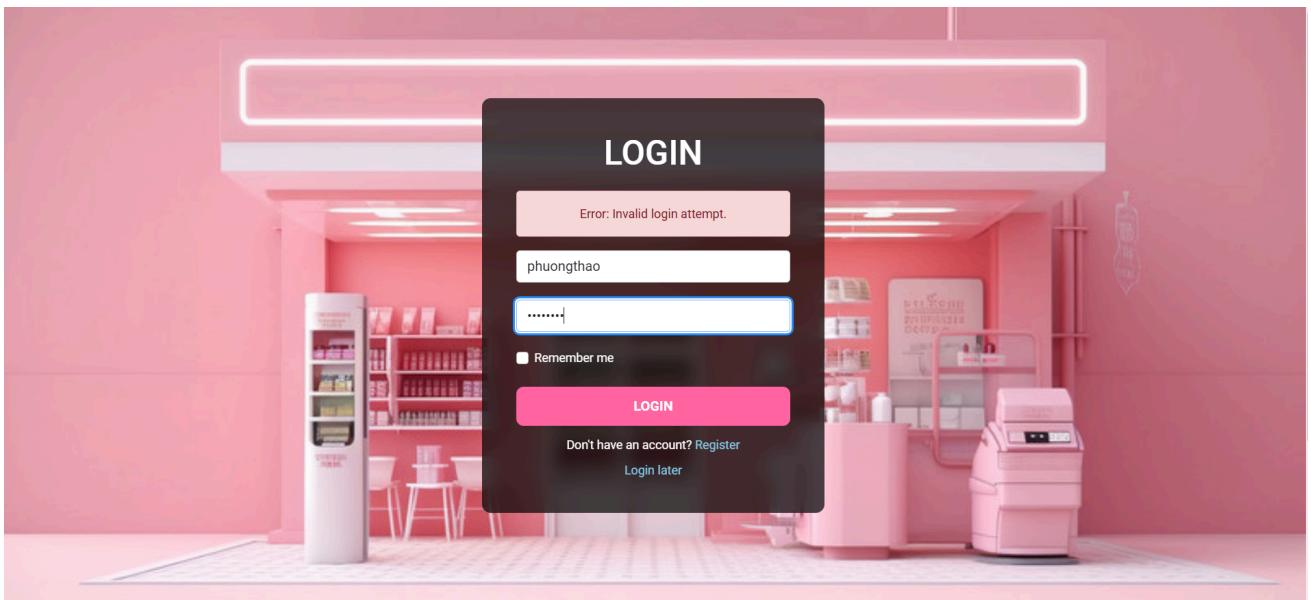
New Arrivals

A row of four small product thumbnails with heart icons below them, representing new arrivals.

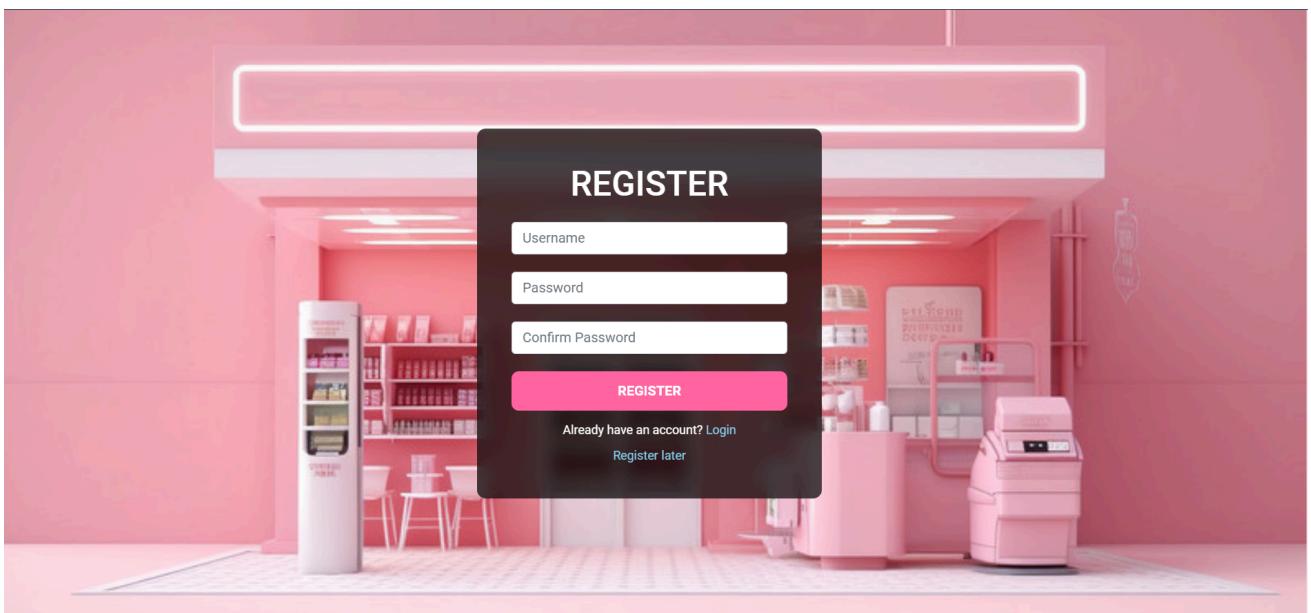
- Click the "Login" button. The login page will appear.



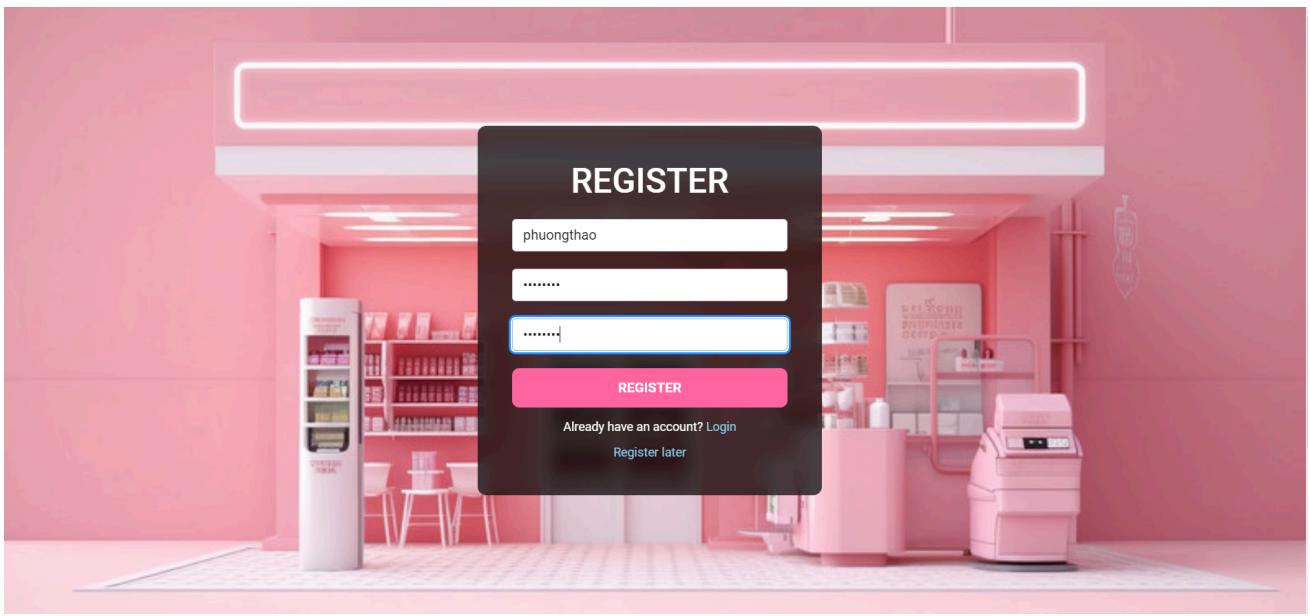
- If the user enters incorrect login information, it will return an error.



- Click the "Register" to create an account.



- Fill in all information to create an account



- Once an account is created, users can see more functions than visitors.

DailyStore

- If the user wants to log out or change the password, click on the username button on the navigation bar.

DailyStore

- Home
- Item Browse
- News
- Ordered Items
- Cart
- Wishlist
- Payment Info
- Shipping Info
- phuongthao

Change password

Old password

New password

Confirm password

Update password

DailyStore
release v1.1.4/151224

An online convenience store offering a wide range of essential products for families and individuals. We aim to make shopping easy and convenient by delivering directly to your doorstep. With a focus on reliability and variety, we strive to simplify your shopping experience.

Contact

0123456789
dailystore@gmail.com
WRF5+8JV, Biên Hòa, Đồng Nai

Gallery



- When the user wants to change the password, fill in all the information and click the "update password" button.

DailyStore

- Home
- Item Browse
- News
- Ordered Items
- Cart
- Wishlist
- Payment Info
- Shipping Info
- phuongthao

Change password

Your password has been changed

Old password

New password

Confirm password

Update password

DailyStore
release v1.1.4/151224

An online convenience store offering a wide range of essential products for families and individuals. We aim to make shopping easy and convenient by delivering directly to your doorstep. With a focus on reliability and variety, we

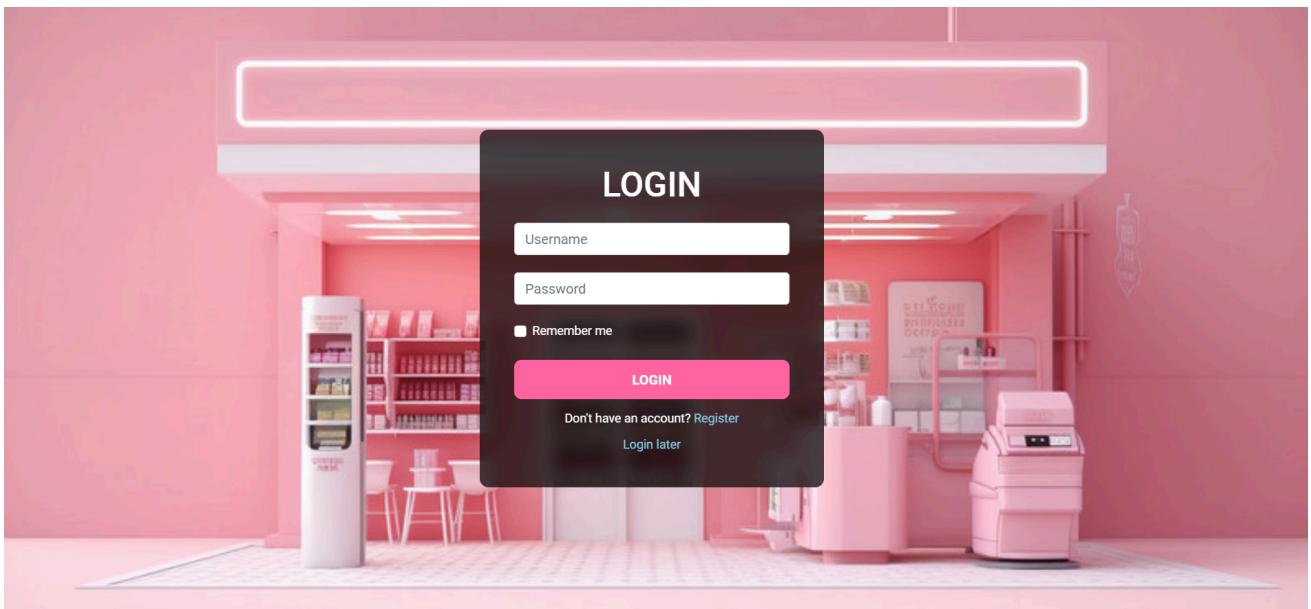
Contact

0123456789
dailystore@gmail.com
WRF5+8JV, Biên Hòa, Đồng Nai

Gallery



- Click the "Logout" button to log out. It will return to the login screen, now the user can log in with the new password.



2. Product viewing functions

2.1. Home

- On the home page, users can see promotional posters, the store's 8 newest products and 2 latest news.

DailyStore

Home

Item Browse

News

Ordered Items

Cart

Wishlist

Payment Info

Shipping Info

phuongthao

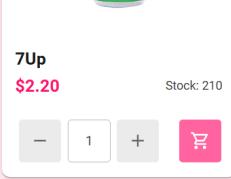
Search Items

Có Lay's Tết này Cuối vui lấy via

New Arrivals

DailyStore

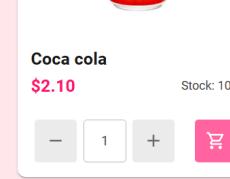
- [Home](#)
- [Item Browse](#)
- [News](#)
- [Ordered Items](#)
- [Cart](#)
- [Wishlist](#)
- [Payment Info](#)
- [Shipping Info](#)
- [phuongthao](#)



7Up
\$2.20

Stock: 210

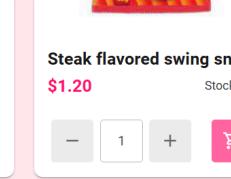
- 1 + [Buy](#)



Coca cola
\$2.10

Stock: 100

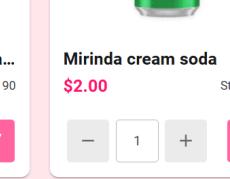
- 1 + [Buy](#)



Steak flavored swing sna...
\$1.20

Stock: 90

- 1 + [Buy](#)



Mirinda cream soda
\$2.00

Stock: 90

- 1 + [Buy](#)

[BROWSE ALL ITEMS](#)

Lastest News

How Convenience Stores Are Evolving with Modern Needs

Created By: thao - 12/15/2024 1:03:55 PM

Convenience stores have always been known for their quick service, but they are evolving to meet the needs of today's consumers. In addition to traditional snacks and beverages, many convenience stores now offer fresh food options like sandwiches, salads, and hot meals. This shift allows customers to pick up a quick, healthy meal without having to visit a restaurant. Many stores have also adopted new technologies to improve the shopping experience. Mobile payment options, self-checkout kiosks, and

Top Snacks to Grab at Your Local Convenience Store

Created By: thao - 12/15/2024 1:03:02 PM

2.2. Item Browse

- Click the "Browse all items" button at the bottom of the New Arrivals section on the home page or click the "Item Browse" function on the navigation bar. The website will take to the Item Browse page.

DailyStore

- [Home](#)
- [Item Browse](#)
- [News](#)
- [Ordered Items](#)
- [Cart](#)
- [Wishlist](#)
- [Payment Info](#)
- [Shipping Info](#)
- [phuongthao](#)



Vifon beef Pho
\$3.50

Stock: 0

- 1 + [Buy](#)



Omachi spicy and sour s...
\$3.10

Stock: 197

- 1 + [Buy](#)



Otto milk cream bread
\$2.00

Stock: 100

- 1 + [Buy](#)



Lays potato flavor snack
\$1.30

Stock: 100

- 1 + [Buy](#)



Stock: 0

- 1 + [Buy](#)



Stock: 0

- 1 + [Buy](#)



Stock: 0

- 1 + [Buy](#)



Stock: 0

- 1 + [Buy](#)

- Click on any item. The website will lead to that Item Detail page.

DailyStore

- [Home](#)
- [Item Browse](#)
- [News](#)
- [Ordered Items](#)
- [Cart](#)
- [Wishlist](#)
- [Payment Info](#)
- [Shipping Info](#)
- [phuongthao](#)



Omachi spicy and sour shrimp cup noodles

0 0 Evaluate

\$3.10

Enjoy the delicious taste of Omachi Instant Noodles in a convenient cup! With rich, flavorful broth and perfectly cooked noodles, Omachi brings you a satisfying meal in minutes. Available in a variety of tasty flavors, it's the perfect snack or quick meal for any time of day. Order now and experience the convenience and taste of Omachi Instant Noodles!

Stock: 197

- 1 +

ADD TO CART

Add a Review



Comment*

SUBMIT

- Item reviews can be viewed at the bottom of the page and can be selected to view star ratings.

DailyStore

- [Home](#)
- [Item Browse](#)
- [News](#)
- [Ordered Items](#)
- [Cart](#)
- [Wishlist](#)
- [Payment Info](#)
- [Shipping Info](#)
- [phuongthao](#)

Add a Review



Comment*

SUBMIT

5/5 ★★★★★

All 5★ 4★ 3★ 2★ 1★

Reviews

hihi

15/12/2024

Delicious

hihi

15/12/2024

Very Good

The screenshot shows a product page for a yellow bowl. On the left, a sidebar menu includes Home, Item Browse, News, Ordered Items, Cart, Wishlist, Payment Info, Shipping Info, and a user profile for phuongthao. At the top right are a minus sign, a quantity input field set to 1, a plus sign, and a pink 'ADD TO CART' button. Below the product image is a 'Add a Review' form with a 5-star rating icon, a comment input field, and a 'SUBMIT' button. A summary bar below shows a 5/5 rating, 5 yellow stars, and filter buttons for All, 5★, 4★, 3★, 2★, and 1★. The 'Reviews' section displays one entry from 'hihi' dated 15/12/2024, rated 5 stars, with the comment 'Very Good'.

2.3. News

- Click the "News" function on the navigation bar.

The screenshot shows the news section of the DailyStore website. The sidebar menu is identical to the previous screenshot. The main area features a search bar labeled 'Search News'. Two news items are listed:

- How Convenience Stores Are Evolving with Modern Needs**
Created By: thao - 12/15/2024 1:03:55 PM
An image of the interior of a modern convenience store with well-stocked shelves.
- Top Snacks to Grab at Your Local Convenience Store**
Created By: thao - 12/15/2024 1:03:02 PM
An image of a woman in a pink shirt looking at snack shelves filled with various brands like Oishi and Indo Chips.

- Click on the arrow icon to reveal the news content.

DailyStore

- Home
- Item Browse
- News**
- Ordered Items
- Cart
- Wishlist
- Payment Info
- Shipping Info
- phuongthao

Search News



How Convenience Stores Are Evolving with Modern Needs

Created By: thao - 12/15/2024 1:03:55 PM

Convenience stores have always been known for their quick service, but they are evolving to meet the needs of today's consumers. In addition to traditional snacks and beverages, many convenience stores now offer fresh food options like sandwiches, salads, and hot meals. This shift allows customers to pick up a quick, healthy meal without having to visit a restaurant. Many stores have also adopted new technologies to improve the shopping experience. Mobile payment options, self-checkout kiosks, and loyalty programs are now common, allowing for faster, more efficient service. Additionally, some convenience stores are offering delivery services, bringing the convenience right to your door. These innovations ensure that convenience stores continue to meet the demands of today's fast-paced world while providing customers with more choices and better service.



Top Snacks to Grab at Your Local Convenience Store

Created By: thao - 12/15/2024 1:03:02 PM

2.4. Wishlist

- Click on the heart icon to add the item to your wishlist.

DailyStore

- Home
- Item Browse
- News**
- Ordered Items
- Cart
- Wishlist
- Payment Info
- Shipping Info
- phuongthao

Search Items

Item added to wishlist



Vifon beef Pho

\$3.50

Stock: 0



1



Omachi spicy and sour s...

\$3.10

Stock: 197



1



Otto milk cream bread

\$2.00

Stock: 100



1



Lays potato flavor snack

\$1.30

Stock: 100



1



DailyStore

- Home
- Item Browse
- News
- Ordered Items
- Cart
- Wishlist**
- Payment Info
- Shipping Info
- phuongthao

Search Items



Vifon beef Pho
\$3.50 Stock: 0

– 1 + Cart



Omachi spicy and sour s...
\$3.10 Stock: 197

– 1 + Cart

DailyStore
release v1.1.4/151224

An online convenience store offering a wide range of...

Contact

0123456789
dailystore@gmail.com

Gallery





- Press the heart icon back to gray to remove it from wishlist.

DailyStore

- Home
- Item Browse
- News
- Ordered Items
- Cart
- Wishlist**
- Payment Info
- Shipping Info
- phuongthao

Search Items

✓ Item removed from wishlist X



Omachi spicy and sour s...
\$3.10 Stock: 197

– 1 + Cart

DailyStore
release v1.1.4/151224

An online convenience store offering a wide range of...

Contact

0123456789
dailystore@gmail.com

Gallery





2.4. Search bar

- Enter keywords in the search bar to find items faster.

DailyStore

Search Items: Ott

- Home
- Item Browse**
- News
- Ordered Items
- Cart
- Wishlist
- Payment Info
- Shipping Info
- phuongthao

Otto milk cream bread
\$2.00 Stock: 100

Quantity: 1

Lays potato flavor snack
\$1.30 Stock: 100

Quantity: 1

Daily Store

release v1.1.4/151224

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Gallery



DailyStore

- Home
- Item Browse**
- News
- Ordered Items
- Cart
- Wishlist
- Payment Info
- Shipping Info
- phuongthao

DailyStore

Search Items: Ott

Otto milk cream bread
\$2.00 Stock: 100

Quantity: 1

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release v1.1.4/151224

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dailystore@gmail.com

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3. Transaction functions

3.1. Add to cart

- When user have selected the item and quantity want to buy, click on the shopping cart icon or the "Add to cart" button.

DailyStore

- [Home](#)
- [Item Browse](#)
- [News](#)
- [Ordered Items](#)
- [Cart](#)
- [Wishlist](#)
- [Payment Info](#)
- [Shipping Info](#)
- [phuongthao](#)



Cookie

\$1.50

Stock: 50

-
8
+

V
\$:
0



Cookie

0 0 Evaluate

\$1.50

This is a very good cookie

Stock: 50

-
6
+

ADD TO CART

- The items the user clicked to buy appeared in the shopping cart.

DailyStore

- [Home](#)
- [Item Browse](#)
- [News](#)
- [Ordered Items](#)
- [Cart](#)
- [Wishlist](#)
- [Payment Info](#)
- [Shipping Info](#)
- [phuongthao](#)

Your Cart

Product	Unit Price	Quantity	Item Total	Actions
Cookie	\$1.50	- 6 +	\$9.00	
Omachi spicy and sour shrimp cup noodles	\$3.10	- 4 +	\$12.40	
Otto milk cream bread	\$2.00	- 4 +	\$8.00	

Order Summary

Selected Items	0
Selected Total	\$0.00

DailyStore

release v1.1.4/15/224

An online convenience store offering a wide range of essential products for families and individuals. We aim to make shopping easy and convenient by delivering directly to your doorstep. With a focus on reliability and variety, we strive to simplify your shopping experience.

Contact

0123456789

dailystore@gmail.com

WRF5+8JV, Biên Hòa, Đồng Nai

Gallery





34

3.2. Checkout order

- Tick the items want to buy, and it will show the total amount to pay.

Your Cart

	Product	Unit Price	Quantity	Item Total	Actions
<input type="checkbox"/>	Cookie	\$1.50	— 6 +	\$9.00	
<input checked="" type="checkbox"/>	Omachi spicy and sour shrimp cup noodles	\$3.10	— 4 +	\$12.40	
<input type="checkbox"/>	Otto milk cream bread	\$2.00	— 4 +	\$8.00	

Order Summary

Selected Items	2
Selected Total	\$21.40

PROCEED TO CHECKOUT

DailyStore
release v1.4/151224

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Gallery

- After clicking the "Proceed to checkout" button, a dialog box about shipping information and payment method will appear. If user do not fill in enough information, you will not be able to proceed to the next step.

Your Cart

Checkout

Shipping Information

⚠ Shipping information is missing. Please add your shipping information.

Payment Method

Payment Method*
Cash

Payment will be made in cash

PROCEED TO CHECKOUT

DailyStore
release v1.4/151224

An online convenience store offering a wide range of essential products for families and individuals. We aim to make shopping easy and convenient by delivering directly to your doorstep. With a focus on reliability and variety, we strive to simplify your shopping experience.

Order Summary

Selected Items	2
Selected Total	\$21.40

PROCEED TO CHECKOUT

Gallery

- Click on the pen icon to add shipping information, it will go to the Shipping Infor page.

DailyStore

- Home
- Item Browse
- News
- Ordered Items
- Cart
- Wishlist
- Payment Info
- Shipping Info**
- phuongthao

Shipping Information

CLEAR INFORMATION
SAVE INFORMATION

DailyStore
release v1.1.4/151224

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dailystore@gmail.com
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Gallery

- Fill in all information and press "save information" button

DailyStore

- Home
- Item Browse
- News
- Ordered Items
- Cart
- Wishlist
- Payment Info
- Shipping Info**
- phuongthao

Shipping Information

Shipping information updated successfully.

CLEAR INFORMATION
SAVE INFORMATION

DailyStore
release v1.1.4/151224

An online convenience store offering a wide range of essential products for families and individuals. We aim to

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dailystore@gmail.com

Gallery

- Add a new card on the Payment Info page.

DailyStore

Payment Information

Add New Card

Existing Cards

Demo Version Warning: This is a demonstration version. Card details are stored in plain text and are not validated or encrypted. DO NOT use real credit card information.

Card Holder Name*

Card Number*

Expiry Date*

CVV*

Set as Primary Card

SAVE CARD INFORMATION

Thao
***** * 548
Expires: 02/2011
Primary Card

REMOVE

- When filled in all the information, user can click the "Proceed to checkout" button.

Checkout

Shipping Information

Receiver Name: Thao **Phone Number:** 012345677

Address: 123/123

Payment Method

Payment Method*
Credit Card

Card Holder: Thao **Card Number:** **** * 548

PROCEED TO CHECKOUT

strive to simplify your shopping experience.

3.3. View order history

- Go to the Ordered Item page to see the information.

The screenshot shows the 'Ordered Items' section of the DailyStore application. A single order is listed with details: Order ID 7, Total Price \$29.40, Status Pending, Address Name: Thao, Address: 123/123, Phone Number: 012345677, and Created At 12/15/2024 3:33 PM. The interface includes a search bar, pagination, and navigation links for Home, Item Browse, News, Cart, Wishlist, Payment Info, Shipping Info, and user phuongthao.

4. Admin Role

- Admin can add products for sale, delete and edit added products.

The screenshot shows the 'Item Management' section of the DailyStore application. A list of products is displayed with columns for Image, Name, Price, Description, Stock Quantity, and Actions (Edit and Delete). The products include Cookie, Vifon beef Pho, Omachi spicy and sour shrimp cup noodles, Otto milk cream bread, Lays potato flavor snack, 7Up, Coca cola, and Steak flavored swing snack.

Image	Name	Price	Description	Stock Quantity	Actions
	Cookie	\$1.50	This is a very good cookie	44	
	Vifon beef Pho	\$3.50	Enjoy the authentic taste of Vi...	29	
	Omachi spicy and sour shrimp cup noodles	\$3.10	Enjoy the delicious taste of O...	193	
	Otto milk cream bread	\$2.00	Experience the irresistible tas...	96	
	Lays potato flavor snack	\$1.30	Experience the perfect blend ...	98	
	7Up	\$2.20	Discover our refreshing range ...	210	
	Coca cola	\$2.10	Discover our refreshing range ...	99	
	Steak flavored swing snack	\$1.20	Experience the perfect blend ...	90	

- Admin can add news, delete and edit added news

DailyStore

- [Home](#)
- [Item Browse](#)
- [News](#)
- [Item Management](#)
- [News Management](#)
- [Promotes Manage](#)
- [Ordered Items](#)
- [Show Orders](#)
- [Role Assign](#)
- [Cart](#)
- [Wishlist](#)
- [Payment Info](#)
- [Shipping Info](#)
- [thao](#)

Search News

ADD NEWS



How Convenience Stores Are Evolving with Modern Needs

Created at: 12/15/2024 1:03 PM - by thao



Top Snacks to Grab at Your Local Convenience Store

Created at: 12/15/2024 1:03 PM - by thao



- Admin can add advertising posters, choose which posters to display on the home page, delete and edit added posters.

DailyStore

- [Home](#)
- [Item Browse](#)
- [News](#)
- [Item Management](#)
- [News Management](#)
- [Promotes Manage](#)
- [Ordered Items](#)
- [Show Orders](#)
- [Role Assign](#)
- [Cart](#)
- [Wishlist](#)
- [Payment Info](#)
- [Shipping Info](#)
- [thao](#)

Search Promotions

ADD PROMOTION



Active



Active



Active



- Admin can view the status of orders placed by customers.

Item Orders					
Order ID	Total Price	Status	Address	Created At	
1	\$0.00	Delivery Successful	Name: Mai Nguyễn Hoàng, Address: 102B/4, Khu phố 4, PhoneNumber: 0346905448	12/14/2024 3:07 PM	Assigned Shipper: shipperdemo
2	\$0.00	Cancelled	Name: 123123, Address: 224, Quốc lộ 1A, Khu phố 5, PhoneNumber: 0346905448	12/15/2024 3:35 AM	Not Assigned
3	\$0.00	Shipper Assigned	Name: thao, Address: 1234, PhoneNumber: 123465778900	12/15/2024 5:55 AM	Assigned Shipper: shipperidea
4	\$0.00	Delivery Successful	Name: idea, Address: 123 gerta , PhoneNumber: 123456789	12/15/2024 9:08 AM	Assigned Shipper: shipperdemo
5	\$9.30	Cancelled	Name: 123123, Address: 224, Quốc lộ 1A, Khu phố 5, PhoneNumber: 0346905448	12/15/2024 1:23 PM	Not Assigned
6	\$14.70	Pending	Name: Receiver Name Here, Address: Customer Address, PhoneNumber: 0123456789	12/15/2024 2:41 PM	Not Assigned
7	\$29.40	Pending	Name: Thao, Address: 123/123, PhoneNumber: 012345677	12/15/2024 3:33 PM	Not Assigned

Rows per page: 10 | 1-7 of 7 | < > >>

- Admin can assign roles to users. For example, if someone wants to be a shipper, the admin will assign them shipper rights and every time they log in, they will enter the web as a shipper.

Role Management		
New Role Name	Actions	
CREATE ROLE		
Role Name	Actions	
Shipper		
User		

User Roles		
Username	Roles	Actions
hoenmike	Admin	CLEAR ROLES
shipperdemo	Shipper	CLEAR ROLES
thao	Admin	CLEAR ROLES
root123	Admin	CLEAR ROLES
shipperthao	Shipper	CLEAR ROLES
shipperidea	Shipper	CLEAR ROLES

5. Shipper Role

- Shippers can view Pending and Cancelled items
- Can take customer orders for delivery

Item Orders					
Order ID	Total Price	Status	Address	Created At	
2	\$0.00	Cancelled	Name: 123123, Address: 224, Quốc lộ 1A, Khu phố 5, PhoneNumber: 0346905448	12/15/2024 3:35 AM	ACCEPT ORDER
5	\$9.30	Cancelled	Name: 123123, Address: 224, Quốc lộ 1A, Khu phố 5, PhoneNumber: 0346905448	12/15/2024 1:23 PM	ACCEPT ORDER
6	\$14.70	Pending	Name: Receiver Name Here, Address: Customer Address, PhoneNumber: 0123456789	12/15/2024 2:41 PM	ACCEPT ORDER
7	\$29.40	Pending	Name: Thao, Address: 123/123, PhoneNumber: 012345677	12/15/2024 3:33 PM	ACCEPT ORDER

Rows per page: 10 | 1-4 of 4 | < > >>

- Taken orders will be pushed into the Shipper Dashboard to manage its status

DailyStore

Assigned Orders

Order ID	Total Price	Status	Information	Assigned At
1	\$0.00	Delivery Successful	Name: Mai Nguyễn Hoàng, Address: 102B/4, Khu phố 4, Phone Number: 0346905448	12/14/2024 3:18 PM
4	\$0.00	Delivery Successful	Name: idea, Address: 123 gerta , Phone Number: 123456789	12/15/2024 2:46 PM
7	\$29.40	Shipper Assigned	Name: Thao, Address: 123/123, Phone Number: 012345677	12/15/2024 4:06 PM

Rows per page: 10 | < | > | 1-3 of 3 |

- Shipper can set the status of the order to Delivering, Successful

DailyStore

Assigned Orders

Order ID	Total Price	Status	Information	Assigned At
1	\$0.00	Delivery Successful	Name: Mai Nguyễn Hoàng, Address: 102B/4, Khu phố 4, Phone Number: 0346905448	12/14/2024 3:18 PM
4	\$0.00	Delivery Successful	Name: idea, Address: 123 gerta , Phone Number: 123456789	12/15/2024 2:46 PM
7	\$29.40	Shipper Assigned	Name: Thao, Address: 123/123, Phone Number: 012345677	12/15/2024 4:06 PM

Rows per page: 10 | < | > | 1-3 of 3 |

Confirm Status Update

Are you sure you want to set the order status to 'On Delivery'?

AGREE **CANCEL**

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dailystore@gmail.com
WRF5+8JV, Biên Hòa, Đồng Nai

Gallery

Assigned Orders

Order ID	Total Price	Status	Information	Assigned At
1	\$0.00	On Delivery	Name: Mai Nguyễn Hoàng, Address: 102B/4, Khu phố 4, Phone Number: 0346905448	12/14/2024 3:18 PM
4	\$0.00	Delivery Successful	Name: idea, Address: 123 gerta , Phone Number: 123456789	12/15/2024 2:46 PM
7	\$29.40	Shipper Assigned	Name: Thao, Address: 123/123, Phone Number: 012345677	12/15/2024 4:06 PM

Rows per page: 10 | < | > | 1-3 of 3 |

Order status updated successfully

DailyStore

Assigned Orders

Order ID	Total Price	Status	Information	Assigned At
1	\$0.00	On Delivery	Name: Mai Nguyễn Hoàng, Address: 102B/4, Khu phố 4, PhoneNumber: 0346905448	12/14/2024 3:18 PM
4	\$0.00	Delivery Successful	Name: Idea, Address: 123 gerta , PhoneNumber: 123456789	12/15/2024 2:46 PM
7	\$29.40	Shipper Assigned	Name: Thao, Address: 123/123, PhoneNumber: 012345677	12/15/2024 4:06 PM

Rows per page: 10 | < > | 1-3 of 3

Confirm Status Update

Are you sure you want to set the order status to 'Delivery Successful'?

AGREE **CANCEL**

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Gallery

Assigned Orders

Order ID	Total Price	Status	Information	Assigned At
1	\$0.00	Delivery Successful	Name: Mai Nguyễn Hoàng, Address: 102B/4, Khu phố 4, PhoneNumber: 0346905448	12/14/2024 3:18 PM
4	\$0.00	Delivery Successful	Name: Idea, Address: 123 gerta , PhoneNumber: 123456789	12/15/2024 2:46 PM
7	\$29.40	Shipper Assigned	Name: Thao, Address: 123/123, PhoneNumber: 012345677	12/15/2024 4:06 PM

Rows per page: 10 | < > | 1-3 of 3

Order status updated successfully

- Shipper can cancel the order and remove it from their assigned orders table

DailyStore

Assigned Orders

Order ID	Total Price	Status	Information	Assigned At
1	\$0.00	Delivery Successful	Name: Mai Nguyễn Hoàng, Address: 102B/4, Khu phố 4, PhoneNumber: 0346905448	12/14/2024 3:18 PM
4	\$0.00	Delivery Successful	Name: Idea, Address: 123 gerta , PhoneNumber: 123456789	12/15/2024 2:46 PM
7	\$29.40	Shipper Assigned	Name: Thao, Address: 123/123, PhoneNumber: 012345677	12/15/2024 4:06 PM

Rows per page: 10 | < > | 1-3 of 3

Cancel Order

Are you sure you want to cancel this order?

AGREE **CANCEL**

DailyStore
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Gallery

Assigned Orders

Order ID	Total Price	Status	Information	Assigned At
1	\$0.00	Delivery Successful	Name: Mai Nguyễn Hoàng, Address: 102B/4, Khu phố 4, PhoneNumber: 0346905448	12/14/2024 3:18 PM
4	\$0.00	Delivery Successful	Name: Idea, Address: 123 gerta , PhoneNumber: 123456789	12/15/2024 2:46 PM

Rows per page: 10 | < > | 1-2 of 2

Order cancelled successfully

- Cancelled items will be sent back to the Item Orders table for another shipper to delivery.

Item Orders				Created At	
Order ID	Total Price	Status	Address	Created At	
2	\$0.00	Cancelled	Name: 123123, Address: 224, Quốc lộ 1A, Khu phố 5, Phone Number: 0346905448	12/15/2024 3:35 AM	<button>ACCEPT ORDER</button>
5	\$9.30	Cancelled	Name: 123123, Address: 224, Quốc lộ 1A, Khu phố 5, Phone Number: 0346905448	12/15/2024 1:23 PM	<button>ACCEPT ORDER</button>
6	\$14.70	Pending	Name: Receiver Name Here, Address: Customer Address, Phone Number: 0123456789	12/15/2024 2:41 PM	<button>ACCEPT ORDER</button>
7	\$29.40	Cancelled	Name: Thao, Address: 123/123, Phone Number: 012345677	12/15/2024 3:33 PM	<button>ACCEPT ORDER</button>

Rows per page: 10 < > 1-4 of 4

IV. DISCUSSION

The Daily Store online retail website represents a comprehensive solution to modern e-commerce challenges, addressing the growing need for convenient, user-friendly online shopping experiences. Throughout the development process, our team encountered and successfully navigated several key challenges:

Technical Implementation

The project leveraged a robust technology stack, including .NET framework, C#, Azure SQL Database, and MudBlazor, which provided a solid foundation for building a scalable and responsive web application. The Model-View-Controller (MVC) architecture ensured a clean separation of concerns, facilitating easier maintenance and future enhancements.

Functional Achievements

We successfully implemented a wide range of functionalities that cater to different user roles:

- For customers: Comprehensive product browsing, wishlist management, checkout, and order review systems
- For administrators: Detailed store management capabilities, including item, news, and promotion management
- For shipping personnel: Order tracking and delivery status update mechanisms

Security and Access Control

A critical aspect of the project was the implementation of role-based access control. Utilizing .NET's `<AuthorizeView>` component, we created a secure environment where different user roles (Admin, Shipper, Regular User) have access to only their designated functionalities.

Challenges and Learnings

During the development process, we encountered several challenges:

- Learn to use MudBlazor components, hosting database and web service with Azure
- Implementing a seamless user authentication system
- Creating an intuitive and responsive user interface

- Ensuring data integrity across various database interactions

The Daily Store project successfully demonstrates a modern approach to online retail, combining technological innovation with user-centric design. By focusing on ease of use, comprehensive functionality, and secure access control, we have created a platform that addresses the evolving needs of online shoppers and store managers.

Key Achievements

- Developed a fully functional online retail website with multi-role support
- Implemented secure authentication and authorization mechanisms
- Created an intuitive and responsive user interface
- Established a scalable architecture using .NET and Azure technologies

Future Recommendations

To further improve the Daily Store platform, future iterations could consider:

- Implementing advanced recommendation algorithms
- Integrating more sophisticated payment gateways
- Enhancing mobile responsiveness
- Adding more advanced analytics for store management

Final Thoughts

This project not only fulfilled the Web Application Development course requirements but also provided practical insights into modern web development techniques, database management, and user experience design. It is a testament to the team's technical skills and innovative approach to solving real-world e-commerce challenges.

V. CONCLUSION

The Daily Store project successfully demonstrates a modern approach to online retail, combining technological innovation with user-centric design. By focusing on ease of use, comprehensive functionality, and secure access control, we have created a platform that addresses the evolving needs of online shoppers and store managers.

Key Achievements

- Developed a fully functional online retail website with multi-role support
- Implemented secure authentication and authorization mechanisms
- Created an intuitive and responsive user interface
- Established a scalable architecture using .NET and Azure technologies

Future Recommendations

To further improve the Daily Store platform, future iterations could consider:

- Implementing advanced recommendation algorithms
- Integrating more sophisticated payment gateways
- Enhancing mobile responsiveness
- Adding more advanced analytics for store management

VI. REFERENCE

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4. Authentication and authorization in Azure App Service:
<https://learn.microsoft.com/en-us/azure/app-service/overview-authentication-authorization>
5. Website design inspiration from Shopee [<https://shopee.vn/>], Lazada [<https://www.lazada.vn>], and Steam [<https://store.steampowered.com/>]