



MINISTRY OF EDUCATION AND TRAINING

TRƯỜNG ĐẠI HỌC FPT

FPT UNIVERSITY

Capstone Project Document

Eatery Management Systems

G11	
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Capstone Project code	EMS

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Definition and Acronyms

Acronym	Definition
PWM	Psychology website
AWS	Amazon Web Services
BA	Business Analysis
BR	Business Rule
ERD	Entity Relationship Diagram
GUI	Graphical User Interface
PM	Project Manager
SDD	Software Design Description
SPMP	Software Project Management Plan
SRS	Software Requirement Specification
UAT	User Acceptance Test
UC	Use Case
API	Application Program Interface

I. Project Introduction

1. Overview

1.1 Project Information

- Project name: **Eatery Management Systems**
- Vietnamese name: **Hệ thống quản lý quán ăn**
- Project code: **EMS**
- Group name: **SEP490-G11**
- Software type: **Web application**

1.2 Project Team

Full Name	Role	Email	Mobile
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Table 1.2: Team Member Information

2. Product Background

In the dynamic and fast-paced world of the food service industry, managing an eatery efficiently is crucial for success. G11 Groups introduced our cutting-edge solution, the Eatery Management System (EMS), a software designed to streamline and enhance every aspect of restaurant operations. With a focus on user-friendly interfaces and robust functionalities. Tailored to meet the specific needs of Eatery Owner, Managers, Staff, Customers, the EMS offers a comprehensive suite of features aimed at optimising eatery management.

3. Existing Solutions

3.1 Sapo FnB

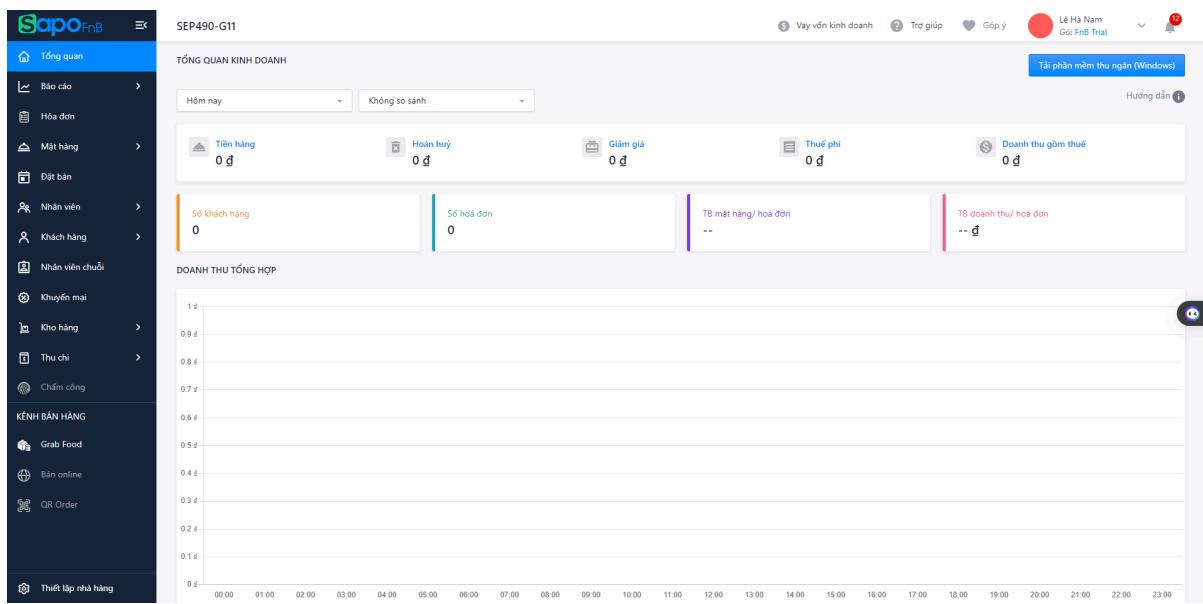


Figure 3.1: Sapo website (Link: <https://fnb.mysapo.vn/>)

The F&B Management System at fnb.mysapo.vn serves as a comprehensive solution for managing sales in the Food and Beverage industry. The system aims to streamline and optimise various aspects of sales operations, catering to businesses ranging from cafes and restaurants to larger establishments.

3.1.1 The system actors:

- **Eatery owner**
- **Managers**
- **Staff**
- **Customers**
- **Waiter**

3.1.2 Sapo FnB has the following modules:

1. Admin Module:

-User Management:

+Create, modify, and deactivate user accounts.

+Assign roles and permissions based on job responsibilities.

-Configuration:

+Customise system settings, including tax rates, currencies, and business information.

2. Manager Module:

-Menu's product Management:

+Add, edit, remove menu items

+Set prices, manage availability, and categorise products.

-Sales Monitoring:

+Access real-time sales data and generate reports.

+Monitor performance metrics, best-selling items, and trends.

-Staff Management:

+Create and manage staff schedules.

+Evaluate staff performance and track attendance.

3. Staff Module:

-Order Processing:

+Receive and process customer orders.

+Update order status, communicate with the kitchen, and manage table assignments.

-Inventory Management:

+Track stock levels and receive alerts for low inventory.

+Manage supplier information and streamline procurement.

4. Customer Module:

-Online Ordering:

+Browse the menu, customise orders, and place them online.

+View order history and save preferences for future orders.

-Order Tracking:

+Monitor the real-time status of their orders.

+Receive notifications for order updates and estimated delivery times.

5. Waiter Module:

+Engaged in order processing, customer service, table service.

3.1.3 Advantages:

-Operational Efficiency: Streamlines sales operations, reducing manual errors and optimising processes.

-Data-Driven Decision Making: Managers gain valuable insights from sales data to make informed business decisions.

-Improved Customer Experience: Enables online ordering, order tracking, and personalised customer service.

-Real-time Monitoring and Reporting

3.1.4 Disadvantages:

- Scalability Concerns:

+Potential Performance Issues: As the business grows, there may be concerns related to system scalability and performance.

+Hardware Upgrades: Increasing demands may require hardware upgrades, adding to the overall cost.

- Cost Implications:

+Initial Investment: Implementing and customising the system may involve significant upfront costs.

+Maintenance Expenses: Regular updates and maintenance might contribute to ongoing expenses.

- Potential Security Risks:

+Data Security: The system's reliance on user accounts and online features may pose security risks if not adequately protected.

+External Integration Risks: Integrating with external systems may expose the system to potential security vulnerabilities.

3.1.5 Conclusion:

The F&B Management System at fnb.mysapo.vn demonstrates a robust platform tailored for the dynamic needs of the food service industry. The comprehensive modules cater to each actor, ensuring an integrated and efficient workflow. Continuous monitoring, user feedback, and adaptation to industry trends will contribute to the system's ongoing success and relevance in the market.



Figure 3.1.1: Illustrative photo of actual survey

3.2 KiotViet

The screenshot of the KiotViet website shows the following sections:

- KẾT QUẢ BÁN HÀNG HÔM NAY:**
 - 0 đơn đã xong (0 ↑ 100% Hôm qua 0)
 - 0 đơn đang phục vụ (0 ↑ 0% Hôm qua 0)
 - Khách hàng (0 ↑ 0% Hôm qua 0)
- DOANH SỐ HÔM NAY:** (Theo ngày, Theo giờ, Theo thứ) - Không có dữ liệu
- SỐ LƯỢNG KHÁCH HÔM NAY:** (Hôm nay) - Không có dữ liệu
- CÁC HOẠT ĐỘNG GẦN ĐÂY:**
 - Hương - Kế Toán vừa bán đơn giao hàng với giá trị 42.000 6 days ago
 - Chu Tuấn Dũng vừa bán đơn hàng với giá trị 780.000 6 days ago
 - Hương - Kế Toán vừa bán đơn hàng với giá trị 3.897.000 6 days ago
 - Chu Tuấn Dũng vừa nhập hàng với giá trị 568.000 7 days ago
 - Hương - Kế Toán vừa nhập hàng với giá trị 3.545.500 7 days ago
 - Hương - Kế Toán vừa nhập hàng với giá trị 35.000 7 days ago
 - Chu Tuấn Dũng vừa bán đơn giao hàng với giá trị 125.000 7 days ago

Figure 3.2: KiotViet website (Link: <https://www.kiotviet.vn/>)

Kiotviet is a sales management software commonly used in Vietnamese businesses. This Kiotviet software has the ability to help businesses manage a simple sales process without losing too much cost.

The system actors:

- Admin

- Staff (Accounten ,Employee)
- Partner (Customer,Supplier,Delivery Partner)

KiotViet has the following modules:

- Overview
 - Commodity management
 - Room/Table management
 - Transaction management
 - View partner
 - Staff Management
 - Fund management
 - View statistical
- Advantage:
- + Revenue management is extremely simple.
 - + Improve sales performance.
 - + Employees will be managed in the most professional way.
 - + Minimize loss of goods in the warehouse.
- Disadvantage:
- +Depends on the internet.
 - +Limited interactivity.
 - +Cost.

4. Business Opportunity

4.1 Market Expansion:

-Targeting Diverse Businesses: Identify opportunities to tailor the system for various types of eatery, including cafes, mid-range eatery, and quick-service establishments.

4.2 Enhanced User Experience:

-Customer Engagement Features: Introduce additional customer engagement features within the Customer module, such as order with QR at the table in the eatery.

-Intuitive Interfaces: Continuously improve user interfaces for all roles, ensuring a seamless and user-friendly experience.

4.3 Integration with Emerging Technologies::

-The EMS interface enables staff to execute transactions quickly and accurately, reducing wait times for customers ,efficient and secure payment processing..

4.4 Analysis of Sales and Trends:

-EMS systems provide detailed reports on sales performance, helping you understand customer shopping trends and adjust business strategies accordingly.

4.5 Contactless Ordering and Payment:

-Enhance the EMS interface to support contactless ordering through QR codes, reducing physical contact and enhancing safety.

4.6 Sustainability Initiatives:

-Green Practices and Waste Reduction:

+Introduce features that promote sustainability, such as digitised menus to reduce paper usage.

5. Software Product Vision

In the ever-evolving landscape of the culinary industry, the Eatery Management System (EMS) is envisioned as a transformative solution designed to empower eatery, particularly medium- and small-sized establishments, to thrive in a competitive market. Our EMS aims to revolutionise the way eatery operate, delivering a seamless and intelligent platform that enhances every facet of their business.

6 Project Scope & Limitations:

6.1 Major Features:

6.1.1 Common

FE-1: Login.

FE-2: Logout.

FE-3: Change Password.

6.1.2 Staff

- Cashier:

FE-1: Manage bill:Search & Filter Order,View list bill ,View detail bill

FE-2: View transaction: view transaction ,view detail transaction

-Chef:

FE-1:View list order dish,View list finished dish,Update status order dish

-Waiter:

FE-1:Manage Order:Create order,Edit order,Confirm order,View Menu, Filter Dish,Search Dish,View lish order,View waiting dishes,Filter dish,Search dish,View delivery dish, View waiting dish list,View served dish list,View menu,View Finish Dish List

FE-2:Mange Cart:Add to cart,View cart

FE-4:View list table,Filter table by status

FE-5:Confirm bill

FE-6:Receive Support Notification

6.1.3 Eatery Owner

FE-1: View Dashboard: The dashboard provides a comprehensive view of real-time data across various aspects of the restaurant's operation.

FE-2: Manage Product: View List Product,View Product Details,Create Product,Edit Product,Delete Product,Search Product, Change Status Product

FE-3:Manage Category:View List Category,View Category Detail,Create Category>Edit Category,Delete Category,Search Category, Change Status Category

FE-4: Report Statistic: View report Revenue of eatery

FE-5:Manage Transactions:View Transactions,View Detail Transactions,View List Bill,View Detail Bill

FE-6: Manage Table: View List Table, Create Table, Edit Table,Delete Table

6.1.4 Customer

FE-1: View menu, search/filter menu,

FE-2:Manage Order: Create order, update order, view orders (filter by status).

FE-2: Contact: Call staff.

6.1.5 Manager

FE-1: Manage Product: View Display List Product ,Create Product,Update Product,Delete Product, View product information(filter,detail,search)

FE-2:Manage Category:View List Category,View Category Detail,Create Category>Edit Category,Delete Category,Search Category, Change Status Category

FE-3: Manage Account:

- Staff:
- + View List User, View Detail User, Create User, Delete User
- + View staff information(filter), create staff, update staff information, change staff status.

FE-4: Manage Transactions: View Transactions, View Detail Transactions, View List Bill, View Detail Bill

FE-5: Manage table: View table information(filter, detail, search), update table information, delete table.

FE-6: Manage menu: Update, view menu information, Search/Filter, Change the status of dishes

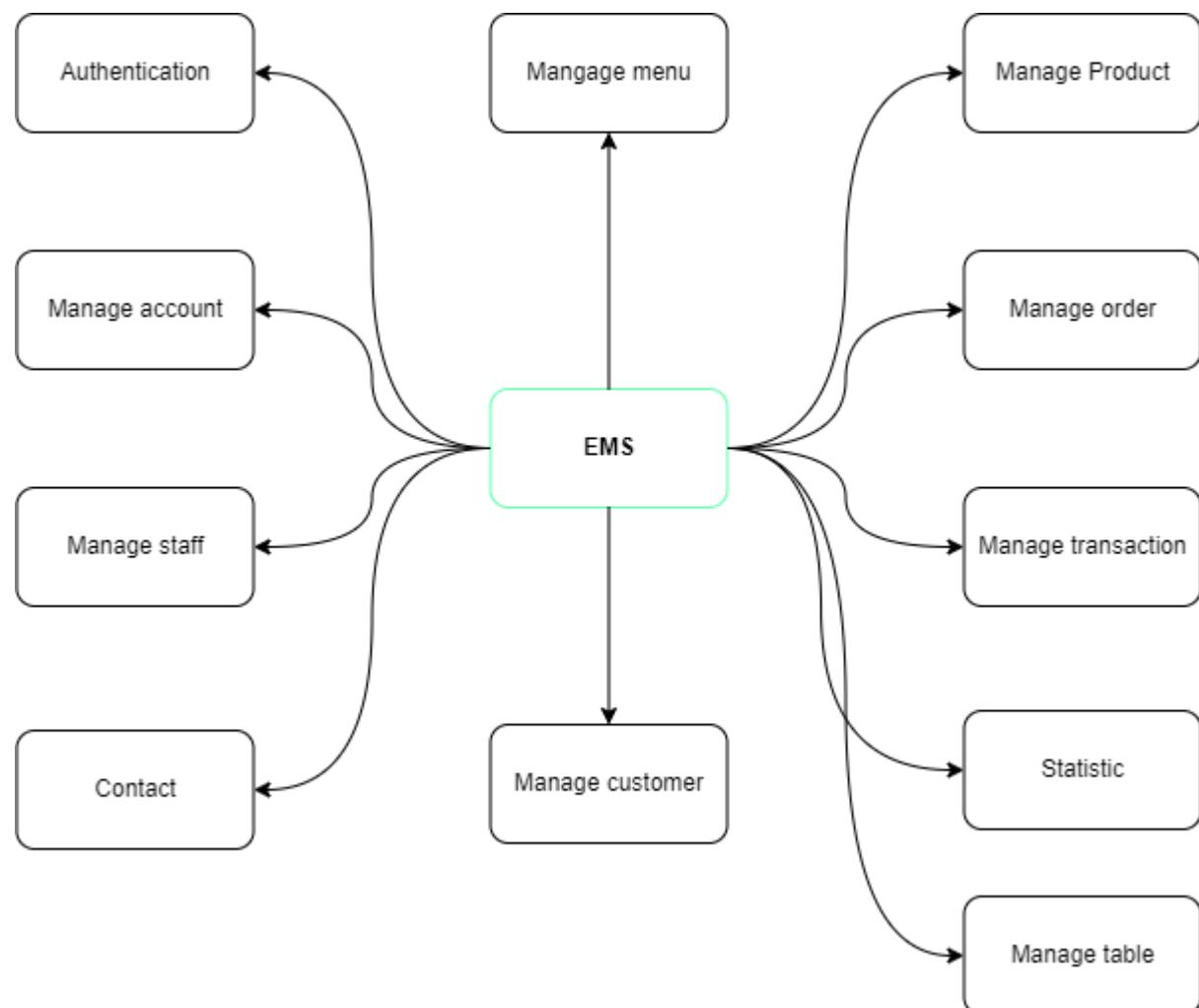


Figure 6.1. Major features

6.2 Out of Scope:

- +) Cash book management
- +) Timekeeping
- +) Warehouse report
- +) Membership card
- +) Payroll
- +) Commission
- +) Customer management
- +) Promotion
- +) Exchange gifts
- +) Report revenue after shift

6.3 Limitations:

-While the EMS aims to be a comprehensive solution for eatery management, there are certain aspects that fall outside the defined scope:

LH-1: Advanced Financial Management

-The RMS focuses on basic financial aspects related to sales. Advanced financial features, such as detailed accounting and budgeting, are beyond the current scope.

LH-2: Customer Relationship Management (CRM)

-CRM functionalities, including detailed customer profiles, targeted marketing, and loyalty programs, are considered out of scope for the initial version of the EMS.

- The EMS only supports Vietnamese

LH-3: External Integrations:

Integrations with third-party services or external systems (other than payment gateways) are not within the current scope.

LH-4: Mobile App Development:

-While the EMS may have a web-based interface, the development of dedicated mobile applications for iOS or Android platforms is not included in the current scope.

LH-5: Supplier of food:

-It is impossible to check whether a supplier meets business standards because it can only be done through direct inspection of that supplier.

II. Project Management Plan

1. Overview

#	WBS Item	Complexity	Est. Effort (man-days)
1	Specification		73
1	Project Planning	Medium	3
2	Deliver Report 2 - Project Management Plan	Simple	20
3	Deliver Report 3 - System Requirement Specification	Complex	20
4	Deliver Report 5 - Test Documentation	Complex	10
5	Deliver Report 6 - Software User Guides	Medium	10
6	Deliver Report 7 - Final Project Report	Medium	10
2	Design		30
1	Design User Interfaces (UI) prototypes	Medium	10
2	Deliver Report 4 - Software Design Document	Complex	20
3	Training		14
1	Learn backend, frontend, and framework	Medium	14
4	Implement code		341
4.1	Common Functions		11
1	Login	Medium	6
2	Logout	Simple	2
3	Change password	Simple	3
4.2	Eatery Owner		114
1	View dashboard	Complex	15
2	View list table	Simple	5
3	Create table	Medium	6
4	Edit table	Medium	6
5	Delete table	Simple	2
6	View list category	Simple	3
7	View category detail	Medium	5

8	Create category	Medium	6
9	Edit category	Medium	5
10	Delete category	Simple	3
11	Search category	Simple	2
13	Change status category	Medium	4
14	View list product	Medium	6
15	View product details	Medium	6
16	Create product	Medium	6
17	Edit product	Medium	5
18	Delete product	Simple	3
19	Search product	Simple	2
20	Change status product	Medium	4
21	View list bill	Medium	4
22	View detail bill	Medium	5
23	View transaction	Medium	6
24	View detail transaction	Medium	5
4.3	Waiter		76
1	View list table	Medium	5
2	Filter table	Medium	6
3	Create order	Medium	20
4	View menu	Simple	3
5	Filter dish	Simple	3
6	Search dish	Simple	1
7	View cart	Medium	5
8	View list table	Medium	5
9	Edit order	Medium	10
10	View waiting Dish	Simple	3
11	View delivery Dish	Simple	3
12	View waiting dish list	Simple	2

13	View serve dish list	Simple	3
14	View finish dish list	Simple	2
15	Confirm bill	Medium	5
4.4	Chef		16
1	View list order dish	Medium	5
2	View list finish dish	Medium	5
3	Update status order dish	Medium	6
4.5	Cashier		28
1	View list bill	Simple	3
2	View detail bill	Medium	4
3	Filter bill	Medium	4
4	Export Invoice	Medium	10
5	View transaction	Medium	4
6	View detail transaction	Simple	3
4.6	Manager		96
1	View list user	Simple	3
2	View detail user	Medium	4
3	Create user	Medium	5
4	Delete user	Simple	3
5	Edit user	Medium	5
6	View list category	Simple	3
7	Create category	Medium	5
8	Edit category	Medium	4
9	Delete category	Simple	2
10	Search category	Simple	2
11	Change status category	Medium	4
12	View list product	Simple	3
13	View product details	Medium	4
14	Create product	Medium	6

15	Edit product	Medium	6
16	Delete product	Medium	5
17	Search product	Simple	2
18	Change status product	Medium	5
19	View list bill	Simple	3
20	View detail bill	Medium	4
21	View Detail Transactions	Medium	4
22	View list table	Simple	3
23	Create table	Medium	5
24	Edit table	Medium	4
25	Delete table	Simple	2
4.7	Customer		36
1	View menu	Simple	3
2	Search dish	Simple	2
3	Filter menu	Medium	4
4	Order dish	Medium	10
5	Edit order	Medium	10
6	View cart	Simple	3
7	View history order	Medium	4

Total Estimated Effort (man-days) 458

One man-days 5h

Allocated Effort (man-days): 458(6 member * 5 workday/week * 15 weeks).

1.2 Project Objectives

1.2.1 Quality

#	Testing Stage	No. of Defects	Notes
1	Reviewing	60	
2	Unit Test	20	Identify and fix bugs or issues early in the development process
3	Integration Test	60	Ensuring that different parts of a software system work seamlessly together
4	System Test	10	Ensure the overall quality, reliability, and performance of the software system before it is deployed for actual use.

5	Acceptance Test	0	Confirm that the software meets the specified requirements and is suitable for production use.
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1.2.2 Project Objectives

- Project will be completed on time
- Complete with allocated effort (458 man-days)

1.2.3 Team Objectives

- The team finishes the project before April 17th, 2024.
- All team members will follow the task assigned.
- Team members improve their skills working in a group.
- Each member improves both technical skills and soft skills.
- Team successfully applied a software development process.

1.3 Project Risks

#	Risk Description	Impact	Possibility	Response Plans
1	Lack of skill & technology knowledge.	Medium	Medium	Training members quickly to keep up with the project progress
2	Misinterpreting the requirement leads to the project going in the wrong direction	High	Medium	Work together with the requirement team immediately and check back to make sure the requirement is correct
3	Members do not attend meetings or come in late	Medium	Medium	Record the meeting minutes in text and hand over the work to another member, inform about meeting information to the member, and provide rules and penalties for violations
4	Hard to understand business requirements	High	High	Learn more about how a restaurant management systems Find ways to solve possible problems from the website as well as customers
5	Extended time to define functional requirements.	High	Medium	Focus on fixing bugs from the previous phase and will continue to develop new functionality once the requirements are clearly defined.

2. Management Approach

2.1 Project Process

We have chosen to develop this project by using the Iterative and Incremental model. This system will be developed and continuously in the circle model

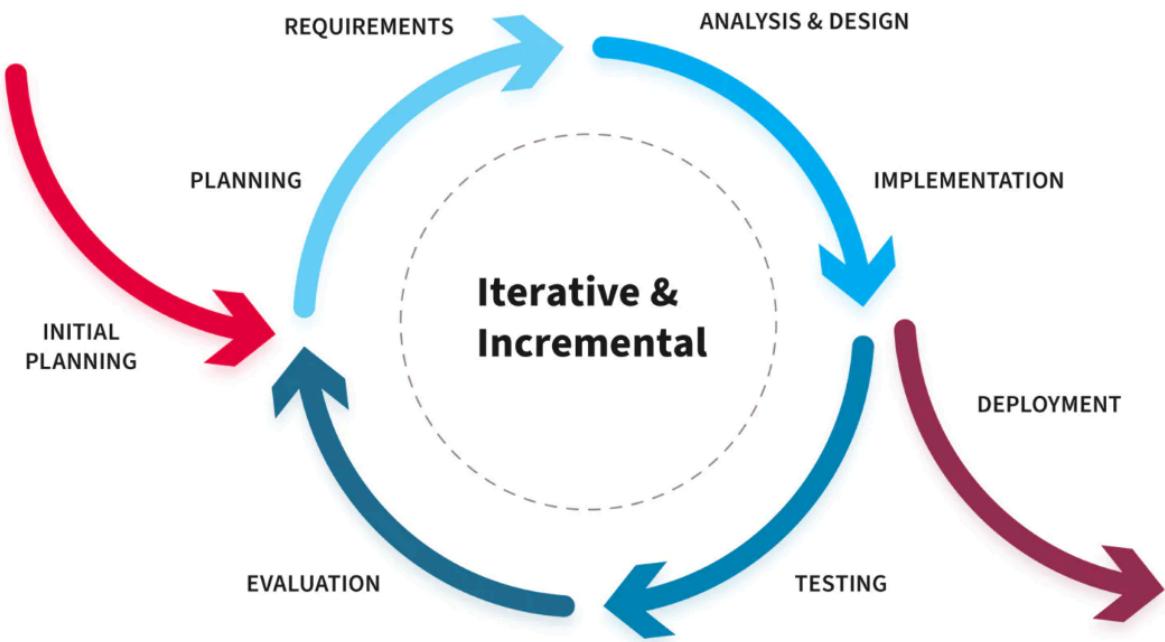


Figure 2.1. Iterative & Incremental Models

We selected this approach due to the reasons listed below:

- This application has many features for users and may take a while to develop. By using this approach, we can prioritise and deliver the most important features first, followed by the remaining ones.
- By testing and reviewing functions early on, any necessary fixes or upgrades can be made, resulting in an improvement in the overall quality of the system.
- By receiving feedback after each increment of the application, we can prevent unexpected outcomes at the end of the development
- Accommodating easily for any changes in requirements.

Apply Iterative & Incremental Model to project, we provided to 3 loops as follows:

- Iteration 1:
 - Requirement collect & analyse
 - Design and analysis project architecture
 - Implementation
 - Test execution: Unit Test and Integration Test
 - Evaluation
- Iteration 2:

- Requirement analyse
 - Design and analysis project architecture
 - Implementation
 - Test execution: Unit Test and Integration Test
 - Evaluation
- Iteration 3:
- Requirement analyse
 - Design and analysis project architecture
 - Implementation
 - Test execution: Unit Test, Integration Test and System Test
 - Evaluation

2.2 Quality Management

2.2.1 Defect Prevention

- Preventive Measures: Implement preventive measures at the early stages of the project. This includes clear requirements gathering, thorough analysis, and detailed design specifications.
- Continuous Improvement: Adopt a continuous improvement mindset, where lessons learned from past projects are used to improve processes.
- Training and Skill Development: Regular training sessions for the team to ensure everyone is up-to-date with the latest best practices and technologies.
- Coding Standards: Enforce coding standards to ensure consistency and reduce errors.

2.2.2 Reviewing

- Peer Reviews: Conduct peer reviews of code, designs, and documentation. This helps in identifying potential issues early.
- Walkthroughs and Inspections: Regularly schedule walkthroughs and inspections of both the project's progress and its various components.
- Client Feedback: Regularly involve the client or stakeholders in reviews to ensure the project meets their expectations and requirements.

2.2.3 Unit Testing

- Develop unit test suites to test the smallest components of the software, such as functions, modules or classes, and ensure that they work as expected.
- Use unit testing tools to automate the execution of test suites and identify errors automatically.

2.2.4 Integration Testing

- Create integration test scenarios to test the performance of software components when combined and integrated together.
- Testing the interaction and data exchange between different components to ensure system compatibility and integrity.

- Check if components do not conflict or cause errors when combined together.

2.2.5 System Testing

- Testing the functionality and operation of a software system to ensure that it functions properly and meets the stated requirements.
- Evaluates the performance of a software system, including load, response time and resource consumption, to ensure that it operates effectively.
- Testing the security of a software system to ensure that it meets security requirements and is free of security vulnerabilities.

2.3 Training Plan

Training Area	Participants	When, Duration	Waiver Criteria
Java Spring Boot	All members	09/01/2024	Mandatory
MySQL	All members	12/01/2024	Mandatory
Github,Slack	All members	14/1/2024	Mandatory
Angular	Chu Tuân Dũng + Lê Hà Nam + Chu Văn Luân	16/1/2024	Mandatory
Postman	All members	19/1/2024	Mandatory

3. Project Deliverables

#	Deliverable	Due Date	Notes
1	Project Plan	6/01/2024	Make a project goal plan.
2	Report 1 - Project Introduction Document	11/01/2024	Project introduction.
3	Report 2 - Project Management Plan Document	16/01/2024	Project management plan.
4	Report 3 - SRS Document	6/03/2024	Software requirement specification.
5	Report 4 - Software Design Document	29/03/2024	Software design document
6	Report 5 - Software Testing Document	16/04/2024	Test case document, test documentation
7	Report 6 - Release Package and User Guides	15/04/2024	Software user guides
8	Report 7 - Appendix	16/04/2024	Final project final
9	Final package	17/04/2024	Final Codes & documents, User manual

4. Responsibility Assignments

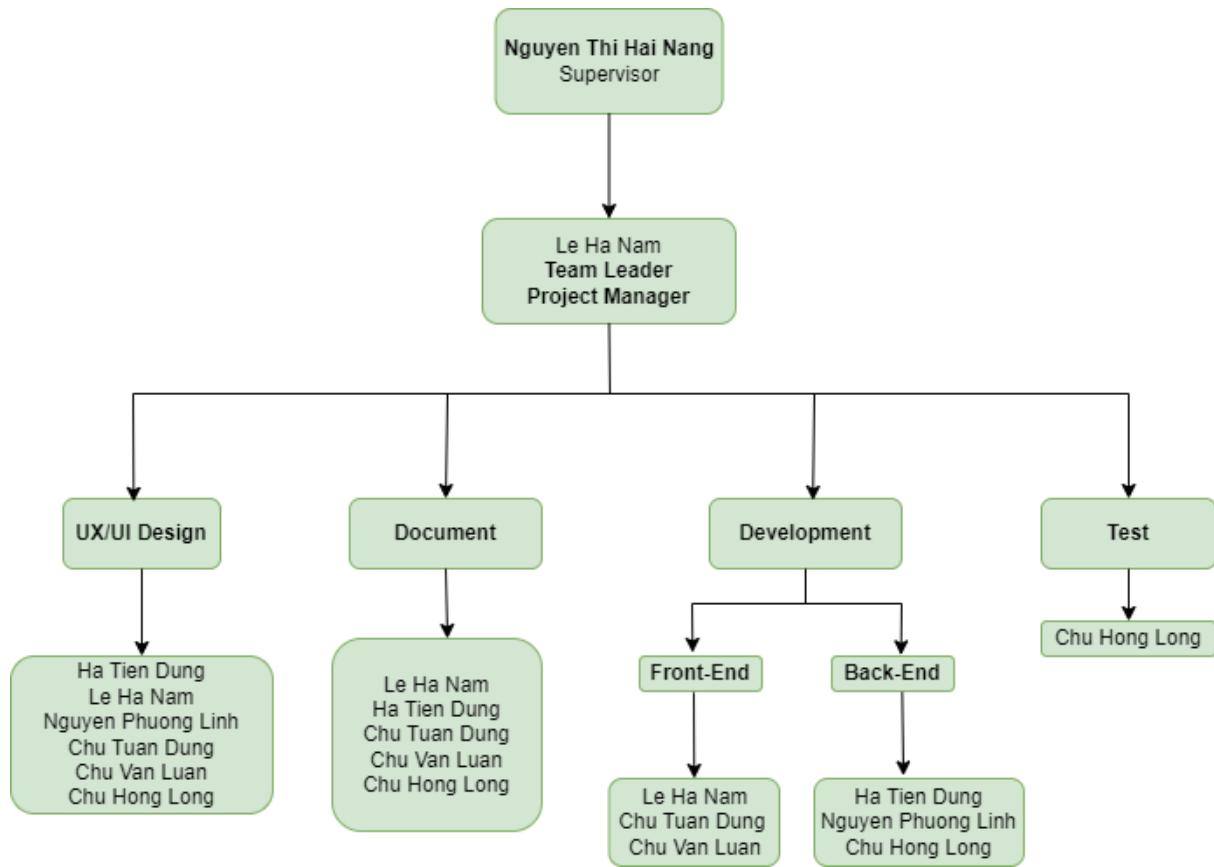


Figure 4.1. Team & Structures Diagram

D~Do; R~Review; S~Support; I~Informed; <blank>- Omitted

Responsibility	Project Manager	Business Analyst	Designer	Developer	Tester
Start Project	D	I	I	I	I
Prepare Project Introduction Document	R	D	D	D	D
Project Planning & Tracking	D	D	S	S	S
Prepare SRS Document	R	D	S	S	S
Prepare Software Design Document	R	D	S	S	S
Implement Features	D	D	D	D	D
Testing	I	S	S	S	D

Maintenance	S	S	D	D	S
Prepare Users Guides	R	D	D	D	D
Prepare Thesis Presentation	D	D	D	D	D
Prepare Final Project	D	D	D	D	D

5. Project Communications

Communication Item	Who/ Target	Purpose	When, Frequency	Type, Tool, Method(s)
Weekly Meeting With Supervisor	All team members and Supervisor	Review members' work achievements. Report the project's progress and the status of each member's work.	Once a week	Offline, Online (Google Meet)
Team daily meeting	All team members	Report the project's progress and the status of each member's work each day.	Everyday	Slack, Messenger, Google Meet
Team daily working	All team members	Work and communicate issues.	Everyday	Slack, Messenger, Google Meet, Zalo
Unscheduled Meeting	All team members	Discuss and solve the urgent problem	When there are urgent problems	Google Meet

6. Configuration Management

6.1 Document Management

6.1.1 Documentation tools

- Google Docs: Report documents, User guides.
- Google Sheets: QA documents, Weekly reports, Project Tracking.
- Microsoft Office (Word, Powerpoint)

6.1.2 Document Conventions

- Each report has code starting with SEP490_G11
- Font family : Calibri

6.1.3 Document Version

- All documents will be stored on Google Drive and Microsoft OneDrive.
- All reports will be delivered to the supervisor through Drive.

After the meeting between all members and supervisor describing requirements, all documents will be created and submitted to management tools to store and to keep track of changes. Leader then creates tasks through Slack. The member will then edit documents if necessary then the Leader will collect documents to submit to the supervisor.

6.2 Source Code Management

- Source code will be stored and maintained by members on Github.
- Each function in the function list will be coded in a separate branch.
- Each commit to the branch will have to follow specific rules.
- A code review will be executed before merging code from function branch to main branch.
- Technical leader is the person who will review and merge code of team members

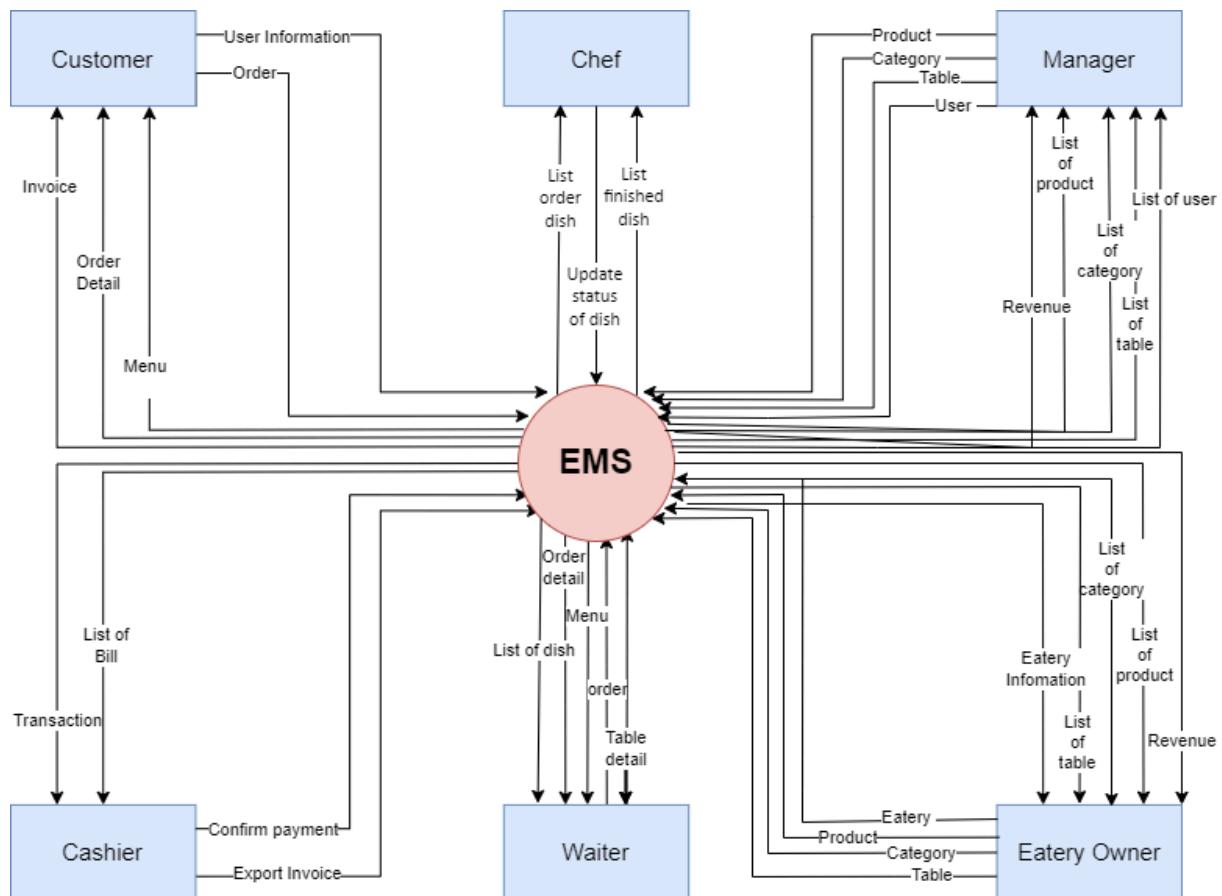
6.3 Tools & Infrastructures

Category	Tools / Infrastructure
Technology	Java/SpringBoot (BackEnd),Angular(FrontEnd)
Database	MySQL
IDEs/Editors	Visual Studio Code, IntelliJ IDEA
Diagramming	StarUML, DrawIO
Documentation	Ms Office, Google Docs/Sheets/Slides
Version Control	GitHub (Source Codes), Google Drive (Documents)
Deployment server	Amazon Web Service (AWS)
Communication tools	Facebook - Messenger, Google Meet, Zalo, Slack
Project management	Word, Excel

III. Software Requirement Specification

1. Overall Requirements

1.1 Context Diagram



Eatery Management System (EMS) is designed to computerise the food ordering process of eatery by automating and integrating various business processes. This system aims to enhance operational efficiency, improve customer service, and facilitate effective management across different functions of the eatery.

The primary objective of the EMS is to provide a comprehensive solution that addresses the needs of various stakeholders including staff, customers, management. The system will offer features for order management, transaction handling, product management, account management, and reporting.

1.2 User Requirements

1.2.1 Actors

#	Actor	Description
1	Eatery owner	The Eatery owner will oversee the entire system. In addition to having similar rights as a manager, they also possess various privileges such as reviewing revenue reports.
2	Manager	Responsible for daily operations of the restaurant. Manage store products, manage categories, manage orders, , manage user roles,check menus, manage tables, manage accounts.
3	Customer	Customers are one of the main actors in the restaurant management system. They are the users of the restaurant's services and products, playing an important role in generating revenue and reputation for the restaurant.
4	Waiter	The waiter, often called Waiter, is one of the main actors in the restaurant management system. They play an important role in providing quality service and creating a positive restaurant experience for customers.
5	Cashier	Cashiers are one of the main actors in the restaurant management system. They are responsible for collecting money from customers and processing payments for services and products that customers have used at the restaurant.
6	Chef	Chef is one of the key actors in the restaurant management system. They take on an important role in preparing and cooking dishes according to customers' requests.
7	User	Users can login, logout, change password, view profile, edit profile

Table 2: Actors

1.2.2 Use Cases

1.2.2.1 Use Case Diagram

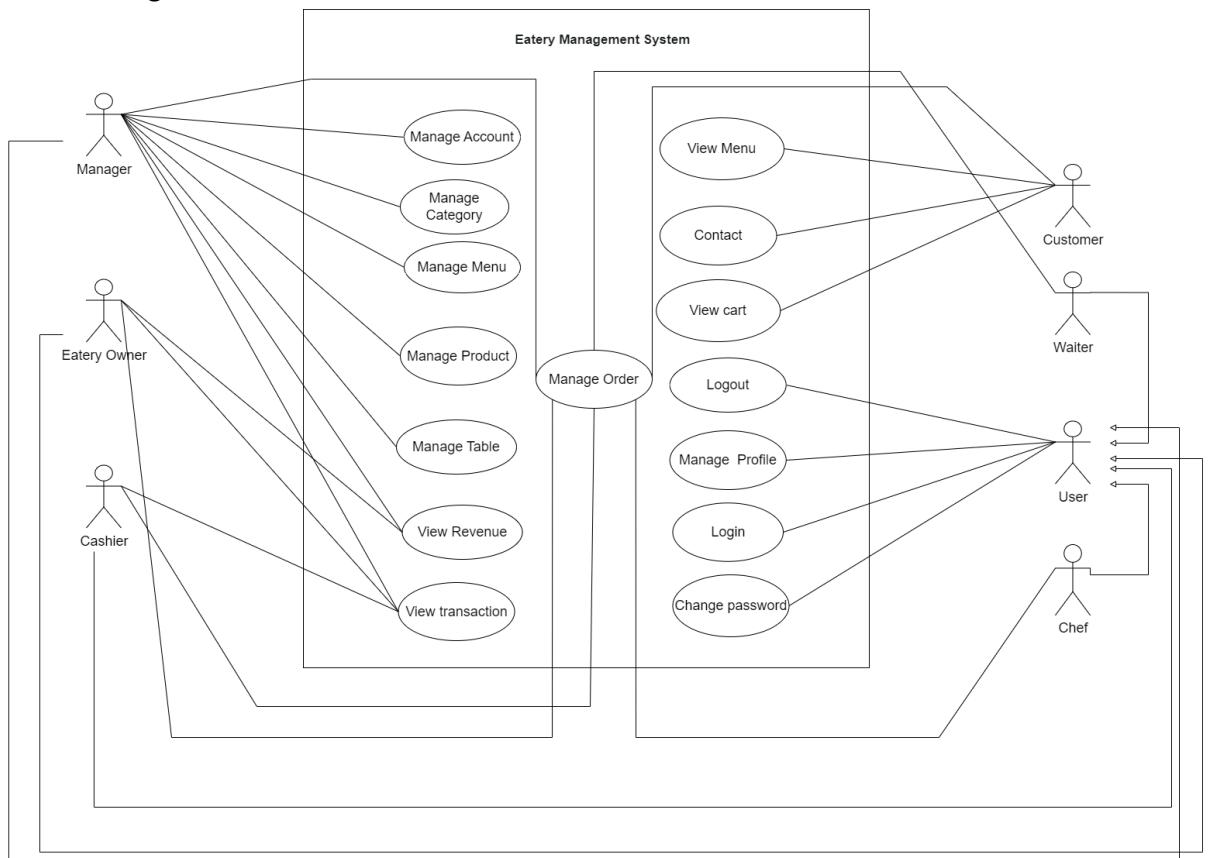


Figure 2: Use case high level

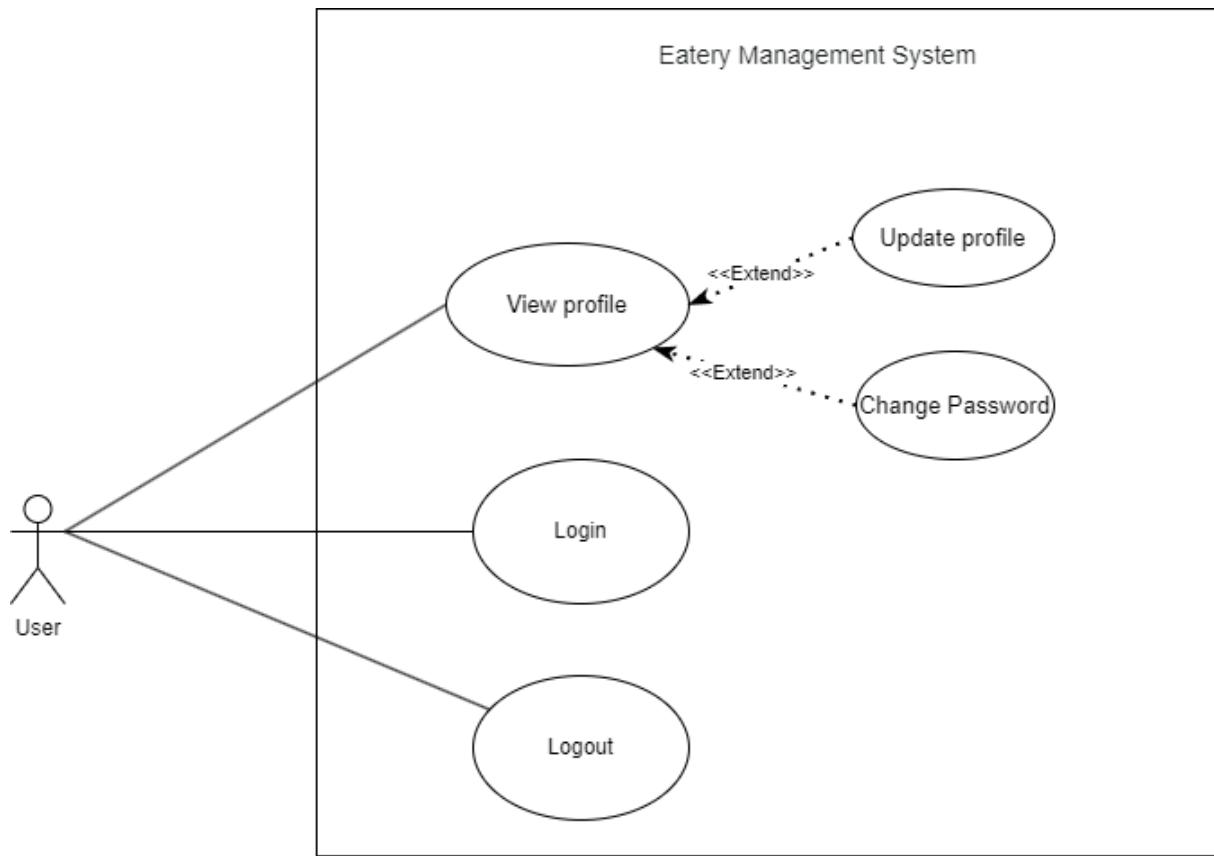


Figure 3: Detail use case User

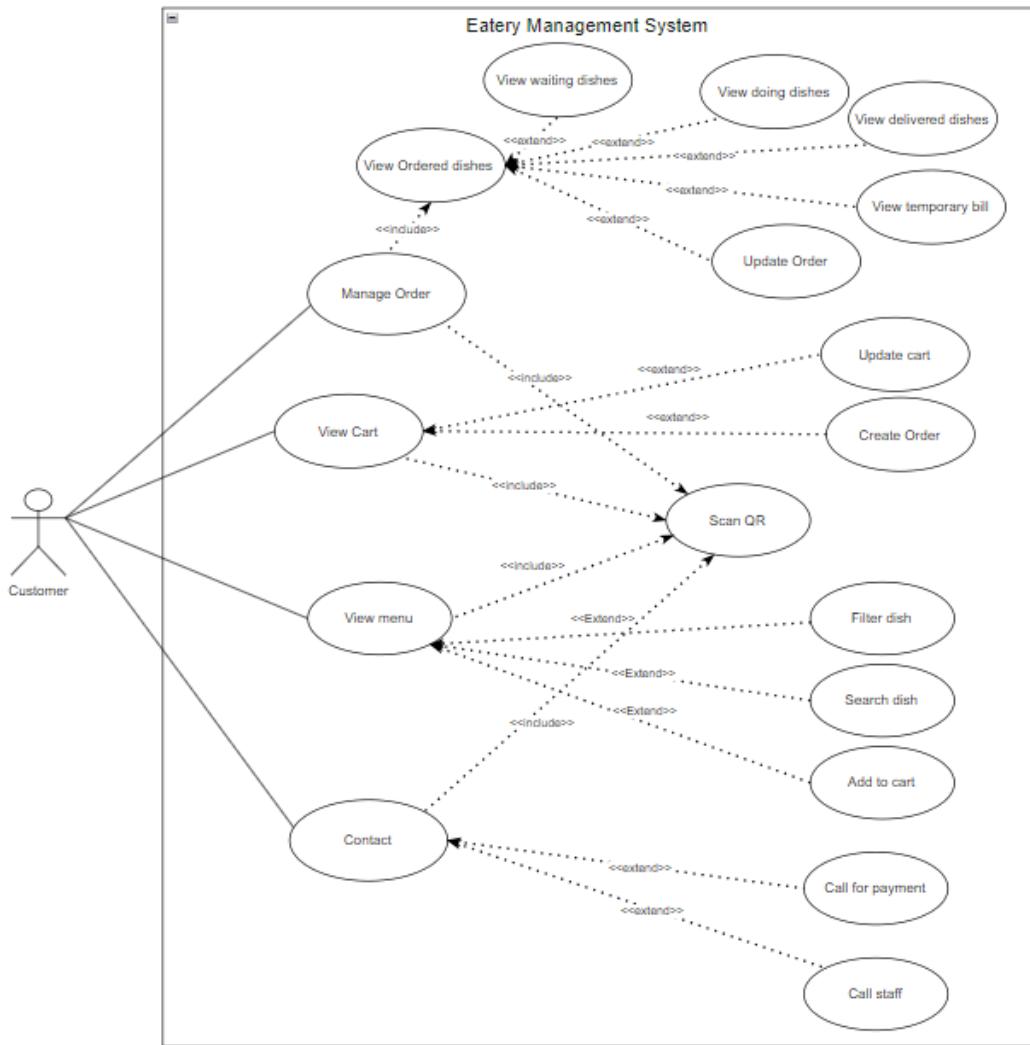


Figure 4: Detail use case Customer

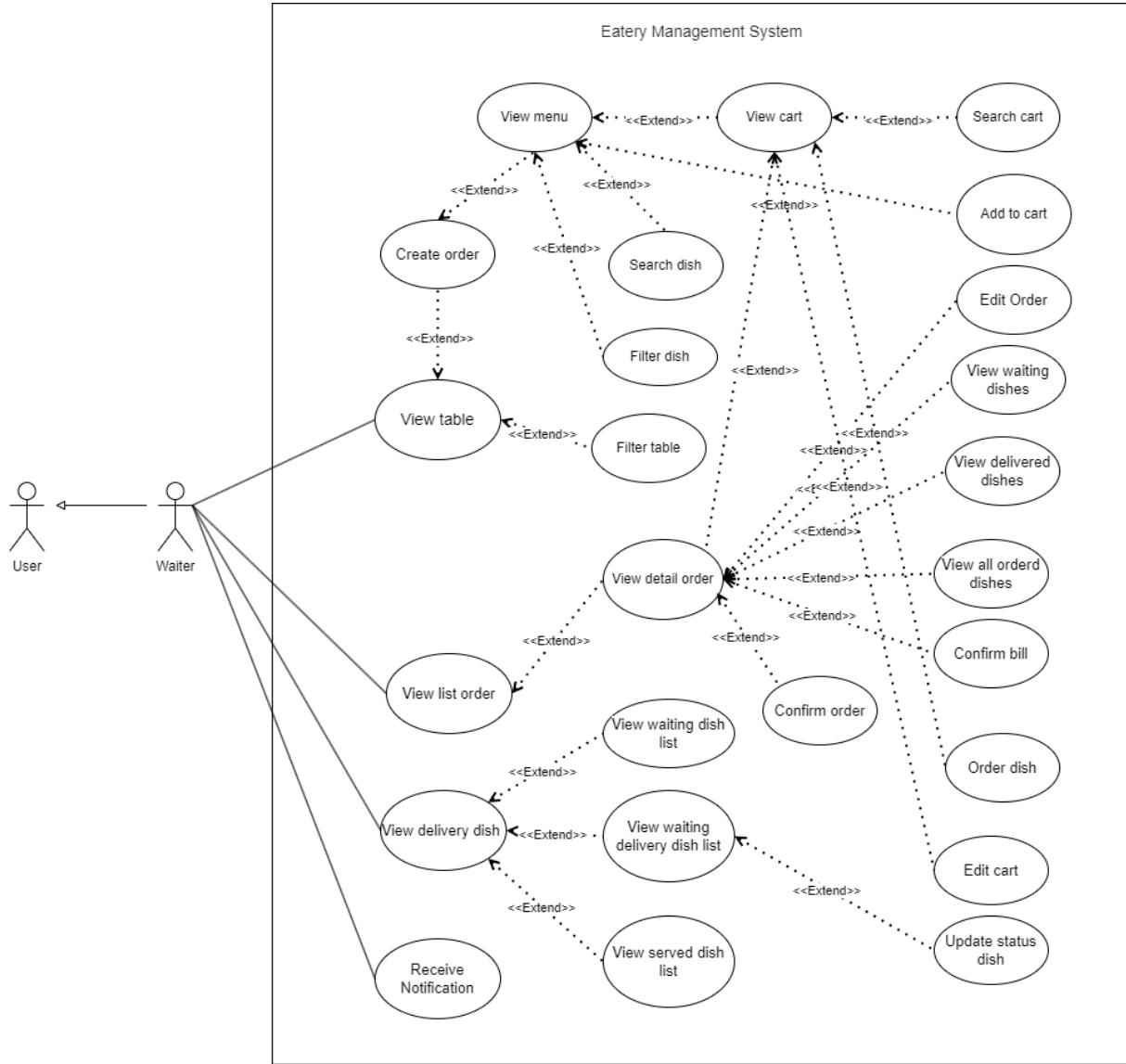


Figure 5: Detail use case Waiter

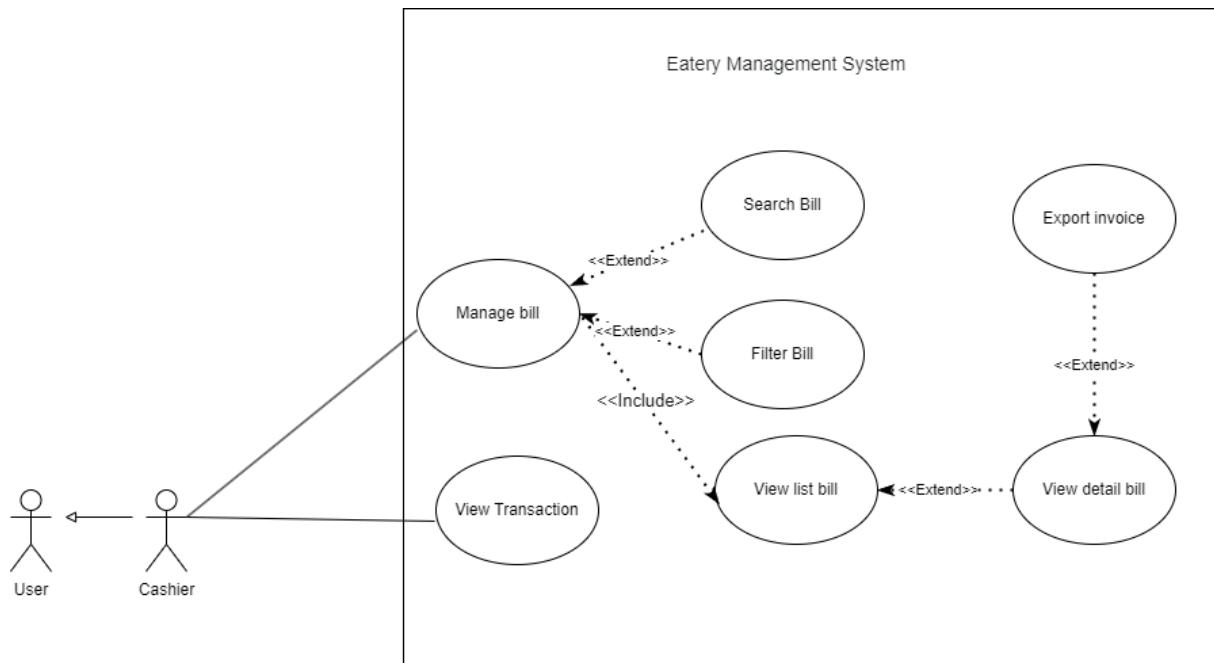


Figure 6: Detail use case Cashier

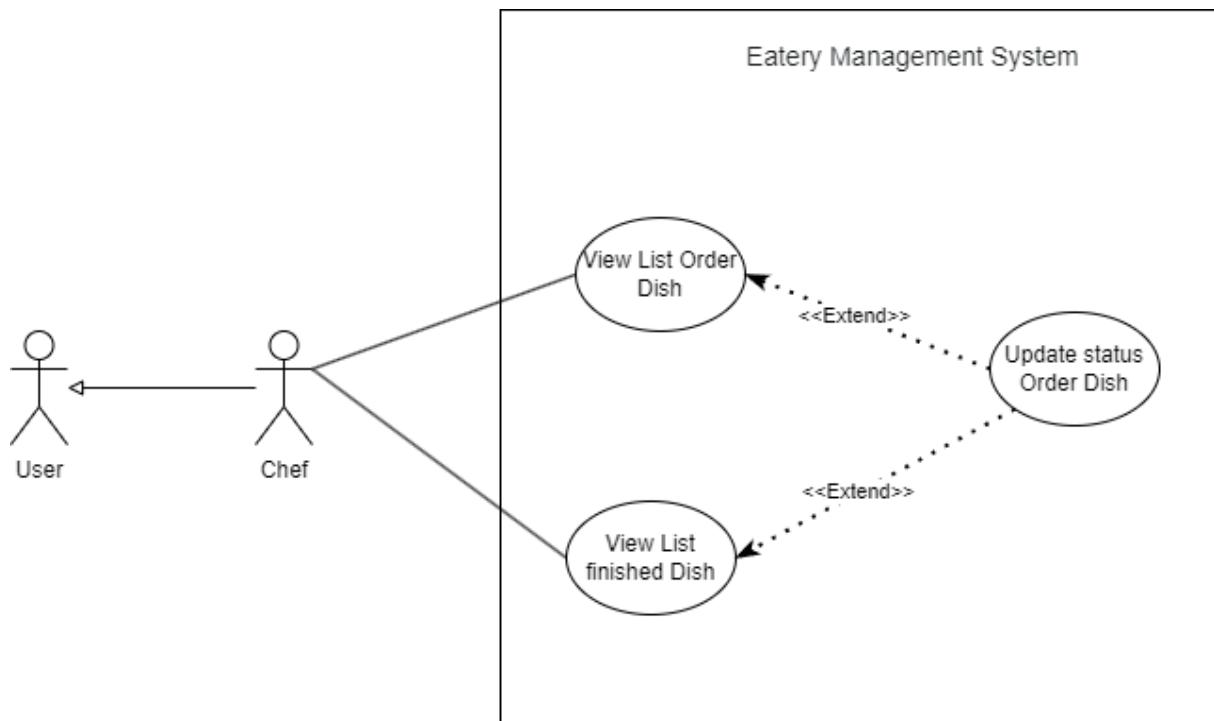


Figure 7: Detail use case Chef



Figure 8: Detail use case Manager

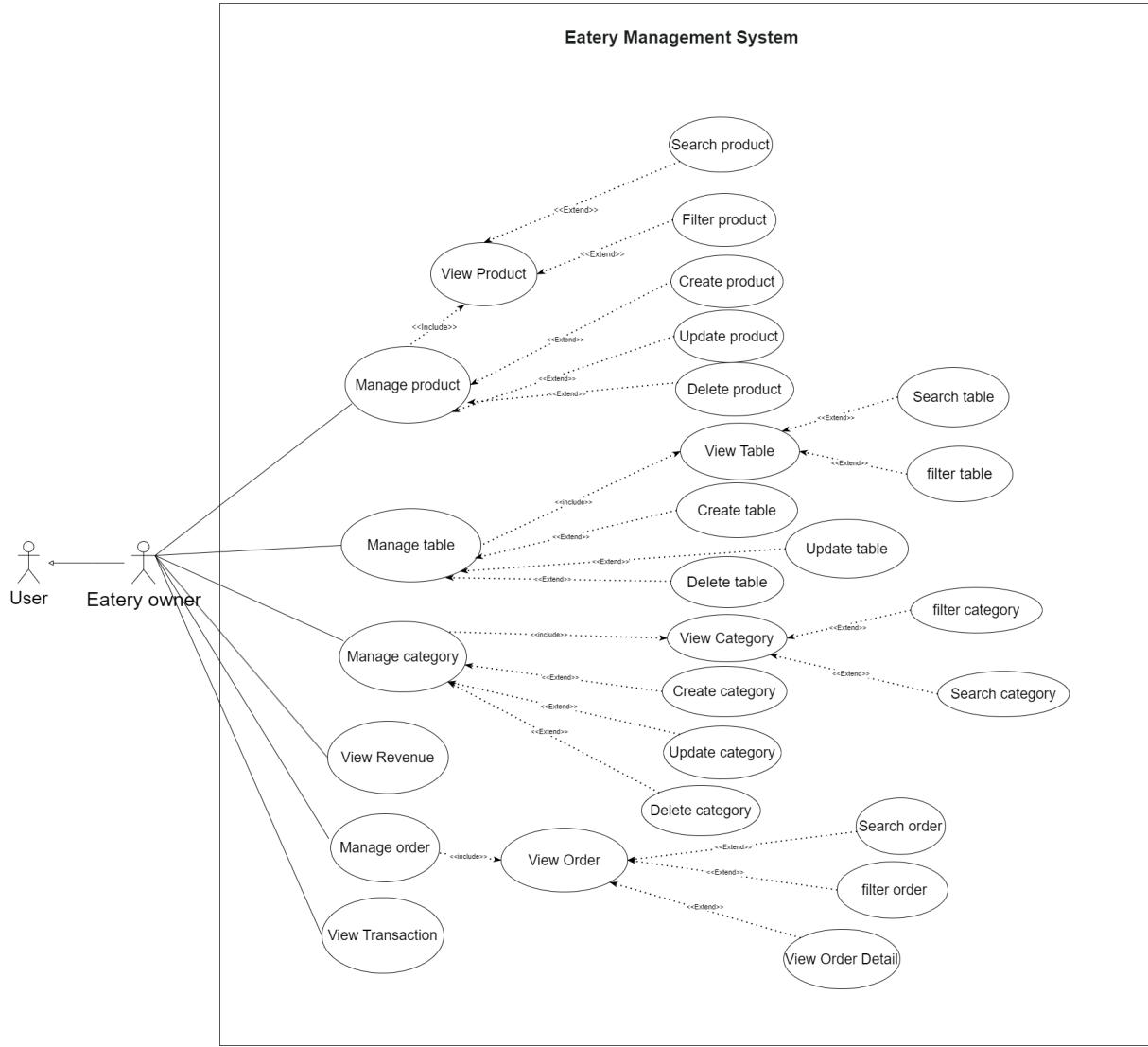


Figure 9: Detail use case Eatery Owner

1.2.2.2 Descriptions

ID	Use Case	Actors	Use Case Description
01	Login	Eatery Owner,Manager,Chef,Cashier,Waiter	This function allows actors to log into the system by entering username, password then actors click the “Login” button..
02	Logout	Eatery Owner,Manager,Chef,Cashier,Waiter	This function allows actors to log out of the system by clicking the “Logout” button.

03	Edit profile	Eatery Owner,Manager,Chef,Cashier,Waiter	This function allows actors to update account information
04	View profile	Eatery Owner,Manager,Chef,Cashier,Waiter	This function allows actors to view profile information
05	Change password	Eatery Owner,Manager,Chef,Cashier,Waiter	This function allows actors to change password
07	View Product	Manager, Eatery Owner	View all products on the system
08	Create product	Manager, Eatery Owner	This function allows actors to create a new product
09	Update product	Manager, Eatery Owner	This function allows actors to update products such as images, name, or description.
10	Delete product	Manager, Eatery Owner	This function allows actors to delete a product
11	Search product	Manager, Eatery Owner	This function allows actors to search product when they fill keyword in the search box
12	Filter product	Manager, Eatery Owner	This function allows actors to search all product by type
13	View table	Manager, Eatery Owner	View all tables on the system
14	Create table	Manager, Eatery Owner	This function allows actors to create a new table
15	Update table	Manager, Eatery Owner	This function allows actors to update tables such as names.
16	Delete table	Manager, Eatery Owner	This function allows actors to delete a table
17	Search table	Manager, Eatery Owner	This function allows actors to search table when they fill keyword in the search box
18	Filter table	Manager, Eatery Owner	This function allows actors to search all tables by type
19	View Category	Manager, Eatery Owner	View all categories on the system
20	Create category	Manager, Eatery Owner	This function allows actors to create a new category
21	Update category	Manager, Eatery Owner	This function allows actors to update categories such as name..
22	Delete category	Manager, Eatery Owner	This function allows actors to delete a category
23	Search category	Manager, Eatery Owner	This function allows actors to search category when they fill keyword in the search box

24	Delete Account	Manager	This function allows actors to delete user in the system.
25	View Revenue	Eatery Owner	This function allows actors to view the store's revenue
26	View transaction	Manager, Eatery Owner, cashier	View history transaction all order.
27	View detail bill	Manager, Eatery Owner, cashier	View detail bill to confirm or export invoice.
28	Export Invoice	Manager, Eatery Owner, cashier	To export invoice for customer.
29	View bill	Manager, Eatery Owner	This function allows actors to view list of bill in system
30	Search bill	Manager, Eatery Owner	This function allows actors to search bill when they fill keyword in the search box
31	Filter bill	Manager, Eatery Owner	This function allows actors to search all bill by type, clicking the "Filter transaction" button from the "Filter transaction" screen.
32	View Order Detail	Manager, Eatery Owner	This function allows actors to view an order detail.
33	View Menu	Customer, waiter	This function allows actors to view list of product in system
34	Scan QR	Customer	Customer will scan the QR code on the table and fill in information then order
35	Search dish	Customer, waiter	This function allows actors to search product by name
36	Filter dish	Customer, waiter	This function allows actors to filter products by type, clicking the "Filter transaction" button from the "Filter transaction" screen.
37	View ordered dishes	Customer	This function allow actors to see a list of dishes they are ordering
38	Update Order	Customer	This function allow actors to update order
39	View cart	Customer	This function allows actors to view cart to order dishes.
40	update cart	Customer	The function allows actors to view updated dishes in their cart.
41	View waiting dishes	Customer	This function allows the actor to view the list of product orders that are waiting for confirm.
42	View doing dishes	Customer	This function allows actors to view the list of product orders that are doing.
43	Create Order	Customer	This function allows actors to create order

44	View delivered dishes	Customer	This function allows actors to view the list of product ordered that are done and served.
45	Add to cart	Customer	This function allows actor to add a dish to cart.
46	Call for Payment	Customer	This function allows actor to start payment.
48	View List Order Dish	Chef	This function allows actors to view a list of dishes that was confirmed.
49	View list finished dish	Chef	This function allows actors to view a list of dishes that were done.
50	Update status order dish	Chef	This function allows actors to update status of dish.
51	Add to cart	Waiter	This function allows actors to add a dish to cart.
52	Search cart	Waiter	This function allows actors to can search dish in cart.
53	View cart	Waiter	This function allows actors to view cart.
54	View table	Waiter	This function allows actors to view a list of table to order.
55	Create Order	Waiter	This function allows actors to create order for customer
56	Filter table	Waiter	This function allows actors to filter the list table for status.
57	View order detail	Waiter	This function allows actors to view an order detail.
58	Edit order	Waiter	This function allows actors to edit order for customer.
59	View waiting dishes	Waiter	This function allows actors to view waiting dishes.
60	View delivered dishes	Waiter	This function allows the actors to view delivered dishes.
61	View all ordered dishes	Waiter	This function allows actors to view ordered dishes.
62	Confirm bill	Waiter	This function allows actors to confirm bill of customer
63	View list order	Waiter	This function allows actors to view list order.
64	View delivery dish	Waiter	This function allows actors to view waiting dishes.
65	View waiting delivery dish list	Waiter	This function allows actors to view the waiting dish list.
66	View served dish list	Waiter	This function allows actors to view the served dish list.
67	Update status dish	Waiter	This function allows actors to update the status of the dish.
68	Receive Notification	Waiter	This function allows actors to receive notification.

69	Search Account	Manager	This function allows actors to search user when they fill keyword in the search box
70	Filter Account	Manager	This function allows actors to search all users by type, clicking the “Filter transaction” button from the “Filter transaction” screen.
71	Create Account	Manager	This function allows actors to add users to the system.
72	Update Account	Manager	This function allows actors to edit user information in the system.

Table 3: Use case description

1.2.3 UCD Eatery Owner

1. Diagram



Figure 9: Eatery Owner Use case

2. Descriptions

Table 4:UCD Eatery Owner

ID	Use Case	Actors	Use Case Description
01	Manage Product	Eatery Owner	This use case is for managing products.
02	Manage Table	Eatery Owner	This use case is for managing tables.
03	Manage Category	Eatery Owner	This use case is for managing categories.
04	View Revenue	Eatery Owner	This use case is for viewing revenue.
05	Manage Order	Eatery Owner	This use case is for managing orders.
06	View Transaction	Eatery Owner	This use case is for viewing transactions.

1.2.4 UCD Manager

1. Diagram(s)

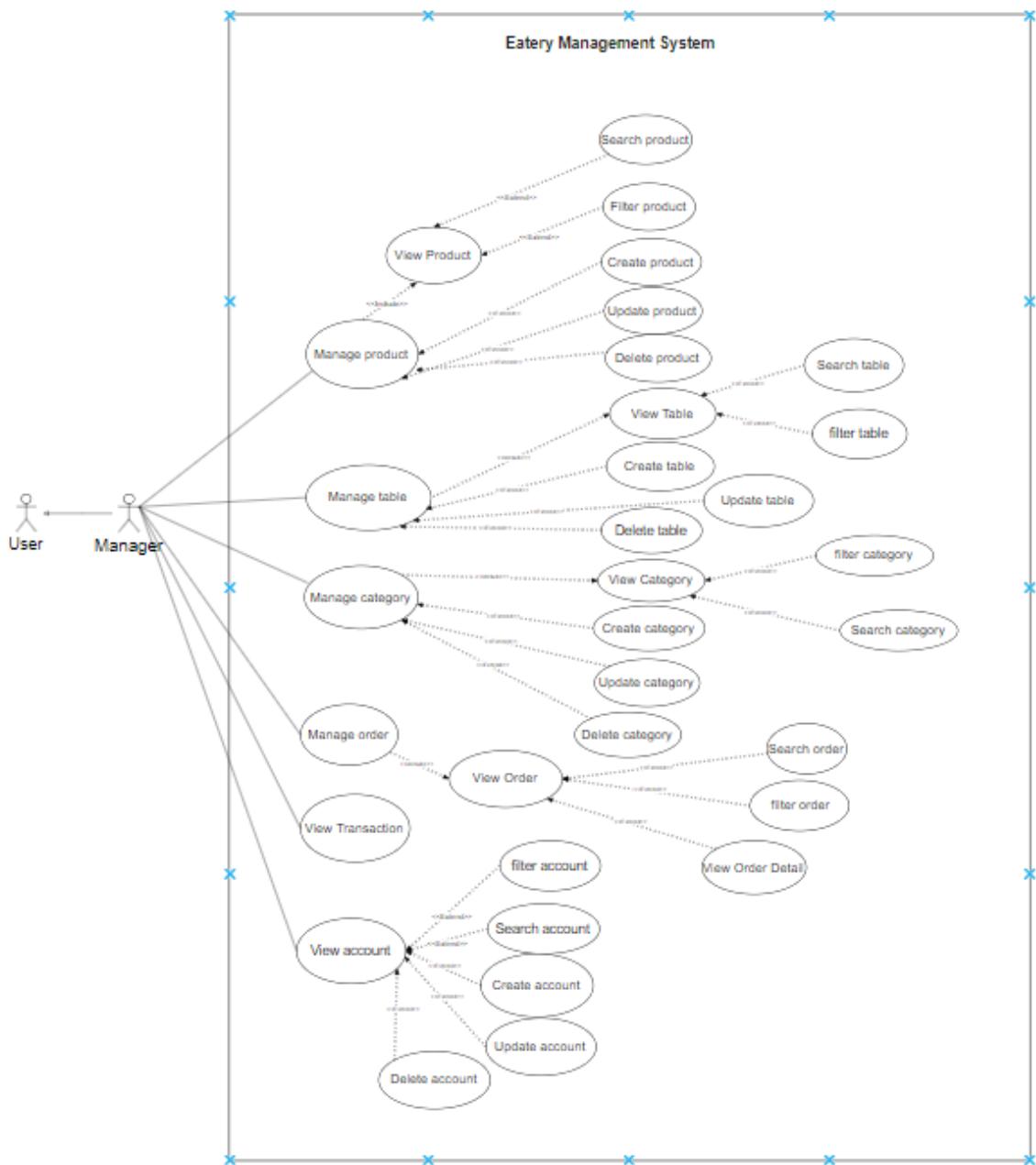


Figure 10: Manager Use case

2. Descriptions

ID	Use Case	Actors	Use Case Description
01	Manage Account	Manager	The Manager can search and filter accounts, create staff accounts, view account information, and edit account details.

02	Manage Product	Manager	This function allows actors to manage product in system
03	Manage Table	Manager	This function allows actors to manage table in system
04	Manage Category	Manager	This function allows actors to manage category in system
05	View Revenue	Manager	This function allows actors to view revenue in system
06	Manage Order	Manager	This function allows actors to manage order in system
07	View Transaction	Manager	This function allows actors to view transaction in system

Table 5: UCD Manager

1.2.5 UCD Chef

1. Diagram(s)

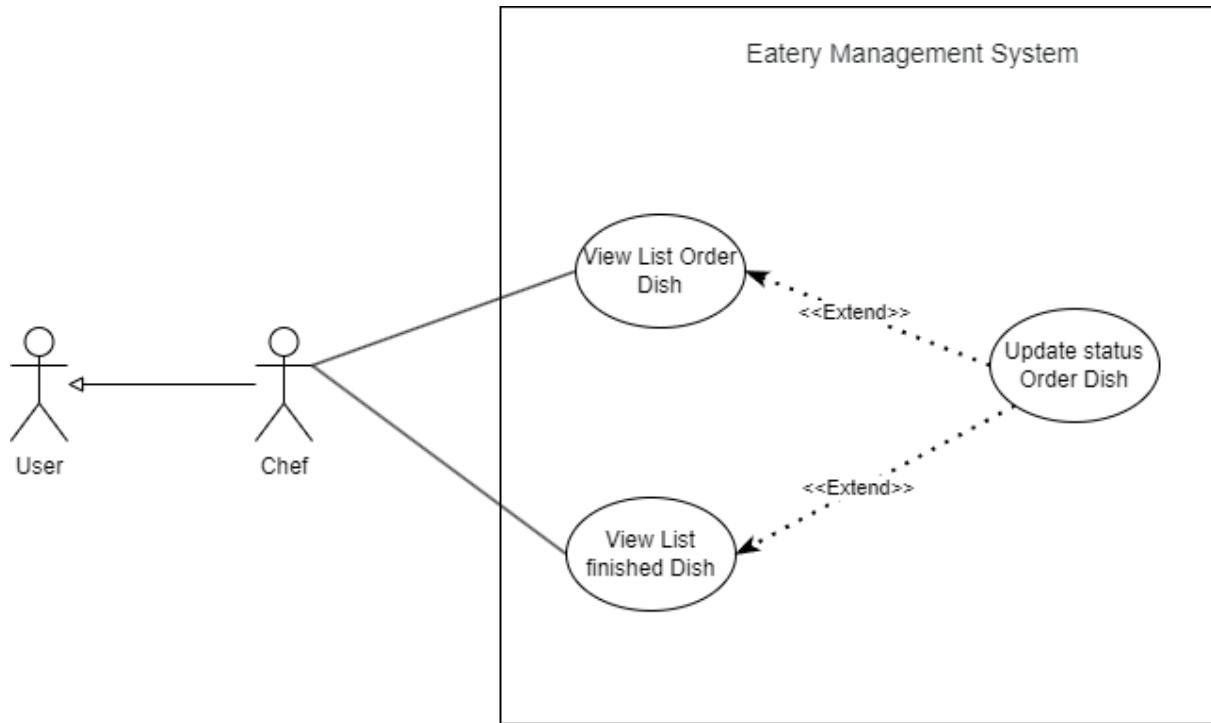


Figure 11:UCD Chef

2. Descriptions

ID	Use Case	Actors	Use Case Description
01	View List Order Dish	Chef	Chef can view list of order dish from waiter or customer
02	Update status order dish	Chef	Chef update status for customer or waiter knows status of dish
03	View list finished dish	Chef	Chef can view list of order dish is done

Table 6: Description

1.2.6 UCD Cashier

1. Diagram(s)

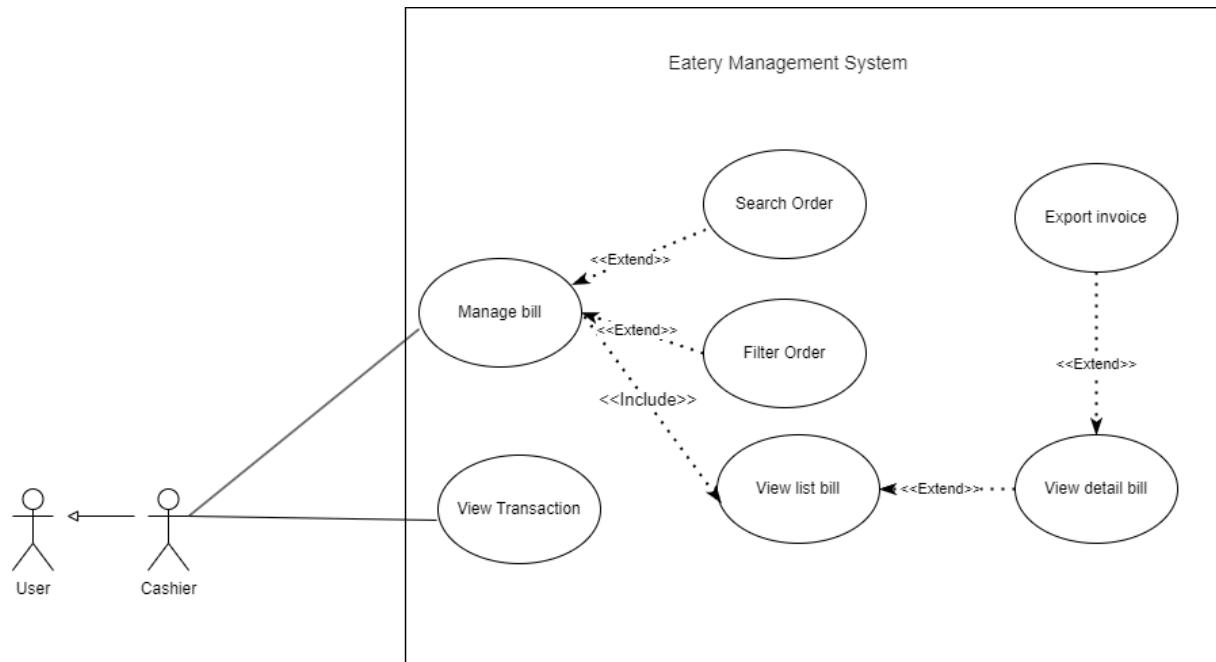


Figure 12: Cashier Use case

2. Descriptions

ID	Use Case	Actors	Use Case Description
01	Manage Order	Cashier	Cashiers are responsible for the order management process, which includes the ability to search and filter orders, create new orders, view existing orders, and update orders. Additionally, they can update the order status to 'Processing' and further to 'Delivered to customer'.
02	Display Transaction	Cashier	The Cashier can manage financial transactions related to customer orders. This includes processing payments and handling the financial aspects of orders.

Table 7:UCD Cashier Description

1.2.7 UCD Waiter

1. Diagram(s)

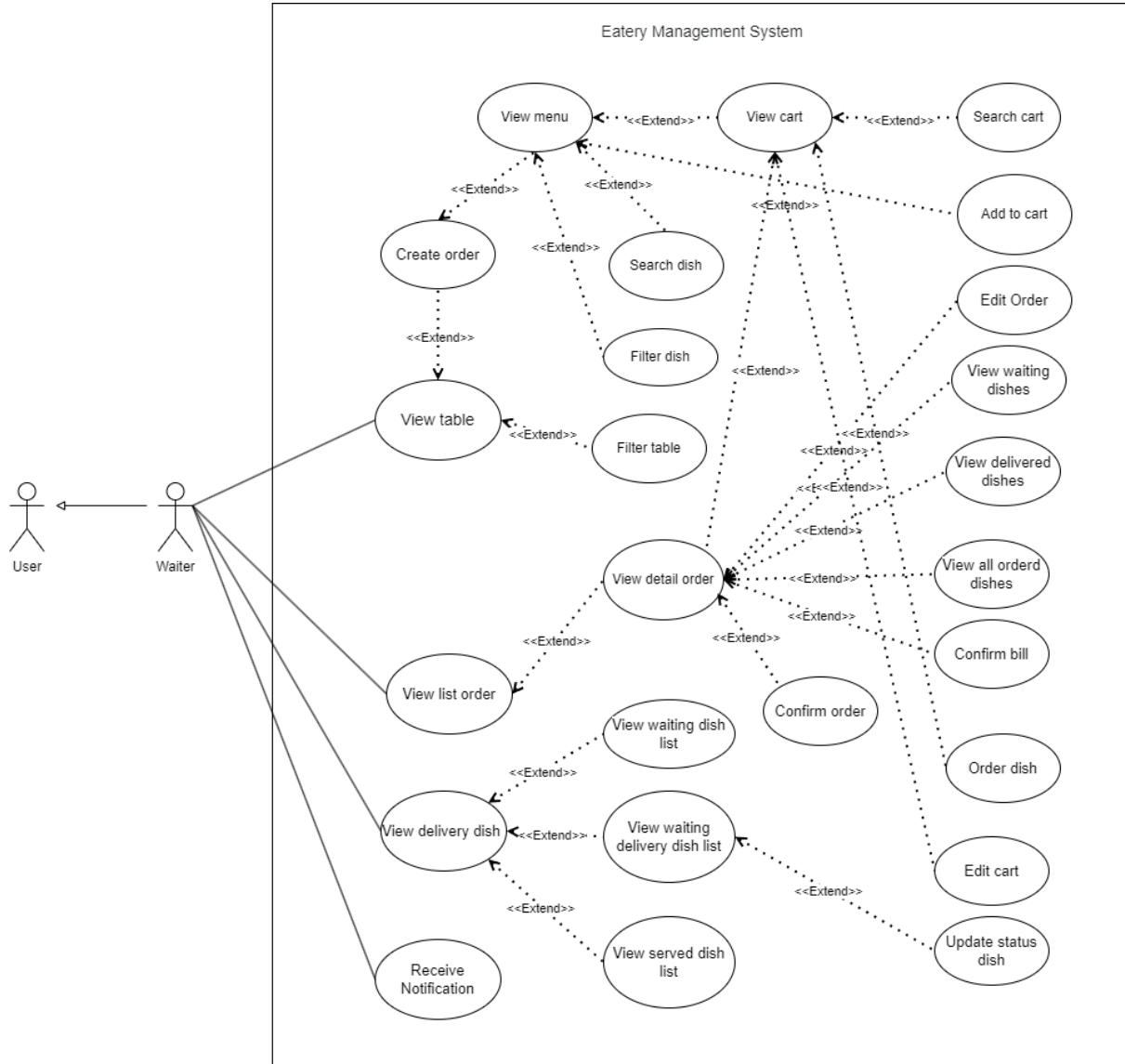


Figure 13: Waiter Use case

2. Descriptions

ID	Use Case	Actors	Use Case Description
01	View Menu	Waiter	Allows Users to browse the full list of available dishes, including descriptions and prices.
02	View Delivery Dish	Waiter	Users receive information on dishes that have been ordered and are currently being delivered.
03	Receive Notification	Waiter	Users and Waiters get alerts for various activities, like order status updates or table availability.
04	Search Dish	Waiter	Allows Users to look up specific dishes by name or ingredient.

05	Filter Dish	<i>Waiter</i>	Users can apply filters to the menu to narrow down dish options based on criteria like dish type or dietary restrictions.
06	Search Cart	<i>Waiter</i>	Users can review items that they have added to their order cart.
07	Add to Cart	<i>Waiter</i>	Users select dishes from the menu to add to their current order.
08	Edit Order	<i>Waiter</i>	Users and Waiters have the ability to make changes to the details of an order before it is finalised.
09	View Waiting Dishes	<i>Waiter</i>	Waiters can monitor dishes that have been ordered but are not yet prepared or delivered.
10	View Delivered Dishes	<i>Waiter</i>	Waiters can track which dishes have been successfully delivered to the tables.
11	View All Ordered Dishes	<i>Waiter</i>	Waiters have an overview of all the dishes that have been ordered throughout the eatery.
12	Confirm Bill	<i>Waiter</i>	Waiters can finalise the billing process for a customer's order.
13	Order Dish	<i>Waiter</i>	Enables Waiters to place orders on behalf of the User
14	Edit Cart	<i>Waiter</i>	Users can modify the contents of their order cart, including adding or removing items.
15	Update Status Dish	<i>Waiter</i>	Waiters can update the status of a dish, marking it as prepared, delivered, or cancelled.
16	Receive Notification	<i>Waiter</i>	Users and Waiters get alerts for various activities, like order status updates or table availability.

Table 8: UCD Waiter Description

1.2.8 UCD Customer

1. Diagram(s)

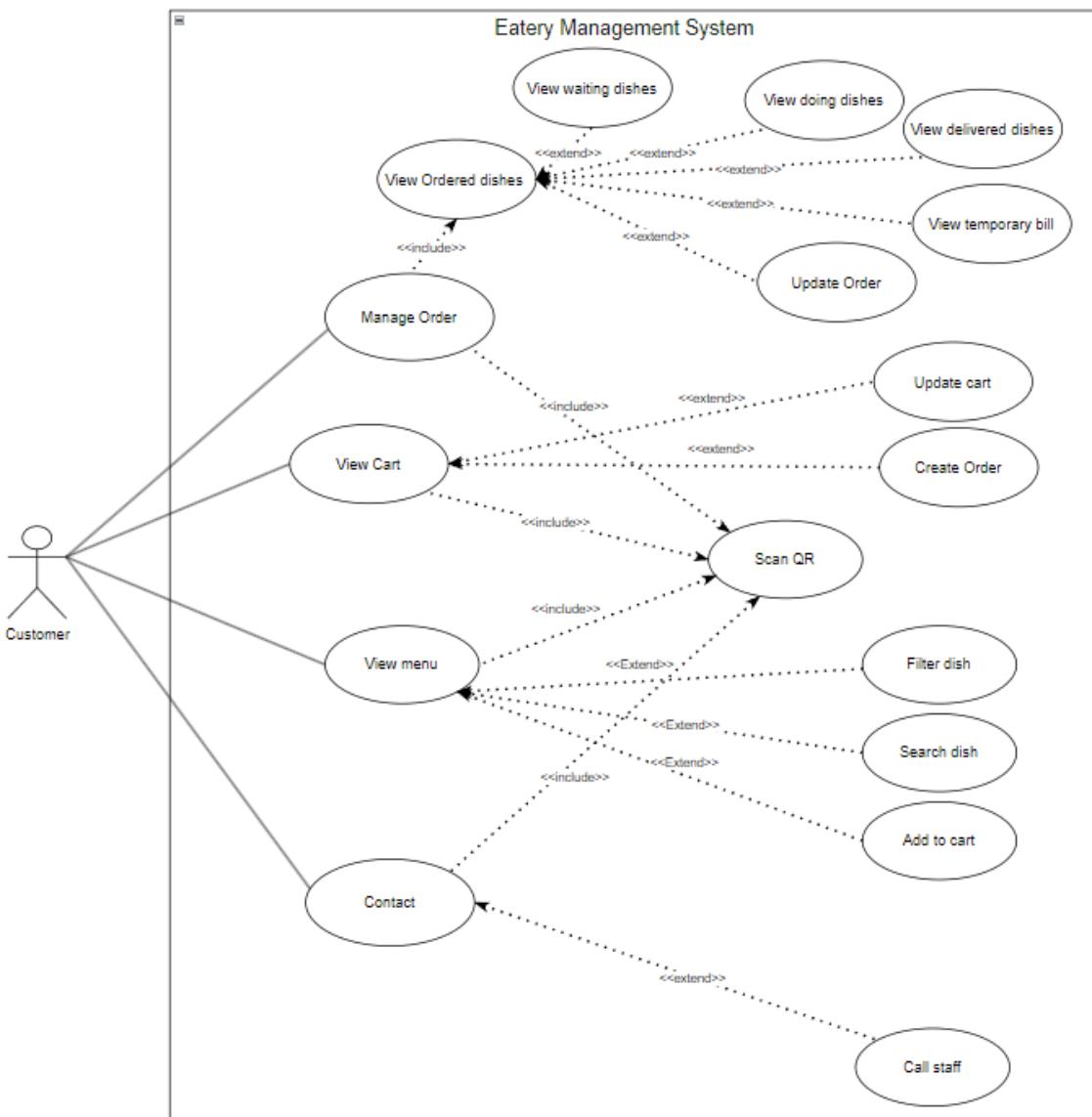


Figure 14: Customer Use case

2. Descriptions

ID	Use Case	Actors	Use Case Description
01	View Menu	Customer	Allows customers to browse the restaurant's offerings, including dishes, descriptions, and prices.
02	Scan QR	Customer	Customers can scan a QR code to quickly access the eatery's services, such as the menu or ordering system.

03	Contact	Customer	Provides customers with the means to contact the eatery for inquiries or special requests.
04	View Cart	Customer	Customers can review the items they have selected before finalising their order.
05	Manage Order	Customer	Enables customers to oversee their orders, including viewing, updating, or cancelling them.
06	View Ordered Dishes	Customer	Customers can check the list of dishes they have ordered during their current visit.
07	View Waiting Dishes	Customer	Allows customers to see which dishes are being prepared and are yet to be served.
08	View Doing Dishes	Customer	Customers can view the status of dishes that are in the process of being cooked
09	View Delivered Dishes	Customer	Customers can check which dishes have been served to their table.
10	View Temporary Bill	Customer	Customers can view an interim bill to check the items and their prices before requesting the final bill.
11	Update Order	Customer	Enables customers to make changes to their existing order, such as adding or removing dishes.
12	Update Cart	Customer	Customers can update their selection of dishes in the cart before placing the order.
13	Create Order	Customer	Allows customers to finalise and place their order after selecting their dishes.
14	Filter Dish	Customer	Customers can filter dishes based on categories, ingredients, or other preferences.
15	Search Dish	Customer	Enables customers to search for specific dishes by name or keyword.
16	Add to Cart	Customer	Customers can select dishes to add to their order cart.

Table 9: UCD Customer Description

1.3 System Functionalities

1.3.1 Screens Flow

1.3.1.1 Screen flow for Eatery Owner

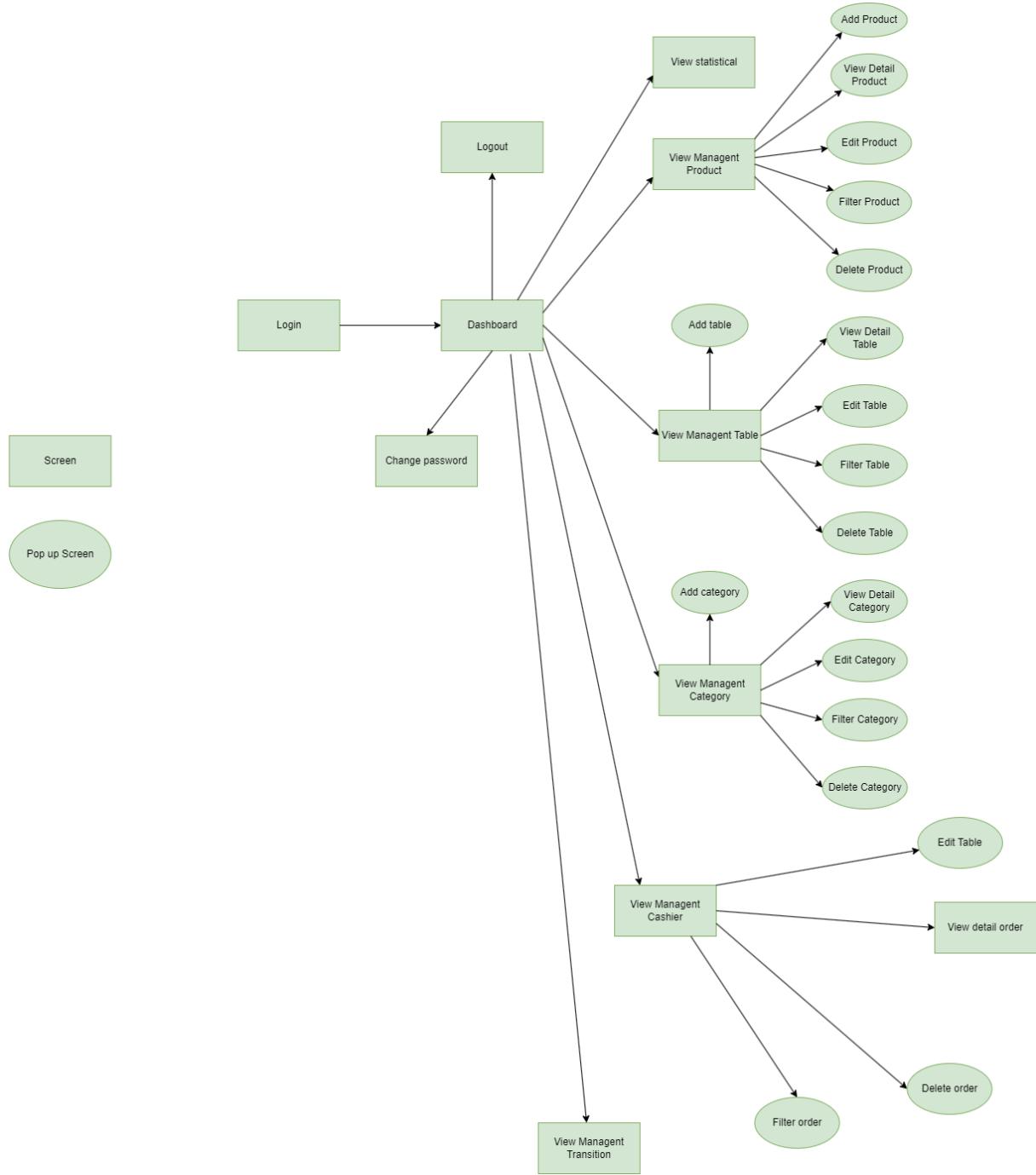


Figure 15: Screen flow for Eatery Owner

1.3.1.2 Screen flow for Manager

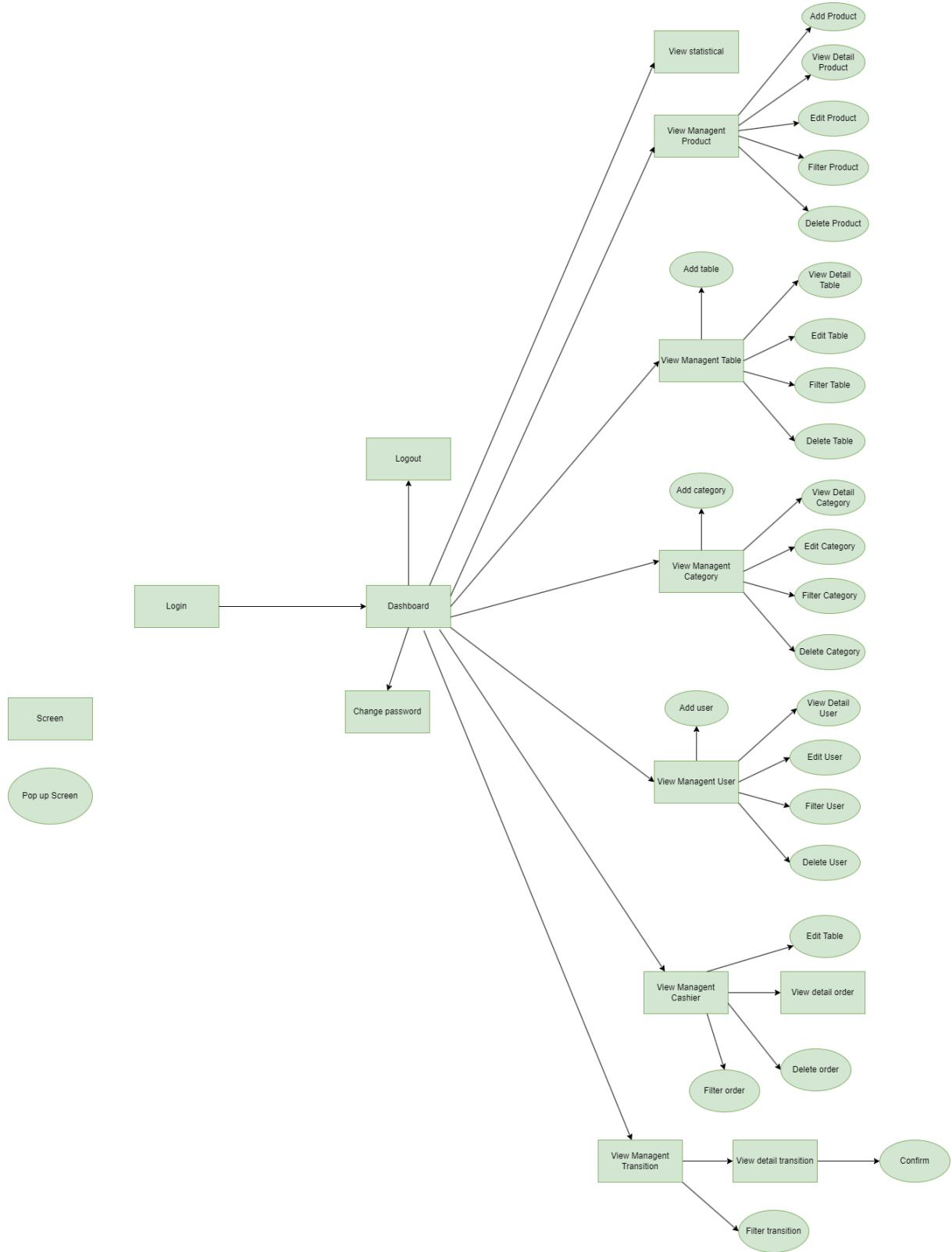


Figure 16: Screen flow for Manager

1.3.1.3 Screen flow for Cashier

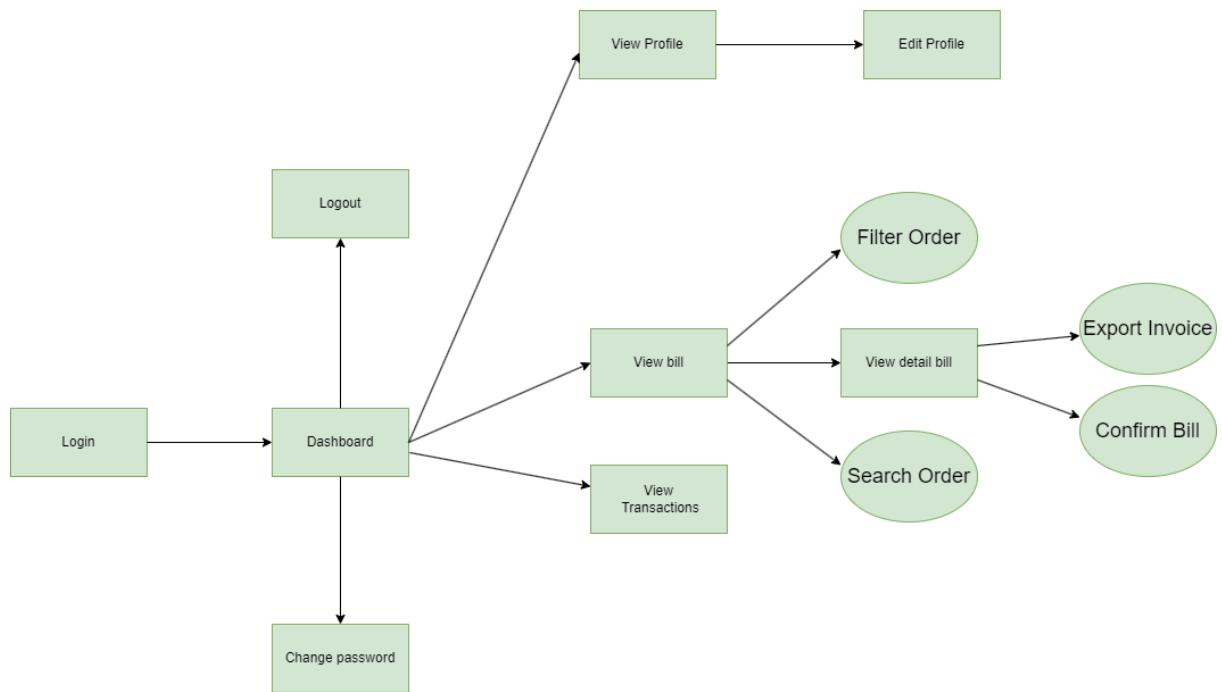


Figure 17: Screen flow for Cashier

1.3.1.4 Screen flow for Chef

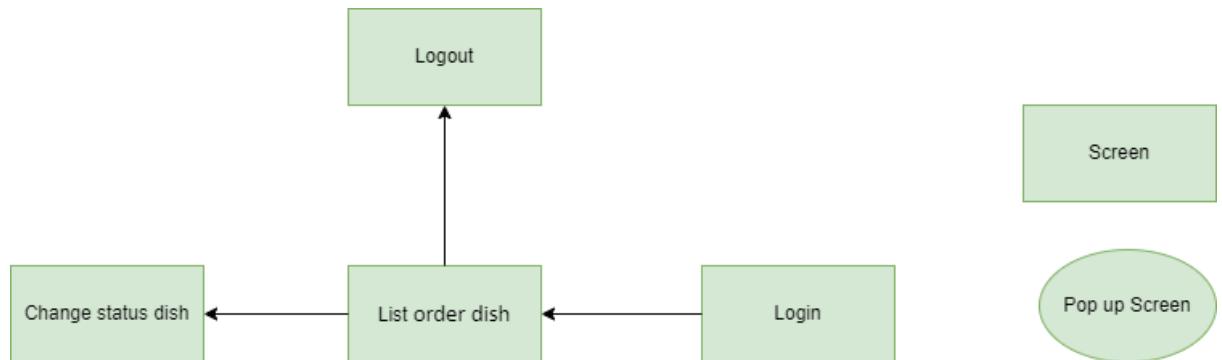


Figure 18: Screen flow for chef

1.3.1.5 Screen flow for Waiter

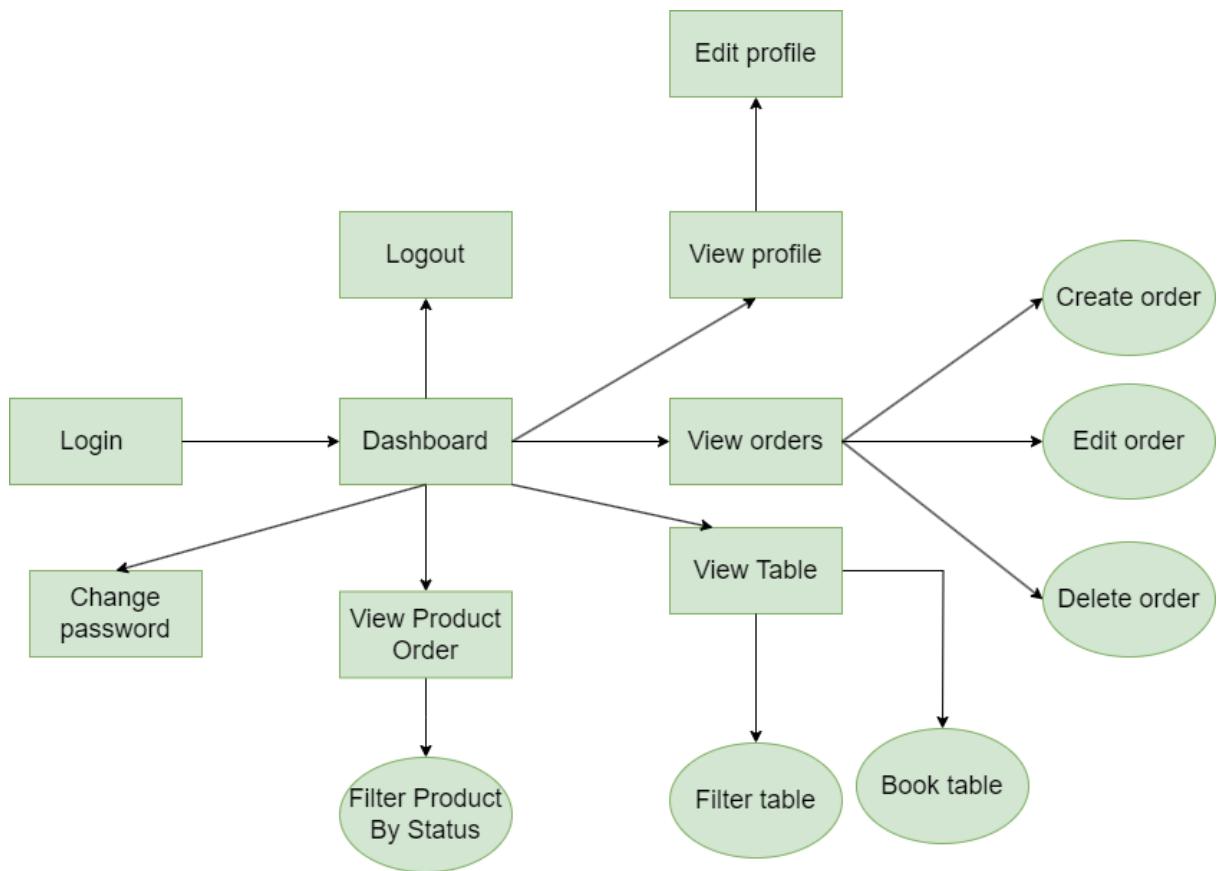


Figure 19: Screen flow for Waiter

1.3.1.6 Screen flow for Customer

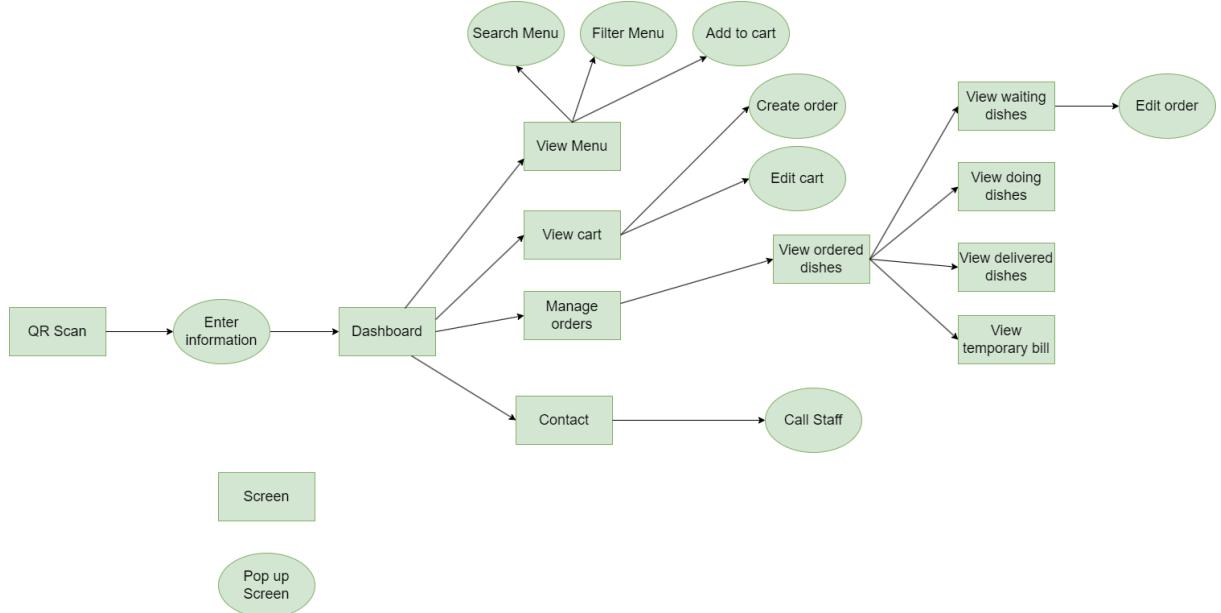


Figure 20: Screen flow for Customer

1.3.2 Screen Descriptions

1.3.2.1 Screen Description for Eatery Owner

#	Feature	Screen	Description
1	Common	Dashboard	The screen will display statistics of the system
2	User Authentication	Login	Screen for login to the application
		Change password	Screen for changing password
3	Manage Product	List Product	Screen display information of all products in the system
		Create Product	Screen for manager to create product
		Detail Product	Screen display detail information of product
		Delete Product	Screen display confirmation dialog
4	Mange Table	List Table	Screen display information of all table in the system
		Create table	Screen for manager to create table
		Detail table	Screen display detail information of table
		Delete table	Screen display confirmation dialog
5	Manage Category	List Category	Screen display information of all categories in the system
		Create Category	Screen for manager to create category
		Detail Category	Screen display detail information of category
		Delete Category	Screen display confirmation dialog
6	Manage Order	List Order	Screen display information of all orders in the system
		Detail Order	Screen display detail information of order

Table 10: Screen Eatery Owner Description

1.3.2.2 Screen Description for Manager

#	Feature	Screen	Description
1	Common	Dashboard	The screen will display statistics of the system
2	User Authentication	Login	Screen for login to the application
		Change password	Screen for changing password
3	Manage Product	List Product	Screen display information of all products in the system
		Create Product	Screen for manager to create product
		Detail Product	Screen display detail information of product
		Delete Product	Screen display confirmation dialog

4	Mange Table	List Table	Screen display information of all table in the system
4		Create table	Screen for manager to create table
		Detail table	Screen display detail information of table
		Delete table	Screen display confirmation dialog
5	Manage Category	List Category	Screen display information of all categories in the system
		Create Category	Screen for manager to create category
		Detail Category	Screen display detail information of category
		Delete Category	Screen display confirmation dialog
6	Manage Order	List Order	Screen display information of all orders in the system
		Detail Order	Screen display detail information of order
7	View manage user	Add user	Screen display for manager add more user
		View Detail user	Screen display for manager view detail user
		Edit user	Screen display for manager edit information of user
		Filter user	Screen display for manager filter user by name
		Delete user	Screen display for manager delete user
8	View management transaction	View detail transaction	Screen display for manager view detail transaction
		Filter transaction	Screen display for manager filter transaction
		Confirm	Screen display for manager confirm transaction

Table 11: Screen Waiter Description

1.3.2.3 Screen Description for Cashier

#	Feature	Screen	Description
1	Authentication	Login	Screen for login to the application
		Change password	Screen for changing password
2	Manage profile	View profile	Screen for view profile
		Edit profile	Screen for edit profile
3	Manage bill	View bill	Screen for view all bill
4	Manage transaction	View Transactions	Screen for view all transaction
5	Manage bill	Filter Order	Screen for filter order
		View detail bill	Screen for view detail a bill
		Search Order	Screen for search a order
		Export Invoice	Screen for export a bill for customer
		Confirm Bill	Screen for confirm customer pay bill

Table 11: Screen Cashier Description

1.3.2.4 Screen Description for Chef

#	Feature	Screen	Description
1	Authentication	Login	Screen for login to the application
2	Manage Order	List Order/Change status order	Screen displays a list and Chef change status Order from Waiting for processing to Done

Table 12: Screen Chef Description

1.3.2.5 Screen Description for Waiter

#	Feature	Screen	Description
1	Common	Dashboard	The screen is the home page of the waiter. It has links to other pages of the waiter..
		View profile	After login, the waiter can view their profile information such as name , account, phone, email, picture.
		Edit profile	After viewing their profile, they can change their information such as name , account, phone, email, picture.
2	Authentication	Login	Screen for login to the application
		Change password	Screen for changing password
3	Manage Order	View Orders	Screen display information of all orders in the system
		Create Order	Screen for creating an order if customers don't have a cellphone to order.
		Edit Order	Screen for change the order such as change the foods, more or less number of foods or delete the foods.
		Delete Order	If a waiter creates an order but customers don't want to eat any more and the food is not served yet, they can delete that order.
4	Contact	Response Customer	If customers have problems and ping the waiters, the waiters can response the customers and solve the problems

Table 13: Screen Waiter Description

1.3.2.6 Screen Description for Customer

#	Feature	Screen	Description
1	Enter website	Scan QR	Customers scan QR code to access the system and view menu, create order and contact with the waiter.

		Enter information	Customers input name and select table to order.
3	Order foods	View Menu	Customers can view all products of the store such as categories, dishes, drinks, desserts.
		Add to cart	Customers select a dish and pop up a detailed dish open and they can add it to cart.
		Search menu	Customers can search for a dish.
		Filter menu	Customers can filter the menu for categories.
		Edit cart	If customers create an order but they don't want to eat any more and the food is not served yet, they can delete that order.
		View cart	After customers finish eating, they will start to pay all what they call from order by cash or banking.
		Create Order	After customers view the menu and choose foods, they can start to create an order.
		Edit cart	Customers can edit their cart by increasing or decreasing the number of dishes and delete dishes.
		View history order	Customers can view all dishes that they just ordered.
		Edit order	After customers create an order so they can change the order such as change the foods, more or less number of foods or delete the foods.
		View ordered dishes	Customers can track their order.
18	Contact	Call for payment	If they finish a meal, they can click the button for payment and start paying for the meal.

Table 14: Screen Customer Description

1.3.3 Screen Authorization

Screen	Eatery Owner	Manager	Cashier	Chef	Waiter	Customer
Login	X	X	X	X	X	
Logout	X	X	X	X	X	
Change Password	X	X	X	X	X	
Edit Profile	X	X	X	X	X	
View Profile	X	X	X	X	X	
View Waiting Dish					X	X
View Delivery Dish	X	X			X	X

View Revenue	X					
View Category Detail	X	X				
View List User		X				
View List Bill	X	X	X			
View Transaction	X	X	X			
View Cart					X	X
View List Category	X	X				
View List Product	X	X				
View Serve Dish List					X	X
View Finish Dish List					X	X
View Delivery Dish					X	
View Waiting Dish					X	
View List Table	X	X			X	
View Transactions	X	X	X			
View list order dish				X		
View list finished dish				X		
View temp bill					X	X
View Dashboard	X					
Order Dish						X
View history order						X
Export Invoice			X			
Confirm bill					X	

Table 15: Screen Authorization

1.3.4 Entity Relationship Diagram

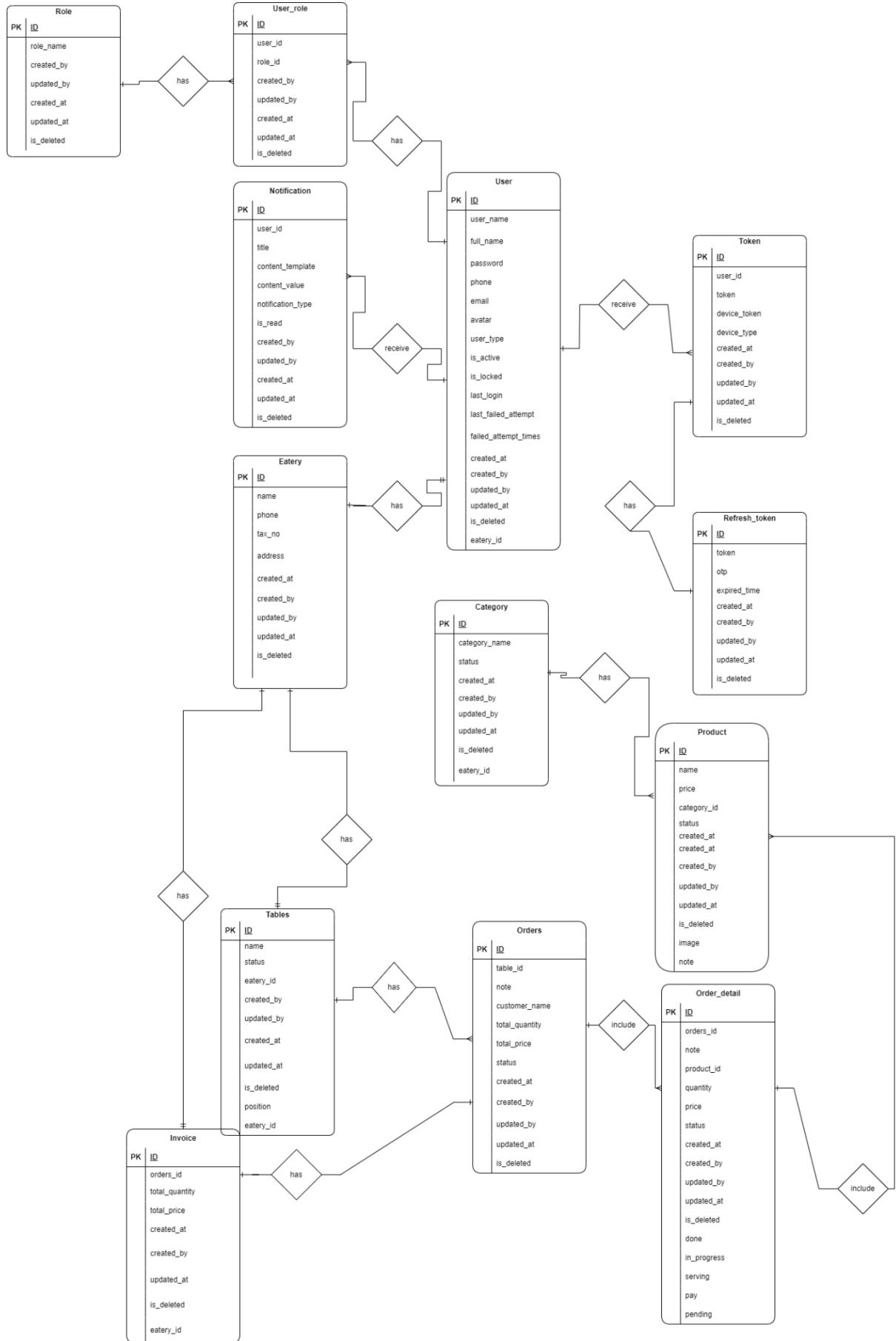


Figure 21: Entity Relationship Diagram

Entities Description

#	Entity	Description
1	Role	To display the name of the role.
2	Tables	To display table information.
3	Notification	All notifications for waiters.
4	User_role	To display the role of users.
5	Order_detail	Order detail of order
6	Invoice	Invoice of customer.
7	Orders	Order of customer.
8	User	All information about the user.
9	Category	All categories of menu.
10	Token	Token for login users.
11	Refresh_token	Refresh token for login.
12	Product	All products on the menu.
13	Master Data	All information about the eatery.
14	Eatery User	To display the eatery of the user.

Table 16: Entities Description

2. Functional Specifications

2.1 Login

2.1.1: UI Specifications

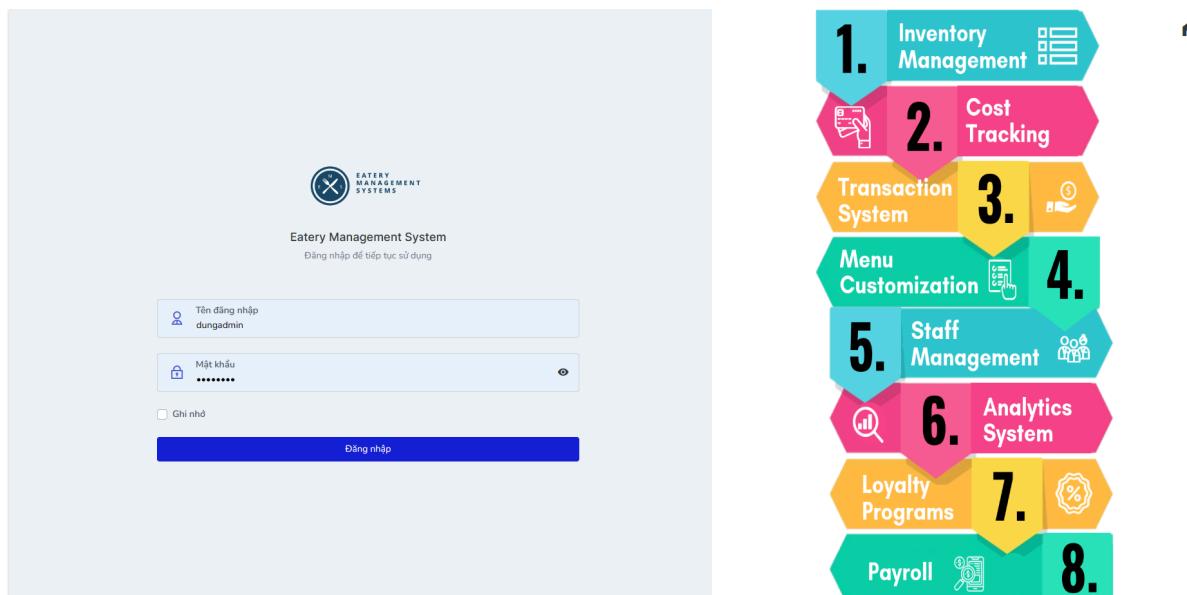


Figure 22- Login

Field Name	Field Type	Description
Tiêu đề	Text	To display the name of the system, logo and login page.
Tên đăng nhập	TextBox, Label	To let users store enter the username.
Mật khẩu	TextBox, Label	To let users enter the password.
Ghi nhớ	TextBox	To let users save their account and next login no need to input.
Đăng nhập	button	To enter the system after enter username and account.
Ảnh	picture	Is background

Table 17: Login Description

2.1.2: UC Specifications

ID and Name:	UC 1- Login		
Created By:	Dungct	Date Created	10/02/2024
Primary Actor:	User	Secondary Actors:	None
Description:	This use case is used for users to log into the system and use the authenticated features and access my personalised account.		
Trigger:	Trigger-1: User clicks Login button from the page header Trigger-2: User accesses an authenticated feature (from a link or type the page URL directly into the address bar)		
Preconditions:	PRE- 1. User account has been created & authorised		
Postconditions:	POST-1. User logs in the system successfully POST-2. The system tracked successful login		
Normal Flow:	1. User accesses the User Login screen. 2. User types in the login details. 3. User clicks the “Đăng nhập” button. 4. System validates the login details. 5. System allows users to access. 6. System tracks user's success login to the Activity Log. 7. User accesses the authorised homepage.		

Alternative Flows:	N/A
Exceptions:	<p>1.LoginAuthenticationException: When an error occurs during login validation, it could be incorrect information, incorrect syntax, or an error with the database.</p> <p>2.ActivityLogException: When there is an error logging a successful login activity, possibly due to a problem with the database or server.</p>
Priority:	High
Frequency of Use:	High
Business Rules:	BR-02
Other Information:	N/A
Assumptions:	N/A

2.2 View Products

2.2.1: UI Specifications

STT	Ảnh	Tên sản phẩm	Giá	Danh mục	Trạng thái	Quản lý
1		Nước Cam	35000	Món tráng miệng	Đang kinh doanh	
2		Casas Del Toqui C.Sauvignon	750000	Rượu vang	Đang kinh doanh	
3		Bia Tiger Bạc	35000	Bia & Rượu	Đang kinh doanh	
4		Nước suối	20000	Nước giải khát	Đang kinh doanh	
5		Lẩu cá lăng	435000	Món chính	Đang kinh doanh	

Figure 23- View products

Field Name	Field Type	Description
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Thêm mới	Button	This is for the manager or eatery owner to create a new product.
Tìm kiếm	Textbox	This is for the manager or eatery owner input keyword to search for a product.
Tìm kiếm	Button	This is for the manager or eatery owner to input keywords to search for a product.
	Icon	This is for the manager or eatery owner to view the product in detail.
	Icon	This is for the manager or eatery owner to update the product.
	Icon	This is for the manager or eatery owner to delete the product.

Table 18: UC View product description

2.2.2: UC Specifications

ID and Name:	UC 2- View products		
Created By:	Dungct	Date Created:	10/02/2024
Primary Actor:	Manager,Eatery Owner	Secondary Actors:	None
Description:	This use case is used for users to view a list of products with some basic information in the system.		
Trigger:	The use case is initiated when a manager or eatery owner clicks the “Sản phẩm” option in the sidebar menu.		
Preconditions:	PRE- 1. The manager, eatery owner has an account active and can login to the EMS Website. PRE- 2. The user’s role is authorised to access the products list.		
Postconditions:	POST-1. EMS displays list products in the system.		
Normal Flow:	1. User selects the option to view products from the main menu. 2. The system retrieves the latest product information from the database. 3. The system displays the products in a list format, including image, name, price, category, and status.		
Alternative Flows:	N/A		
Exceptions:	1.If the system cannot retrieve the product list		

	2. At step 2.0 of the Normal Flow, the system cannot retrieve product information due to a database connection issue. 3. The system displays an error message informing the user of the issue.
Priority:	High
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.3 Create Product

2.3.1: UI Specifications

The form is titled "Thêm mới". It contains five input fields with red asterisks indicating required fields: "Danh mục*", "Tên sản phẩm*", "Giá*", "Trạng thái*", and "Ảnh*". Below the input fields is a blue button labeled "Tải Ảnh Lên". At the bottom are two buttons: a grey "Đóng" button and a green "Lưu" button.

Figure 25- Create product

Field Name	Field Type	Description
Tên sản phẩm	TextBox	This is for the user to enter the name of the product.

Giá	TextBox	This is for users to enter the price of a product.
Danh mục	Select Option	This is for the user to select a category of product.
Tải ảnh lên	Button	This is for users to add new images for products.
Trạng thái	Select Option	This is for users to add status for products.
Đóng	Button	To close the pop up, create a product.
Lưu	Button	Users click a button to create a new product.

Table 22- Create product Description

2.3.2: UC Specifications

ID and Name:	UC 4- Create product		
Created By:	Dungct	Date Created:	10/02/2024
Primary Actor:	Manager,Eatery Owner	Secondary Actors:	None
Description:	This use case is initiated when the manager or eatery owner selects the "Thêm mới" option within the "Sản phẩm" (Product) section of the EMS.		
Trigger:	This use case is initiated when a user with manager or administrator privileges selects the "Thêm mới" button to add a new product in the EMS..		
Preconditions:	PRE- 1. The manager or eatery owner has an account active and can login to the EMS Website. PRE- 2. The manager or eatery enters “Sản phẩm” in menu. PRE- 3. All required fields in the form must be validated for correct data format and completeness.		
Postconditions:	POST-1. The new product details are stored in the EMS database. POST-2. The product is now available for viewing, updating, and inclusion in transactions.		
Normal Flow:	1. The user selects the "Thêm mới" (Add New) button on the product page. 2. The EMS presents a form for the new product details. 3. The user fills in all required fields: category, product name, price, status, and uploads an image. 4. The user submits the form by clicking "Lưu" (Save). 5. The system will validate data when users enter 6. The EMS validates the data and adds the new product to the database. 7. The user receives pop up “Thành công”		
Alternative Flows:	N/A		

Exceptions:	1.If the form submission fails (e.g., due to missing mandatory fields), the EMS displays an error message and prompts the user to correct the inputs.
Priority:	High
Frequency of Use:	High
Business Rules:	BR-02, BR-09, BR-08
Other Information:	N/A
Assumptions:	N/A

2.5 Update Product

2.5.1: UI Specifications

The screenshot shows a modal window titled "Chỉnh sửa". It contains five input fields: "Danh mục" (Category) with a dropdown menu, "Tên sản phẩm" (Product Name) with a value "Nước Cam", "Giá" (Price) with a value "35000", "Trạng thái" (Status) with a dropdown menu, and "Ảnh" (Image) with a URL "http://150.95.113.52:8080/api/file/download/74OAYT1U5U8UWL45LMOL67BDV2E.png". Below the fields are three buttons: a blue "Tải Ánh Lên" (Upload Image) button, a grey "Đóng" (Close) button, and a green "Lưu" (Save) button.

Figure 26- Update product

Field Name	Field Type	Description
Tên sản phẩm	TextBox	This is for users to input name products.
Giá	TextBox	This is for users to input price products.
Danh mục	Select Option	This is for the user to select a category.
Trạng thái	Select Option	This is for the user to select status.

Ảnh	TextBox	This is for users to update a new image.
Tải ảnh lên	Button	This is for users to select images files from the device and upload to the website.
Đóng	Button	Users click a button, close the pop up update product.
Lưu	Button	Users click the button to update the product.

Table 1- Update product Description

2.5.2: UC Specifications

ID and Name:	UC 5- Update product		
Created By:	Dungct	Date Created:	10/02/2024
Primary Actor:	Manager,Eatery Owner	Secondary Actors:	None
Description:	The process is triggered when the manager or eatery owner chooses to update a product from the "Quản lý" section of the product screen.		
Trigger:	When manager, eatery owner click icon update in "Quản lý" column of "Sản phẩm" screen.		
Preconditions:	PRE- 1. The manager or eatery owner has an account active and can login to the EMS Website. PRE- 2. The manager or eatery owner enters "Sản phẩm" in menu. PRE- 3. The product to be edited must exist in the EMS database.		
Postconditions:	POST-1. The product's information in the database is updated with the new values. POST-2. EMS displays successfully update products for the system.		
Normal Flow:	1. The user selects a product to edit from the product list. 2. The EMS displays the "Update Product" form pre-filled with the product's existing data. 3. The user modifies the product details as needed in the form. 4. The user submits the changes by clicking the "Lưu" (Save) button. 5. The EMS validates the input data and applies the changes to the product in the database. 6. The EMS confirms that the product has been updated and reflects these changes in the product list. 7. EMS display update product successfully.		
Alternative Flows:	N/A		
Exceptions:	1. If there is a database error or a system issue preventing the update, the EMS displays a failure message and logs the error.		
Priority:	High		

Frequency of Use:	High
Business Rules:	BR-02,BR- 09, BR-08
Other Information:	N/A
Assumptions:	N/A

2.6 Create Category

2.6.1: UI Specifications

The screenshot shows a modal dialog box titled "Thêm mới danh mục". Inside the dialog, there are two required fields: "Danh mục*" and "Trạng thái*". Below these fields are two buttons: "Đóng" (Grey) and "Lưu" (Green).

Figure 31- Create Category

Field Name	Field Type	Description
Danh mục	TextBox	This is for user update category names.
Trạng thái	SelectOptions	This for the user select status of category.
Lưu	Button	This is for users to submit information.
Đóng	Button	This is for users to close and create category pop ups.

Table 32- Create Category Description

2.6.2: UC Specifications

ID and Name:	UC 10- Create Category		
Created By:	Dungct	Date Created:	10/02/2024
Primary Actor:	Manager,Eatery Owner	Secondary Actors:	None

Description:	The "Create Category" use case allows users to add a new category to organise products within the EMS. This function is crucial for maintaining an orderly system where products can be classified for better management and reporting.
Trigger:	When a manager or eatery owner click “Thêm mới” button in the screen “Danh mục”.
Preconditions:	PRE- 1. The manager or eatery owner has an account active and can login to the EMS Website. PRE- 2 The manager click “Danh mục” in menu.
Postconditions:	POST-1. A new category has been created and is now visible in the category management system. POST-2. The system's category database has been updated to include the new category.
Normal Flow:	1. The user clicks on the option to add a new category. 2. The system presents a form with the fields 'Category Name' and 'Status'. 3. The user enters a name into the 'Category Name' field and selects a 'Status' from the dropdown menu. 4. The user clicks 'Save' to create the new category. 5. The system validates the input data. 6. The system updates the database with the new category information. 7. The system displays pop up “Thành công”
Alternative Flows:	N/A
Exceptions:	1.The user enters invalid or incomplete data and attempts to save the category. 2.The system detects the validation error and does not update the database.
Priority:	High
Frequency of Use:	High
Business Rules:	BR-02
Other Information:	N/A
Assumptions:	N/A

2.7 Update Category

2.7.1: UI Specifications

Figure - Update Category

Field Name	Field Type	Description
Danh mục	TextBox	This is for user update category name
Trạng thái	SelectOptions	This is for the user to select the status of the category.
Lưu	Button	This is for users to update categories.
Đóng	Button	To close the update category pop up.

Table - Update Category Description

2.9.2: UC Specifications

ID and Name:	UC 11- Update Category		
Created By:	Dungct	Date Created:	10/02/2024
Primary Actor:	Manager,Eatery Owner	Secondary Actors:	None
Description:	This use case allows a user to update the details of an existing category, such as its name or status. The outcome is the modified category information being saved and reflected in the system.		
Trigger:	When a manager or eatery owner click to icon update in “Quản lý” column of “Danh mục” screen.		
Preconditions:	PRE-1. The manager or eatery owner click “Danh mục” in menu. PRE-2 The category to be updated exists in the system		
Postconditions:	POST-1. The category details in the database have been updated with the new values. POST-2. Any content or products associated with the category reflect the updated category details..		

Normal Flow:	<ol style="list-style-type: none"> The user selects the category they wish to edit and chooses the edit option. The system displays the category's current details in an editable form, with fields for 'Category Name' and 'Status'. The user updates the necessary fields and selects the new status from the dropdown menu. The user submits the changes by clicking 'Save'. The system validates the updated data. The system updates the category details in the database. The system displays popup is "Thành công".
Alternative Flows:	N/A
Exceptions:	<ol style="list-style-type: none"> The system detects invalid or incomplete data upon submission. The system does not save the changes and informs the user of the validation error. The user is prompted to correct the data and resubmit.
Priority:	High
Frequency of Use:	Medium
Business Rules:	BR-02
Other Information:	N/A
Assumptions:	N/A

2.8 View Detail Category

2.8.1: UI Specifications



Figure: View detail product

Field Name	Field Type	Description

ID	TextBox	To display the number code of the category.
Danh mục	Textbox	To display the name of the category.

Table - View detail category Description

2.8.2: UC Specifications

ID and Name:	UC 12 - View detail category		
Created By:	LongCH	Date Created:	5/02/2024
Primary Actor:	Manager,Eatery Owner	Secondary Actors:	None
Description:	A manager or eatery owner accesses the Eatery Management System and views detailed information of the category.		
Trigger:	When manager or eatery owner clicks icon detail in “Quản lý” column of “Danh mục” screen.		
Preconditions:	PRE- 1. The manager, eatery owner has an account active and can login to the EMS Website. PRE- 2. The manager or eatery enters “Danh mục” in menu.		
Postconditions:	POST-1. The system displays the detailed information of the category without any changes unless edited and saved by the user.		
Normal Flow:	1. The user selects the option to view details of a category. 2. The system retrieves the category information from the database based on the category ID. 3. The system displays the category details, including the ID and name, in a form to the user.		
Alternative Flows:	N/A		
Exceptions:	1.The system cannot find the category's details based on the given ID.		
Priority:	Medium		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

2.9 View Table

2.9.1: UI Specifications

The screenshot shows the 'Bàn' (Tables) view in the Eatery Management System. The sidebar on the left has 'Quản lý bàn' selected. The main area shows a table with 8 rows of data:

STT	Tên bàn	Vị trí	Trạng thái	Quản lý
1	Bàn 8	Tầng 2	Trống	
2	Bàn 7	Tầng 2	Trống	
3	Bàn 6	Tầng 2	Trống	
4	Bàn 5	Tầng 1	Trống	
5	Bàn 4	Tầng 1	Trống	
6	Bàn 3	Tầng 1	Trống	
7	Bàn 2	Tầng 1	Trống	
8	Bàn 1	Tầng 1	Trống	

Figure View tables

Field Name	Field Type	Description
Thêm mới	Button	This is for users to create new tables.
	Icon	This is for the user to view the detail table.
	Icon	This is for users to update tables.
	Icon	This is for the user to delete the table.

Table - View table Description

2.14.2: UC Specifications

ID and Name:	UC 14 - View List Table		
Created By:	LongCH	Date Created:	5/02/2024
Primary Actor:	Manager, Eatery Owner	Secondary Actors:	None
Description:	A manager or eatery owner accesses the Eatery Management System and view list table.		
Trigger:	This use case is initiated when a staff member selects the "Quản lý bàn" (Table Management) option from the system menu to view the list of tables.		

Preconditions:	PRE- 1. The manager or eatery owner has an account active and can login to the EMS Website.
Postconditions:	POST-1. The user is presented with a current and accurate list of tables and their statuses.
Normal Flow:	<ol style="list-style-type: none"> 1. The user selects the "Quản lý bàn" option from the system menu. 2. The system retrieves the current table information from the database. 3. The system displays the list of tables with columns for table number, name, location, status, and management options.
Alternative Flows:	N/A
Exceptions:	1. The system is unable to retrieve table information due to a database connectivity issue.
Priority:	High
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.10 Create Table

2.10.1: UI Specifications

The screenshot shows a modal dialog box with a light gray background. At the top left, it says "Thêm mới bàn". In the center, there are three input fields: "Tên bàn*" (Table name), "Vị trí*" (Position), and "Trạng thái*" (Status). Each field has a red asterisk indicating it is required. Below the fields are two buttons: a dark blue "Đóng" (Close) button and a teal "Lưu" (Save) button.

Figure: View Table

Field Name	Field Type	Description
Tên bàn	TextBox	This is for the user input name of the table.
Vị trí	Select Option	This is for the user to select the position of the table.

Trạng thái	Select Option	This is for user to select status of table
Đóng	Button	This is for users to close pop-up.
Lưu	Button	This is for the user to click to create a new table.

Table 41- View table Description

2.15.2: UC Specifications

ID and Name:	UC 15- Create Table		
Created By:	Dungct	Date Created:	5/02/2024
Primary Actor:	Manager,Eatery Owner	Secondary Actors:	None
Description:	A manager or eatery owner accesses the Eatery Management System and creates a new table.		
Trigger:	When a manager or eatery owner click “Thêm mới” button in the “Quản lý bàn” screen.		
Preconditions:	PRE-1. The manager or eatery owner has an account active and can login to the EMS Website. PRE-2 The manager click “Quản lý bàn” in menu.		
Postconditions:	POST-1: A new table with the specified details has been created and stored in the system. POST-2: The new table is visible and manageable within the table list.		
Normal Flow:	1. The user selects the "Thêm mới" (Add new) option in the table management module. 2. The system presents a form for entering table details, such as table name, location, and status. 3. The user fills out the form with the required information. 4. The user submits the form by clicking "Lưu" (Save). 5. The system validates the input data. 6. The system creates a new table record in the database. 7. The system displays a confirmation message that the table has been created.		
Alternative Flows:	N/A		
Exceptions:	1. The user submits the form with invalid or incomplete data. 2. The system does not create the new table and informs the user of the error.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	BR-02		

Other Information:	N/A
Assumptions:	N/A

2.11 Update Table

2.11.1: UI Specifications

The screenshot shows a modal dialog box titled "Chỉnh sửa bàn". It contains three input fields: "Tên bàn*" with the value "Bàn 8", "Vị trí*" with the value "Tầng 2", and "Trạng thái*". At the bottom are two buttons: "Đóng" (Grey) and "Lưu" (Green).

Figure: Update Table

Field Name	Field Type	Description
Tên bàn	TextBox	This is for the user input name of the table.
Vị trí	Select Option	This is for the user to choose the position of the table.
Trạng thái	Select Option	This is for the user to choose the status of the table.
Lưu	Button	This is for the user to create a new table.
Đóng	Button	This is for user to close pop-up "Chỉnh sửa bàn".

Table - Update table Description

2.11.2: UC Specifications

ID and Name:	UC 16- Update Table		
Created By:	Dungct	Date Created:	5/02/2024

Primary Actor:	Manager,Eatery Owner	Secondary Actors:	None
Description:	This use case is initiated when a user selects the option to edit an existing table's details within the table management system.		
Trigger:	When a manager or eatery owner clicks the icon update in the “Quản lý” column of the “Quản lý bàn” screen.		
Preconditions:	<p>PRE- 1. The manager or eatery owner has an account active and can login to the EMS Website.</p> <p>PRE- 2 The manager or eatery owner clicks “Quản lý bàn” in the menu.</p>		
Postconditions:	<p>POST-1. The system will display the update table successfully.</p> <p>POST-2. The information of this table will be changed.</p>		
Normal Flow:	<ol style="list-style-type: none"> 1. The user selects an existing table from the table list and clicks the edit option. 2. The system presents a form with the current details of the table (name, location, status). 3. The user updates the information as needed in the form fields. 4. The user submits the changes by clicking "Lưu" (Save). 5. The system validates the updated data. 6. The system updates the table's details in the database. 7. The system confirms the successful update to the user. 		
Alternative Flows:	N/A		
Exceptions:	<ol style="list-style-type: none"> 1.The user enters invalid data into the form fields. 2. The system does not update the table details and notifies the user of the error. 		
Priority:	High		
Frequency of Use:	Medium		
Business Rules:	BR-02		
Other Information:	N/A		
Assumptions:	N/A		

2.12 Scan QR code

2.12.1: UI Specifications

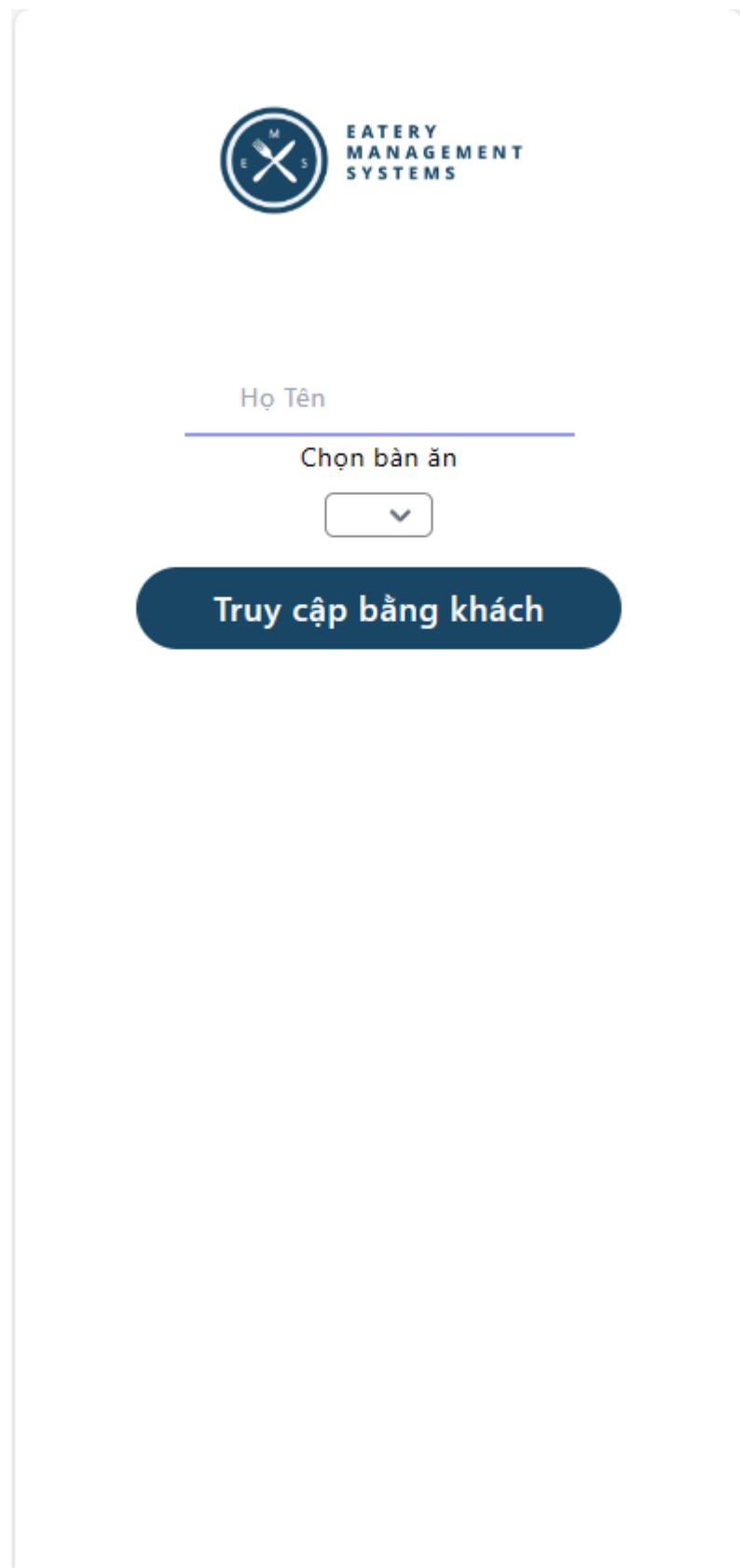


Figure 40: Scan QR code

Field Name	Field Type	Description
Chọn bàn ăn	select options	To select a table for order.
Họ tên	text box	To let customers enter names.
Truy cập bằng khách	Button	To confirm the name of customer and the customer can start the order.

Table 49: Scan QR code Description

2.12.2: UC Specifications

ID and Name:	UC 19- Scan QR code		
Created By:	LuanCV	Date Created:	3/03/2024
Primary Actor:	Customer	Secondary Actors:	None
Description:	The function allows the Customer to enter a name and start an order.		
Trigger:	When Customers scan QR code and input name page display.		
Preconditions:	PRE- 1. The Customer scans the QR code.		
Postconditions:	POST-1. The system will display the input name page after scan QR code.		
Normal Flow:	1. Customers scan QR code. 2. System will display the input information page successfully. 3. Customers input name and select table. 4. Customers click “truy cập bằng khách” button. 5. System will let customers enter the menu page.		
Alternative Flows:	N/A		
Exceptions:	1. QRCodeScanException: When the customer cannot scan the QR code because the code is invalid or there is a problem with the device's camera. 2. InputPageLoadException: When there is an error loading the information entry page, possibly due to a problem with the server or network. 3. InvalidInputException: When a customer enters invalid information, such as an empty or invalid name, or does not select a table. 4. MenuPageLoadException: When there is an error loading the menu page, possibly due to a problem with the server or network.		

Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.13 View Menu/ Filter Category

2.13.1: View Menu-Customer

2.13.1.1: UI Specifications



Figure 41- View Menu

Field Name	Field Type	Description
Tìm kiếm	TextBox	To search for dishes, drinks.

Filter danh mục	button	To filter dishes or drinks.
Data dish: Name, price and picture	picture, text	To display dish information such as name, price and picture.
Thực đơn	button	To link the menu page.
Giỏ hàng	button	To link the cart page.
Lịch sử đặt hàng	button	To link the ordered page.
Hỗ trợ và thanh toán	button	To link informative position customer pages.

Table 48: View Menu Description

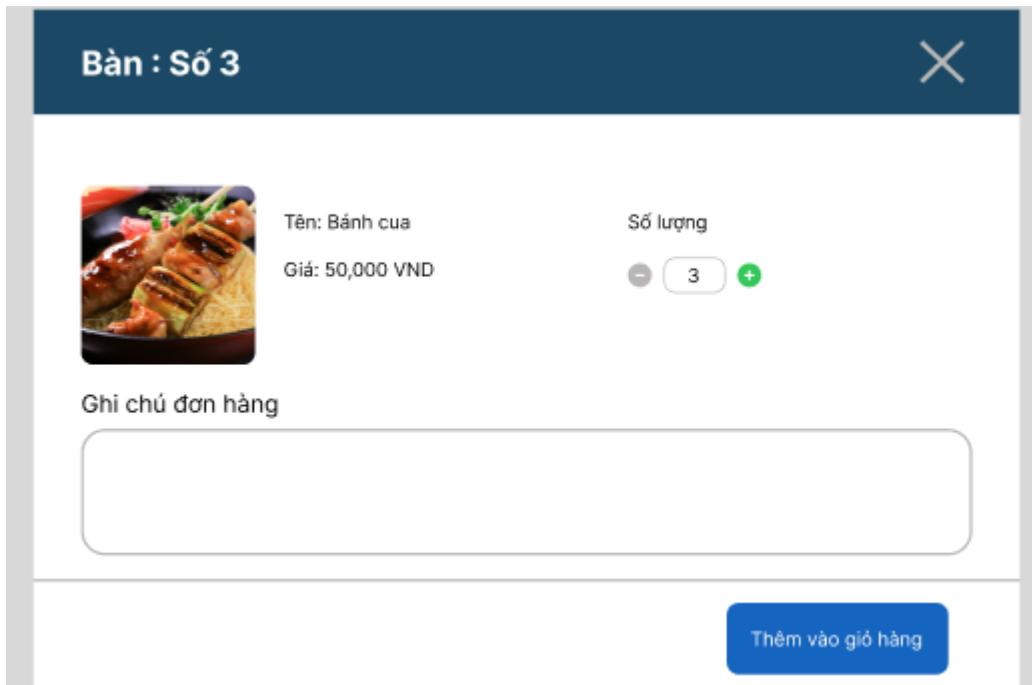


Figure 42- Add to cart

Field Name	Field Type	Description
Bàn	text	To display table order.
Data dish: Name and price	text, picture	To display information about dishes or drinks such as name, picture, price, number.
Số lượng	text	To display the number of that dish or drink.

-	button	To minus 1 number.
+	button	To add 1 number.
Ghi chú đơn hàng	text area	To note what the customer wants from that dish or drink.
Thêm vào giỏ hàng	button	To add this dish or drink to the customer's cart.

Table 49- Add to cart Description

2.13.1.2: UC Specifications

ID and Name:	UC 20.1 - View menu - Customer		
Created By:	LuanCV	Date Created:	5/03/2024
Primary Actor:	Customer	Secondary Actors:	None
Description:	The function allows the Customer to view the menu of the store and can add to cart.		
Trigger:	When Customer scan QR code and click “Thực đơn và gọi món” button in customer’s page, click “Thực đơn” button in navbar in bottom page and when customer scan QR code, enter information.		
Preconditions:	PRE- 1. The Customer scans the QR code.		
Postconditions:	POST-1. The system will display Menu page when customer click “Thực đơn” or “Thực đơn và gọi món” button. POST-2. The system will display a Menu page when customers scan QR code and enter information.		
Normal Flow:	1. Customers scan QR code and start to view the menu to add dishes to cart. 2. System display menu page to order successfully. 3. Customers click 1 dish. 4. System will show a pop up of a detailed dish. 6. Customers click “Thực đơn” button. 7. System will display a menu page. 8. Customers click “Giỏ hàng” button. 9. System will display a cart page. 10. Customers click “Lịch sử đặt hàng” button. 11. System will display a history order page. 12. Customers click “Hỗ trợ và thanh toán” button. 13. System will display a contact page.		
Alternative Flows:	1. When customer click “Thực đơn” button then display menu page.		

Exceptions:	<ol style="list-style-type: none"> 1. MenuPageLoadException: When there is an error loading the menu page, possibly due to a problem with the server or network. 2. DishDetailLoadException: When there is an error while displaying dish details, possibly due to a problem with the database or incomplete data. 3. CartPageLoadException: When there is an error loading the cart page, possibly due to a problem with the server or network. 4. OrderedDishLoadException: When there is an error loading the order history page, possibly due to a problem with the server or network. 5. ContactPageLoadException: When there is an error loading the contact page, possibly due to a problem with the server or network.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.14.2: Filter dish - Customer

2.14.2.1: UI Specifications



Figure 43- Filter Category

Field Name	Field Type	Description
	button	To filter dishes or drinks.
Tìm kiếm sản phẩm	Textbox	Search name of product

Table 50- Filter menu Description

2.14.2.2: UC Specifications

ID and Name:	UC 20.2- Filter category- Customer		
Created By:	LuanCV	Date Created:	5/03/2024
Primary Actor:	Customer	Secondary Actors:	None
Description:	The "Filter Category" use case allows customers to navigate through different categories of the menu such as appetisers, main courses, beverages, etc., to quickly find items of their preference. The outcome of executing this use case is a tailored view of the menu that aligns with the customer's interests or dietary requirements.		
Trigger:	When Customer scan QR code and click "Thực đơn và gọi món" button in customer's page, click "Thực đơn" button in navbar in bottom page and when customer scan QR code, enter information.		
Preconditions:	PRE-1. The menu items are pre-categorized within the system's database.		
Postconditions:	POST-1. The system will display Menu page when customer click "Thực đơn" or "Thực đơn và gọi món" button. POST-2. The customer can view detailed information about items, including prices and descriptions.		
Normal Flow:	1. Customer opens the menu system. 2. Customer selects a category from the menu, such as "Món tráng miệng" (desserts). 3. The system filters and displays only the items from the chosen category. 4. Customer browses through the filtered list and selects an item if they wish to view more details or to order.		
Alternative Flows:	N/A		
Exceptions:	1. CategoryListLoadException: When there is an error loading the category list, possibly due to a problem with the server or network.		

	2. CategorySelectionException: When there is an error selecting a category, such as the category does not exist or there is an error with the input.
Priority:	High
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 51- Filter menu Description

2.15 View Cart - Customer

2.15.1: UI Specifications

Mời bạn chọn món

🔍



Sản phẩm: Nước ép nho

Giá: ₫50,000

Số lượng: - 2 +



Sản phẩm: Nước ép táo

Giá: ₫60,000

Số lượng: - 1 +

Tổng hàng: ₫160,000

Gọi món



Thực đơn



Lịch sử



Giỏ hàng



Hỗ trợ và
thanh toán

Figure 45- View Cart

Field Name	Field Type	Description
------------	------------	-------------

Tiêu đề	text	To display the name of the customer and table name.
Search	textbox	To display the banner of the customer page.
Data: name, price, number, picture	text, picture	To display information about dishes or drinks such as name, price, amount of number.
Xóa	button	To delete dishes or drinks.
-	button	To minus 1 number.
+	button	To add 1 number.
Tổng tiền	text	To display the total money of order.
Gọi món	button	To create order.

Table 54- View Cart Description

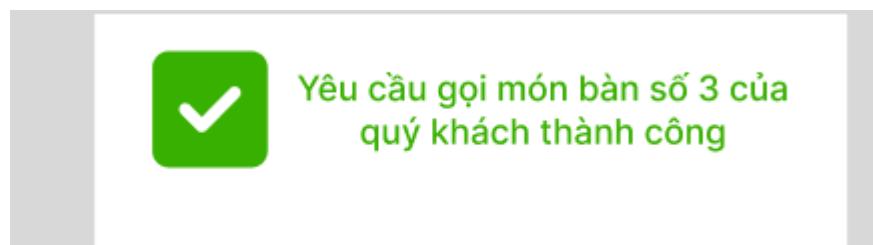


Figure 46- Order Notification

Field Name	Field Type	Description
Tiêu đề	text	To display that order was created successfully to the customer.

Table 55- Order Notification Description

2.15.2: UC Specifications

ID and Name:	UC 21-View Cart - Customer		
Created By:	Namlh	Date Created:	5/03/2024
Primary Actor:	Customer	Secondary Actors:	None

Description:	The function allows the Customer to view the cart and can start to order.
Trigger:	When Customer scan QR code and click “Giỏ hàng” button in navbar in bottom page.
Preconditions:	PRE- 1. The Customer scans the QR code to enter the contact page.
Postconditions:	POST-1. The system will display cart page when customer click click “GiỎ hàng” button in navbar in bottom page.
Normal Flow:	<ol style="list-style-type: none"> 1. Customers want to check out dishes in the cart. 2. Click “GiỎ hàng” button. 3. System display cart page to customers successfully. 4. Customers click the “Xóa” button to delete 1 dish or drink from order. 5. System will delete that dish. 6. Customers click the “-” button. 7. System will decrease 1 amount of dish. 8. Customers click the “+” button. 9. System will increase 1 amount of dish. 10. Customer click "Gọi món" button. 11. System will display message orders created for customers.
Alternative Flows:	N/A
Exceptions:	<ol style="list-style-type: none"> 1. CartPageLoadException: When there is an error loading the cart page, possibly due to a problem with the server or network. 2. DeleteItemException: When there is an error while deleting an item or drink from the cart. 3. UpdateItemQuantityException: When there is an error while increasing or decreasing the number of dishes or drinks in the shopping cart. 4. OrderCreationException: When there is an error during order creation, possibly due to a problem with the server or data.
Priority:	High
Frequency of Use:	N/A
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.16 View Order Dishes - Customer

2.16.1: UI Specifications

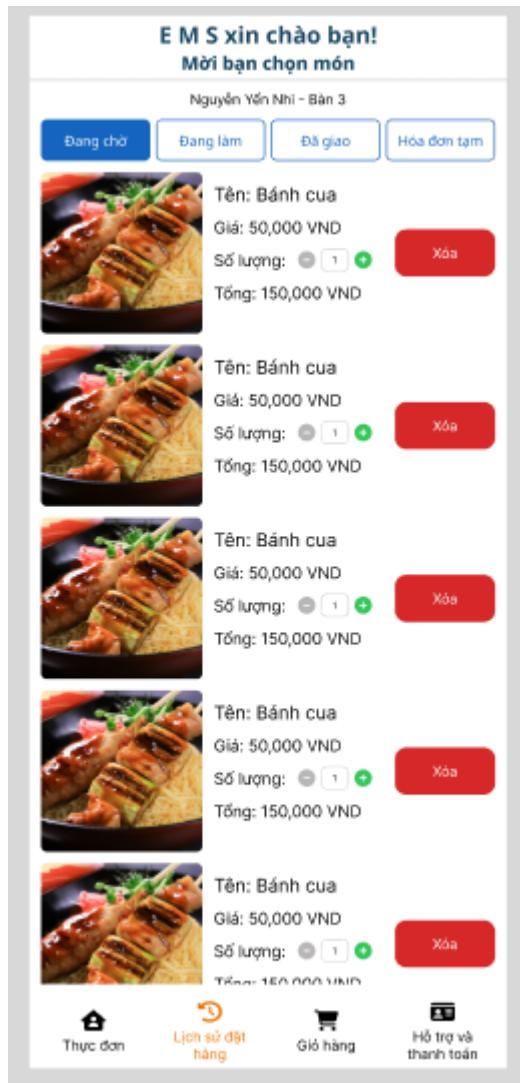


Figure 47- View waiting dishes

Field Name	Field Type	Description
Tiêu đề	text	To display the name of the customer and table name.
Đang chờ	button	To display all ordered dishes or drinks such as name, price, amount of number and picture. Customer can change the order by delete or increase or decrease number of dishes
Data dish: name, price, number, total money of each one and picture	text, picture	To display information about dishes such as name, price, number, total money of each one and picture.

+	button	To add one number of dishes.
-	button	To minus one number of dish
Xóa	button	To delete dishes of order.
Đang làm	button	To display all ordered dishes or drinks that the waiter confirmed such as name, price, amount of number and picture.
Đã giao	button	To display all ordered dishes or drinks that have been delivered to customers such as name, price, amount of number and picture.
Hóa đơn tạm	button	To display all ordered bill dishes or drinks such as name, price, amount of number picture and total money of order.

Table 56- View waiting dishes Description

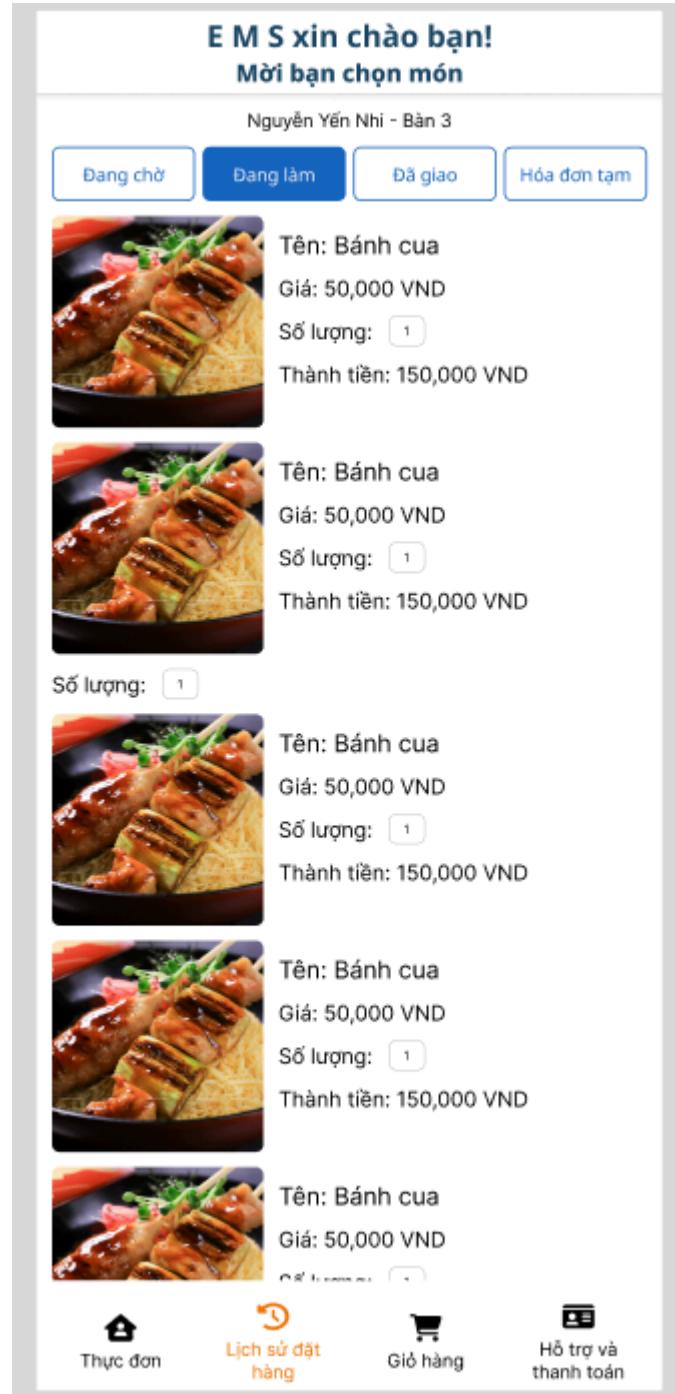


Figure 48- View doing dishes

Field Name	Field Type	Description
Tiêu đề	text	To display the name of the customer and table name.

Đang chờ	button	To display all ordered dishes or drinks such as name, price, amount of number and picture. Customer can change the order by delete or increase or decrease number of dishes
Data dish: name, price, number, total money of each one and picture	text, picture	To display information about dishes such as name, price, number, total money of each one and picture.
Đang làm	button	To display all ordered dishes or drinks that the waiter confirmed such as name, price, amount of number and picture.
Đã giao	button	To display all ordered dishes or drinks that have been delivered to customers such as name, price, amount of number and picture.
Hóa đơn tạm	button	To display all ordered bill dishes or drinks such as name, price, amount of number picture and total money of order.

Table 57- View doing dishes Description

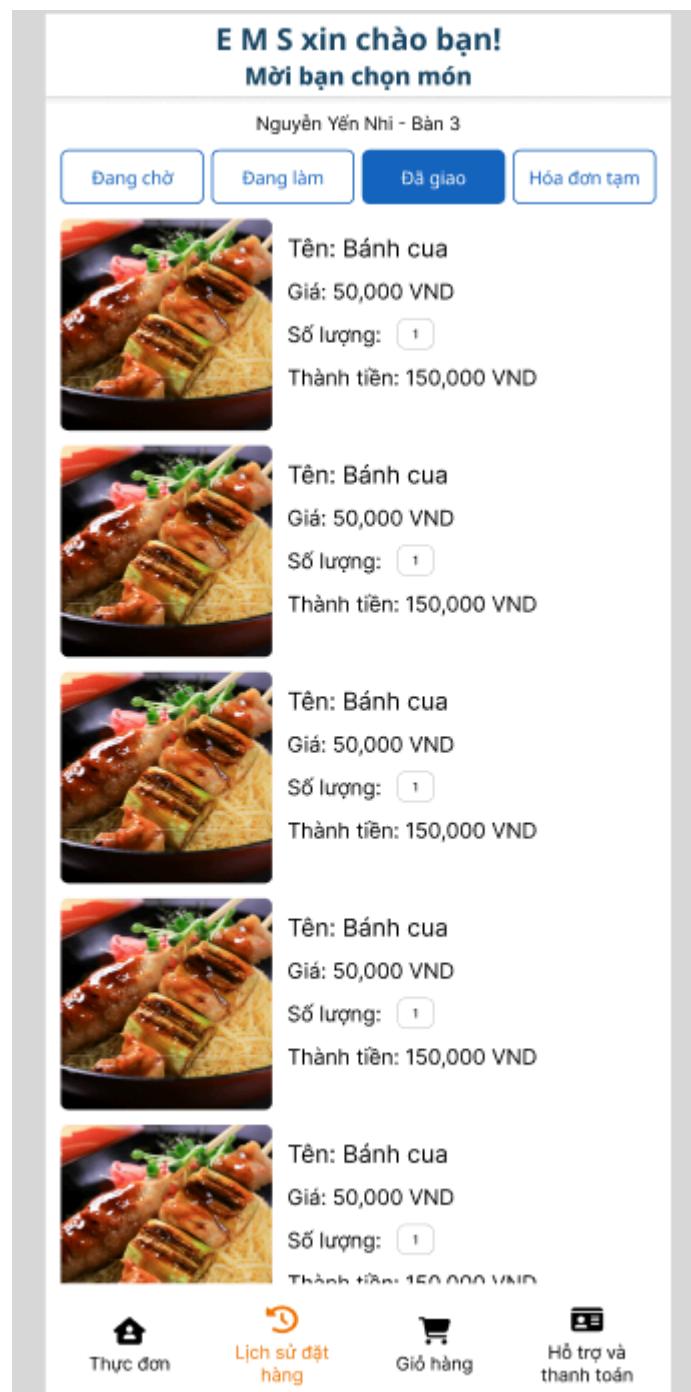


Figure 49- View delivered dishes

Field Name	Field Type	Description
Tiêu đề	text	To display the name of the customer and table name.

Đang chờ	button	To display all ordered dishes or drinks such as name, price, amount of number and picture. Customer can change the order by delete or increase or decrease number of dishes
Data dish: name, price, number, total money of each one and picture	text, picture	To display information about dishes such as name, price, number, total money of each one and picture.
Đang làm	button	To display all ordered dishes or drinks that the waiter confirmed such as name, price, amount of number and picture.
Đã giao	button	To display all ordered dishes or drinks that have been delivered to customers such as name, price, amount of number and picture.
Hóa đơn tạm	button	To display all ordered bill dishes or drinks such as name, price, amount of number picture and total money of order.

Table 58- View delivered dishes Description

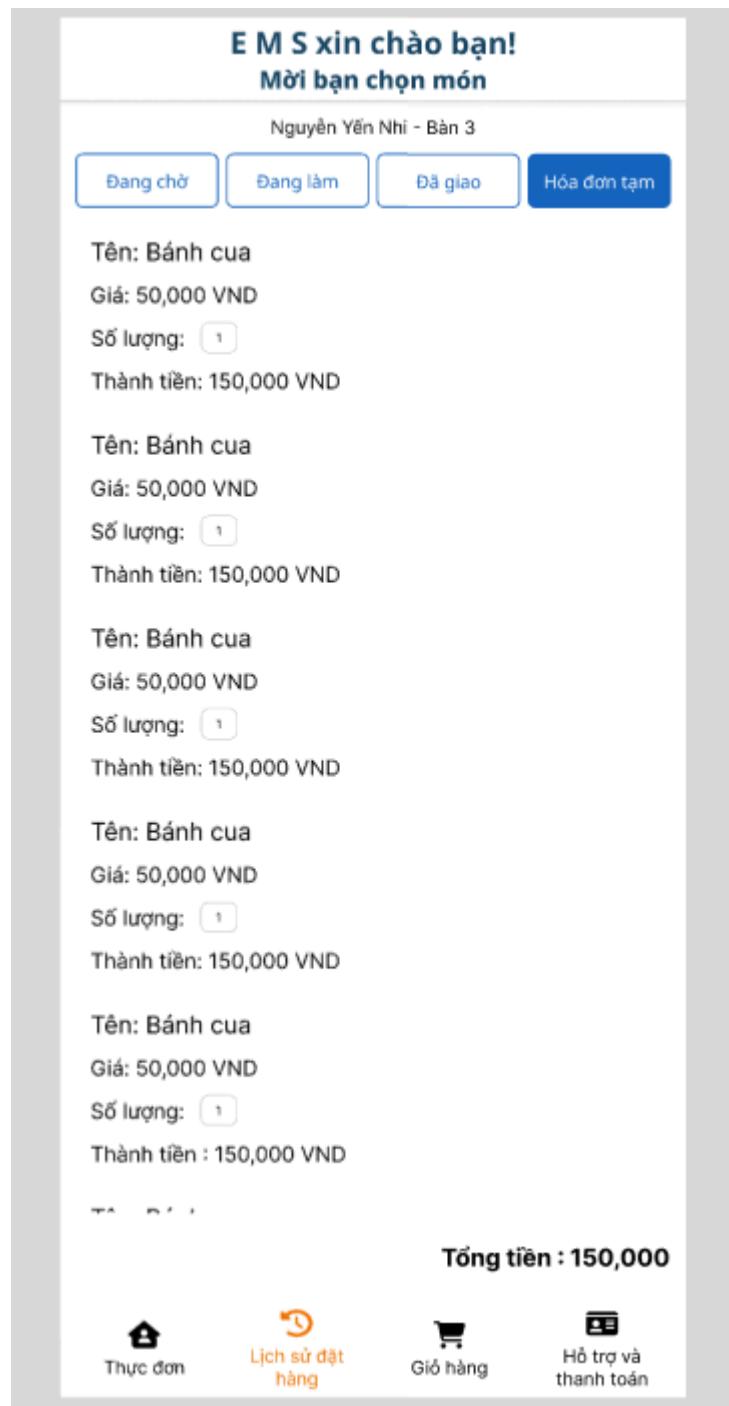


Figure 50- View temporary bill

Field Name	Field Type	Description
Tiêu đề 1	text	To display the banner of the customer page.
Tiêu đề 2	text	To display the name of the customer and the table name.

Đang chờ	button	To display all ordered dishes or drinks such as name, price, amount of number and picture. Customer can change the order by delete or increase or decrease number of dishes
Data dish: name, price, number, total money of each one, total money of bill and picture.	text, picture	To display information of dishes such as name, price, number, total money of each one, total money of bill and picture.
Đã xác nhận		To display all ordered dishes or drinks that the waiter confirmed such as name, price, amount of number and picture.
Đã giao		To display all ordered dishes or drinks that have been delivered to customers such as name, price, amount of number and picture.
Hóa đơn tạm		To display all ordered bill dishes or drinks such as name, price, amount of number picture and total money of order.

Table 59- View temporary bill Description

2.16.2: UC Specifications

ID and Name:	UC 22-View Order history		
Created By:	Namlh	Date Created:	5/03/2024
Primary Actor:	Customer	Secondary Actors:	None
Description:	The function allows the Customer to view the history ordered.		
Trigger:	When Customer click “Lịch sử đặt hàng” button in bottom page.		
Preconditions:	PRE- 1. The Customer scans the QR code to enter the customer page. PRE- 2. The Customer ordered.		
Postconditions:	POST-1. The system will display a successful list of all dishes and drinks that customers ordered. POST-2. The system will display a successful list of all dishes and drinks that customers ordered when the customer clicks the “Đang làm” button. POST-3. The system will display a successful list of all dishes and drinks that customers ordered when the customer clicks the “Đã giao” button.		

	POST-4. The system will display a successful list of all dishes and drinks that customers ordered when the customer clicks the “Hóa đơn tạm” button.
Normal Flow:	<ol style="list-style-type: none"> 1. Customers want to check out dishes that were ordered in the ordered dishes page. 2. Click “Lịch sử đặt hàng” button. 3. System display ordered dishes page to customer successfully. 4. Customers click the “Xóa” button to delete 1 dish or drink from order. 5. System will delete that dish. 6. Customers click the “-” button. 7. System will decrease 1 amount of dish. 8. Customers click the “+” button. 9. System will increase 1 amount of dish. 10. Click “Đang làm” button. 11. System displayed confirmed order dishes to customers successfully. 12. Click “Đã giao” button. 13. System display delivered dishes to customers successfully. 14. Click “Hóa đơn tạm” button. 15. System display ordered bill to customer successfully.
Alternative Flows:	N/A
Exceptions:	<ol style="list-style-type: none"> 1. OrderHistoryLoadException: When there is an error loading the order history page, it may be due to a problem with the server or network. 2. DeleteDishException: When there is an error while deleting a dish from the order history. 3. UpdateDishQuantityException: When there is an error while increasing or decreasing the number of dishes in the order history. 4. InProgressLoadException: When there is an error loading the "In Progress" page, possibly due to a problem with the server or network. 5. DeliveredLoadException: When there is an error loading the "Delivered" page, possibly due to a problem with the server or network. 6. TemporaryBillLoadException: When there is an error loading the temporary bill page, possibly due to a problem with the server or network.
Priority:	High
Frequency of Use:	N/A
Business Rules:	Medium
Other Information:	N/A
Assumptions:	N/A

2.17 Contact - Customer

2.17.1: UI Specifications

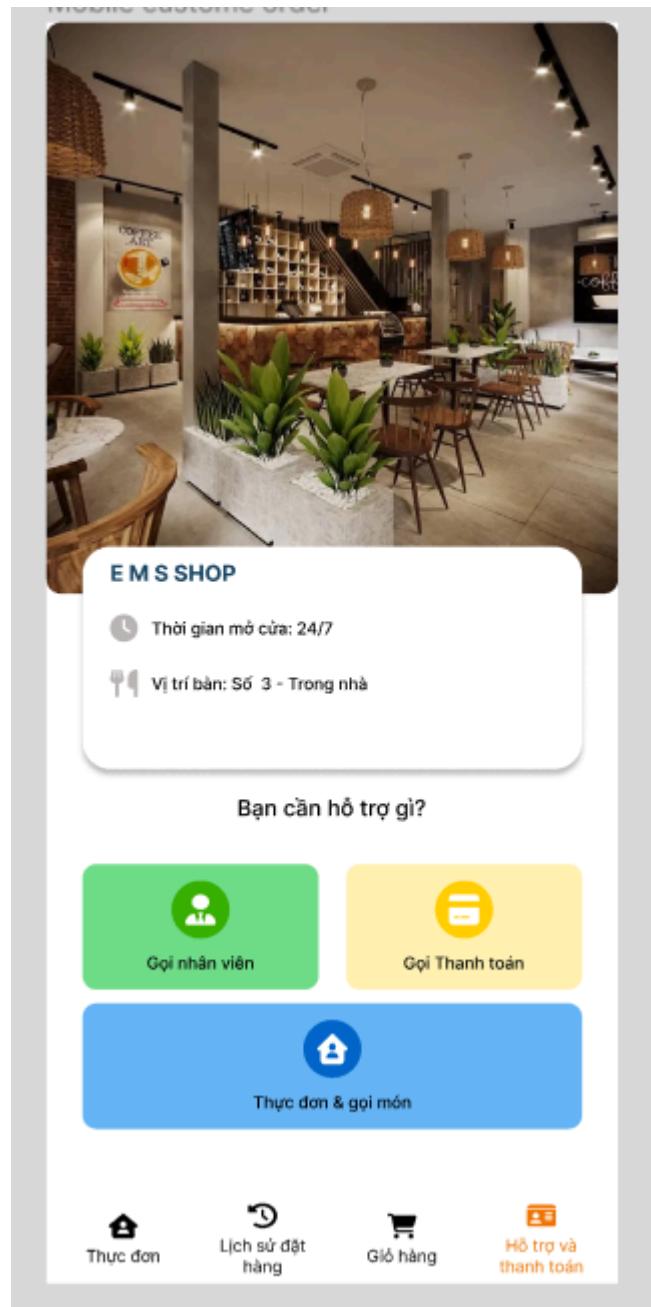


Figure 51- Contact

Field Name	Field Type	Description
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Data	text	To display the information of the shop's table order, area and name of the customer.
Gọi nhân viên	button	To call staff to solve the problems from order or eating.
Gọi thanh toán	button	To call staff to pay the order.
Thực đơn và gọi món	button	To link the menu page.

Table 61- Contact Description

2.17.2: UC Specifications

ID and Name:	UC 23- Contact - Customer		
Created By:	Namlh	Date Created:	5/03/2024
Primary Actor:	Customer	Secondary Actors:	None
Description:	The function allows the Customer to order, call staff, and call for payment.		
Trigger:	When Customers scan QR code and enter the menu page and click “Hỗ trợ và thanh toán” button in bottom page.		
Preconditions:	PRE- 1. The Customer scans the QR code and enters the menu page.		
Postconditions:	POST-1. The system will display a successful customer page when they click “Hỗ trợ và thanh toán” button in bottom page.		
Normal Flow:	1. Customers scan QR code to enter the contact page. 2. System will display the contact page successfully. 3. When customer click “Gọi nhân viên” button 4. System will display notification “Đã gọi nhân viên”. 5. When customer click “Gọi thanh toán” button. 6. System will display notification “Đã gọi thanh toán”. 7. When customer click “Thực đơn & gọi món” button. 8. System display menu page.		
Alternative Flows:	N/A		
Exceptions:	1. ContactPageLoadException: When an error occurs while uploading your contact page, you may have server or network problems. 2. CallStaffButtonException: When there is an error during the process of sending a request, call staff.		

	<p>3. CallPaymentButtonException: When there is an error during the process of sending a payment request.</p> <p>4. MenuPageLoadException: When there is an error loading the menu page, it may be due to a problem with the server or network.</p>
Priority:	High
Frequency of Use:	N/A
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.18 View list order dish - Chef

2.18.1: UI Specifications

Chờ chế biến		Món ăn	Theo bàn
Tên Món	Ghi chú	Số lượng	Quản lý
Miến xào 21/03/2024	Yêu cầu: không quá khô	1	> >>
Miến xào 21/03/2024	Yêu cầu: không quá khô	1	> >>
Miến xào 21/03/2024	Yêu cầu: không quá khô	1	> >>
Miến xào 21/03/2024	Yêu cầu: không quá khô	1	> >>
Miến xào 21/03/2024	Yêu cầu: không quá khô	1	> >>
Miến xào 21/03/2024	Yêu cầu: không quá khô	1	> >>
Miến xào 21/03/2024	Yêu cầu: không quá khô	1	> >>

Figure 52- View list order dish

Field Name	Field Type	Description
Data table: Name, description, unit and management	text, button	To display the information of order that is the name of the dish, description and unit.
Next 1	button	To update dish status from doing to done with 1 unit.
Next all	button	To update dish status from doing to done with all units.
Ưu tiên	button	To step to the order dish page.

Theo bàn	button	To step to order for the table page.
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Table 63- View list order dish Description

2.18.2: UC Specifications

ID and Name:	UC 24- View list order dish		
Created By:	Namlh	Date Created:	5/03/2024
Primary Actor:	Chef	Secondary Actors:	None
Description:	The function allows the chef to view the list of dishes in order.		
Trigger:	When the chef logs into the website.		
Preconditions:	PRE- 1. The Chef login into the website.		
Postconditions:	POST-1. The system will display a successful list order dish page when they login successfully.		
Normal Flow:	<ol style="list-style-type: none"> 1. The system displays the "Chò ché biến" dashboard. 2. The kitchen staff views the list of dishes, along with their notes and quantities. 3. The kitchen staff selects an order to view more details if needed. 4. The kitchen staff initiates the preparation of the dishes based on the list. 5. As each dish is prepared, the staff updates the system, marking dishes as "in progress" or "completed." 6. The system refreshes the list to reflect the current state of order preparation. 		
Alternative Flows:	N/A		
Exceptions:	<ol style="list-style-type: none"> 1. OrderDishListPageLoadException: When there is an error loading the dish list page, possibly due to a problem with the server, database, or network. 2. DatabaseConnectionException: When there is an error accessing the database to get the dish list, possibly due to the database being unavailable or an error in the query. 3. If the system fails to update the order status, it shows an error message, and the kitchen staff can attempt to update it again. 		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		

Other Information:	N/A
Assumptions:	N/A

2.19 Update status order dish-Chef

2.19.1: UI Specifications

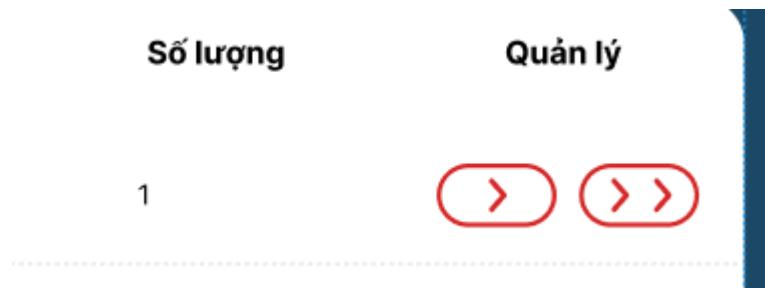


Figure 53- Update status order dish to done

Field Name	Field Type	Description
Next 1	button	To update dish status from doing to done with 1 unit.
Next all	button	To update dish status from doing to done with all units.

Table 65- Update status order dish to done Description



Figure 1- Update status order dish to doing

Field Name	Field Type	Description

Back 1	button	To update dish status from done to doing with 1 number.
Back all	button	To update dish status from done to doing with all numbers.

Table 66- Update status order dish to finished Description

2.19.2: UC Specifications

ID and Name:	UC 25- Update status order dish		
Created By:	Dunght	Date Created:	5/03/2024
Primary Actor:	Chef	Secondary Actors:	None
Description:	The function allows the Chef to update the status of ordered dishes from doing to done and from done to doing .		
Trigger:	When the chef clicks the “Update” button to change the status of the dish.		
Preconditions:	PRE- 1. The Chef login into the website and inside view list order dishes.		
Postconditions:	POST-1. The system will display a successful update status of the dish when the chef updates.		
Normal Flow:	1. Chef wants to update the status of the dish after one dish. 2. Chef clicks the “next 1” button. 3. System will change the status of the dish with 1 unit and put that dish to the finished dish page. 3. Chef clicks the “next all” button. 4. System will change the status of the dish when all units are done and put that dish to the finished dish page. 5. Chef clicks the “back 1” button. 6. System will change the status of the dish with 1 unit and put that dish to the list order dish page. 7. Chef clicks the “back all” button. 8. System will change the status of the dish when all units are done and put that dish to the finished dish page.		
Alternative Flows:	N/A		

Exceptions:	1. DishStatusUpdateException: When there is an error updating the status of the dish, possibly due to a problem with the database or source code related to updating the status. 2. DishNavigationException: When there is an error during navigation a dish from one list to another
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.20 View list finished dish

2.20.1: UI Specifications

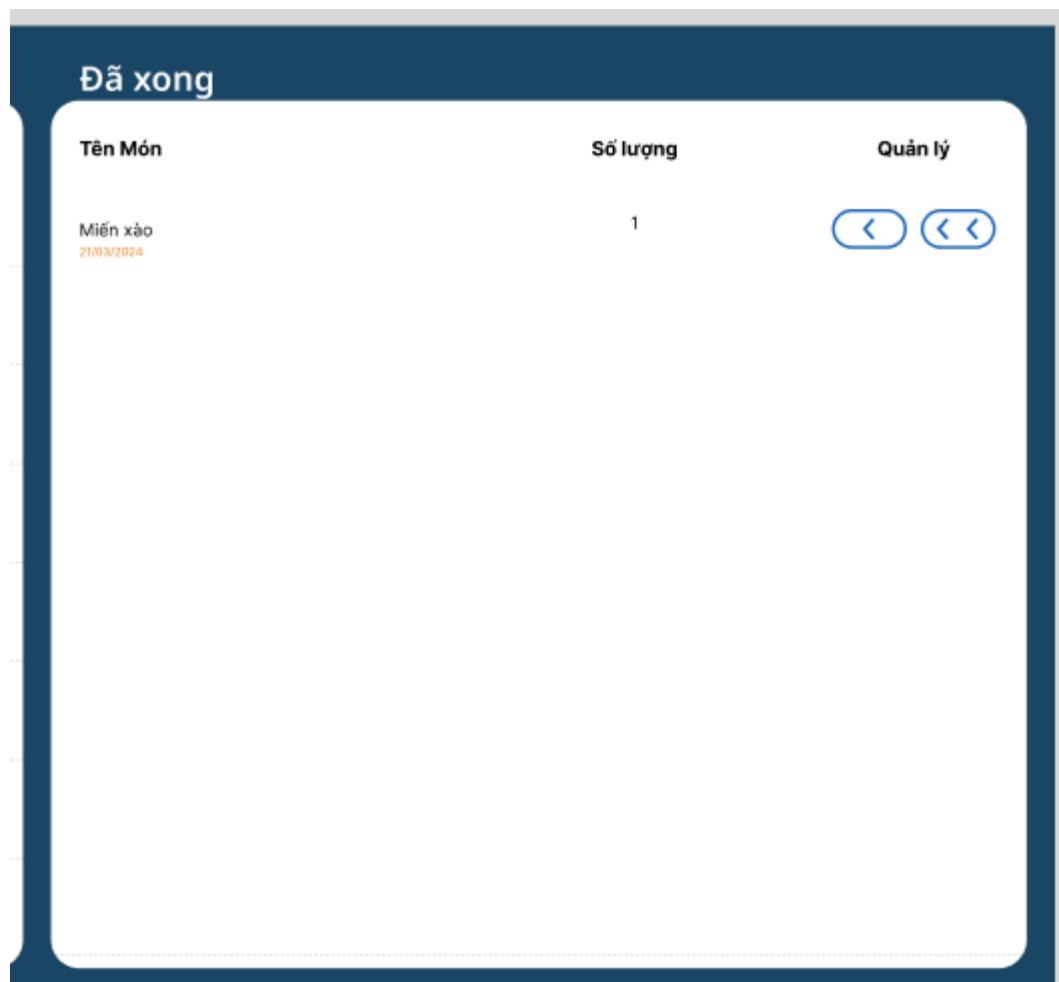


Figure 54- View list finished dish

Field Name	Field Type	Description
Data table: Name, unit and management	text	To display the information of order that is the name of the dish, description and unit.
Back 1	button	To update dish status from done to doing with 1 unit.
Back all	button	To update dish status from done to doing with all units.

Table 68- View list finished dish Description

2.20.2: UC Specifications

ID and Name:	UC 26- View list finished dish		
Created By:	Dunghit	Date Created:	5/03/2024
Primary Actor:	Chef	Secondary Actors:	None
Description:	The function allows the chef to view the finished dish in order.		
Trigger:	When the chef logs into the website.		
Preconditions:	PRE- 1. The Chef login into the website.		
Postconditions:	POST-1. The system will display a successful list order dish page when they login successfully.		
Normal Flow:	1. Chef wants to see list finished dish to check the dishes after doing. 2. System will display list finished dish page to the chef successfully.		
Alternative Flows:	N/A		
Exceptions:	1. FinishedDishListPageLoadException: When there is an error loading the finished dish list page, possibly due to a problem with the server, database, or network. 2. DataMismatchException: When there is a difference between the expected data and the actual data in the completed dish list, leading to a discrepancy.		
Priority:	High		
Frequency of Use:	High		

Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.21 View table - waiter

2.21.1: UI Specifications

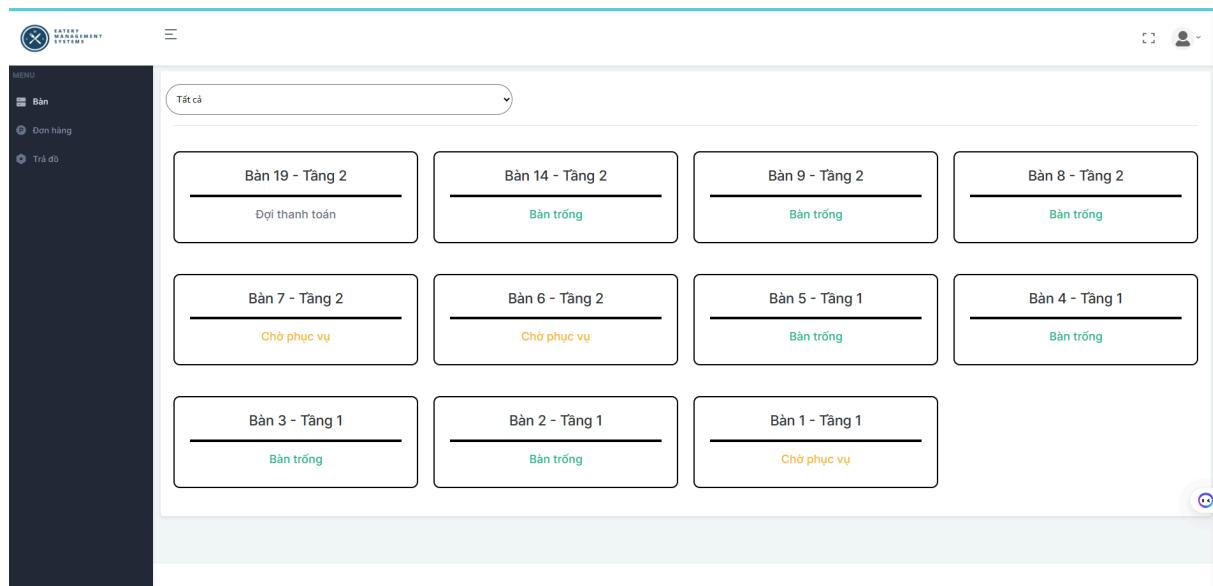


Figure 55- View table

Field Name	Field Type	Description
Filter	select options	To filter tables for status.
Data table : Name and status	text	To display the information of the table such as name, area and status of table.

Table 70- View table Description

2.21.2: UC Specifications

ID and Name:	UC 27- View table		
Created By:	Dunght	Date Created:	5/03/2024

Primary Actor:	Waiter	Secondary Actors:	None
Description:	This use case provides the waiter with a real-time overview of the status of tables within the restaurant, which is crucial for efficiently managing guest seating and ensuring timely service. The outcome is an organised seating and service flow that optimises restaurant operations and enhances customer satisfaction.		
Trigger:	The use case is initiated when a waiter or service staff selects the "Bàn" (Table) option from the system menu to view the status of tables in the restaurant.		
Preconditions:	PRE-1. The system has data on the occupancy and service status of all tables.		
Postconditions:	POST-1. The system will display a successful view table page when they login successfully.		
Normal Flow:	<ol style="list-style-type: none"> 1. The waiter selects the "Bàn" option to view table status. 2. The system displays a layout of the restaurant's tables, showing their current status, such as "Đợi thanh toán" (awaiting payment) or "Bàn trống" (empty table), along with their location (e.g., "Tầng 1" for the first floor). 3. The waiter uses the information to direct new guests to empty tables or to attend to tables that require service. 		
Alternative Flows:	N/A		
Exceptions:	1. ViewTablePageLoadException: When there is an error loading the table selection page, possibly due to a problem with the server or network.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

2.22 Filter table-Waiter

2.22.1: UI Specifications

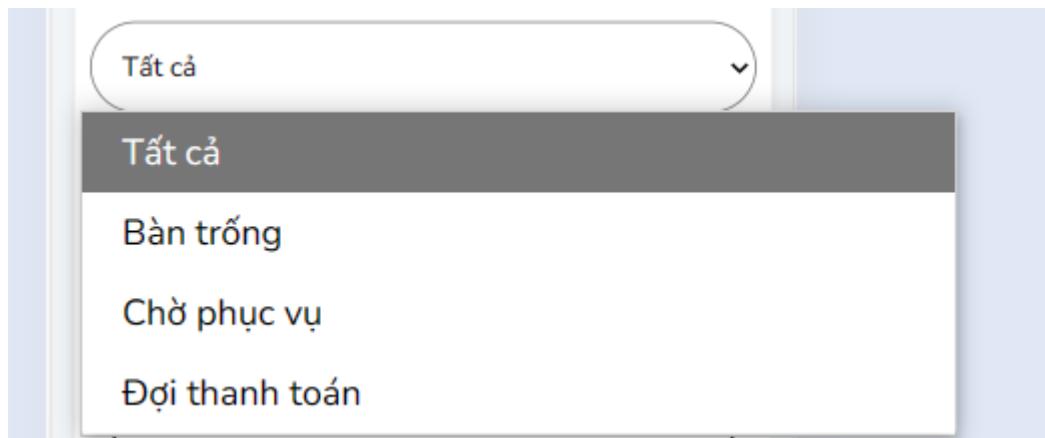


Figure 56- Filter table

Field Name	Field Type	Description
Data filter	text	To display all status of the table.
Filter	select options	To select a status to filter.

Table 72- Filter table Description

2.22.2: UC Specifications

ID and Name:	UC 28- Filter table		
Created By:	Dunght	Date Created:	5/03/2024
Primary Actor:	Waiter	Secondary Actors:	None
Description:	The function allows the Waiters to filter tables for status.		
Trigger:	When Waiters view the table page and select filters.		
Preconditions:	PRE- 1. The Waiters login website successfully. PRE- 2. The waiters in the view table page.		
Postconditions:	POST-1. The system will display a successful view table page when they login successfully. POST-2. The system will display a successful filter table when they select a status.		

Normal Flow:	<ol style="list-style-type: none"> 1. Waiters want to select the status of the table to filter the table. 2. Waiters click “Filter” selection. 3. System will display the all status of the table. 4. Waiters click “Tất cả” option. 5. System will display all the tables. 6. Waiters click “Bàn trống” option. 7. System will display all the tables not ordered. 8. Waiters click “Chờ phục vụ” option. 9. System will display all the tables that are ordering. 10. Waiters click “Đợi thanh toán” option. 11. System will display all the tables that are waiting for payment.
Alternative Flows:	N/A
Exceptions:	<ol style="list-style-type: none"> 1. TableStatusOptionsLoadException: When there is an error loading table status options, possibly due to a problem with the server or database. 2. TableStatusSelectionException: When there is an error during table status option selection, possibly due to data problems or technical errors. 3. FilteredTableListLoadException: When there is an error loading the table list according to the selected state, possibly due to a problem with the server or database.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.23 Create order-Waiter

2.23.1: UI Specifications

Nhập tên khách hàng

Tên bàn:

Bàn 4

Họ tên:

Đóng Xác nhận

Figure 57- Create order

Field Name	Field Type	Description
Tên bàn	text, label	To display the name of the table.
Họ tên	textbox, label	To input the name of the customer.
Đóng	button	To cancel, create order.
Xác nhận	button	To confirm create order.

Table 73- Contact page Description

2.29.2: UC Specifications

ID and Name:	UC 29- Create order		
Created By:	Dungct	Date Created:	5/03/2024
Primary Actor:	Waiters	Secondary Actors:	None
Description:	The function allows the Waiters to create an order.		
Trigger:	When Waiters input name and confirm create order.		
Preconditions:	PRE- 1. The Waiters select a table that is not ordered.		
Postconditions:	POST-1. The system will display a message successfully create order when they click confirm create order.		
Normal Flow:	1. Waiters want to select a table to start creating an order. 2. Waiters click a table that is not ordered. 3. System will display a pop up create order successfully. 4. Waiter input name of customer. 5. Waiters click “Xác nhận” button. 6. System will display the message created successfully. 7. System will display the menu page. 8. Waiters click the “Đóng” button. 9. System will cancel the create order.		
Alternative Flows:	N/A		
Exceptions:	1. CreateOrderPopupLoadException: When there is an error while displaying the order creation pop-up window, possibly due to a problem with the server, database, or network.		

	<p>2. CustomerInfoInputException: When there is an error while entering customer information, such as invalid information or missing required information.</p> <p>3. OrderConfirmationException: When there is an error during the order information confirmation process, possibly due to a problem with the database or invalid data.</p> <p>4. MenuPageLoadException: When there is an error loading the menu page, possibly due to a problem with the server or network.</p>
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.24 Filter dish-Waiter

2.24.1: UI Specifications

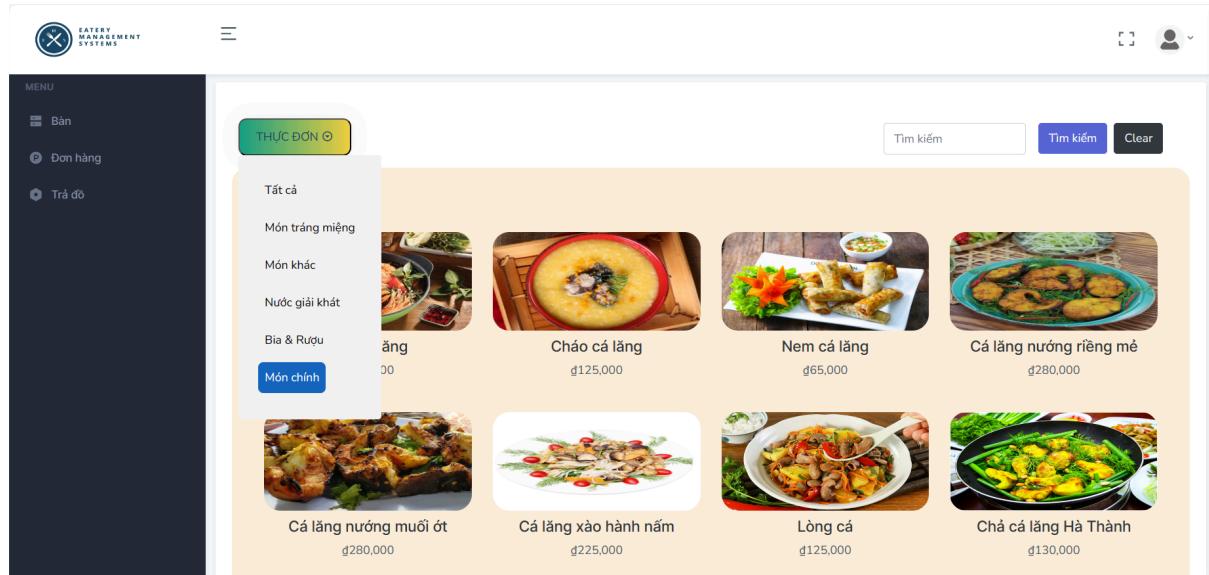


Figure 60- Filter dish

Field Name	Field Type	Description
Thực đơn	button	Waiter used to filter out dishes

Table 76- Filter dish

2.24.2: UC Specifications

ID and Name:	UC 32- Filter dish		
Created By:	LuanCV	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None
Description:	This use case allows the waiter to filter the menu items based on specific criteria such as dish type or price range..		
Trigger:	When Waiter click button “Thực đơn” system show list Category		
Preconditions:	PRE- 1. Current menu items are available and correctly categorised in the system		
Postconditions:	POST-1. The system displays only the menu items that match the filter criteria.		
Normal Flow:	<ol style="list-style-type: none"> 1. Waiter selects the "Filter dish" option on the menu screen. 2. The system presents filtering options (e.g., dish type, price range). 3. Waiter specifies the filtering criteria. 4. The system processes the criteria and updates the menu display accordingly. 		
Alternative Flows:	N/A		
Exceptions:	N/A		
Priority:	High		
Frequency of Use:	Medium		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

2.25 View Cart -Waiter

2.25.1: UI Specifications

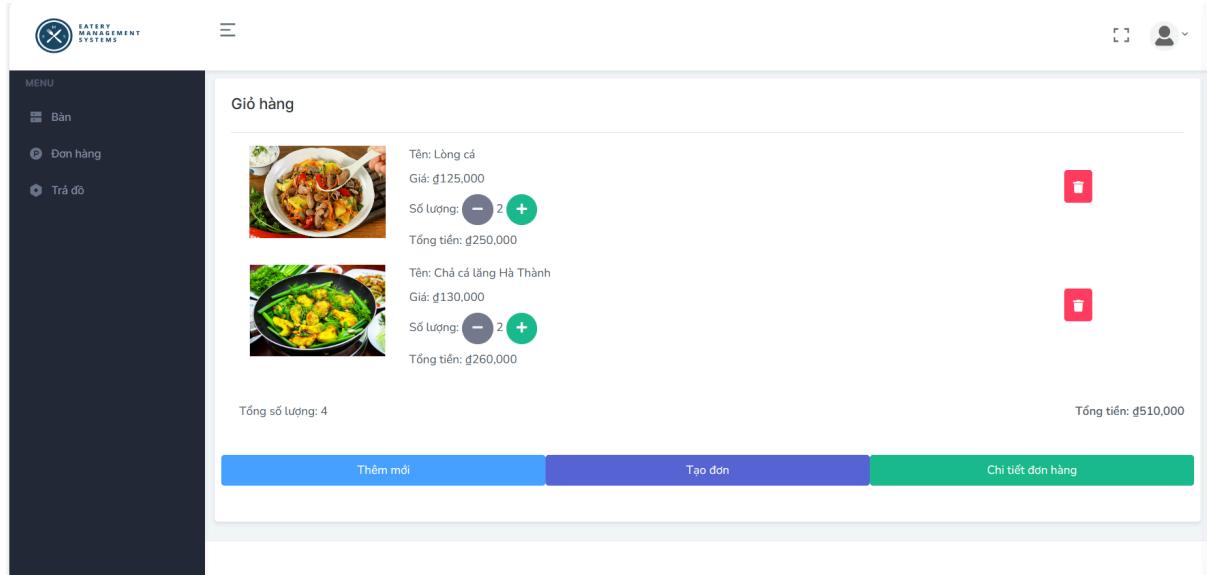


Figure - View Cart

Field Name	Field Type	Description
Thêm mới	button	Waiter can add more dish follow request from Customer
Tạo đơn	button	Waiter confirm order for customer
Chi tiết đơn hàng	button	Waiter view detail order

Table - View Cart

2.25.2: UC Specifications

ID and Name:	UC 33- View Cart		
Created By:	Namlh	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None
Description:	Waiter can reviewing and managing the items in a customer's order before finalising it		
Trigger:	Waiter click "GiỎ hàng" to review the current selections for a customer's order.		
Preconditions:	PRE- 1. There are dishes added to the cart for the current customer.		
Postconditions:	POST-1. The system will display all dish customer orders		

Normal Flow:	<ol style="list-style-type: none"> 1. Waiter selects "GiỎ hàng" from the menu options. 2. The system displays the current items in the cart, along with quantities and prices. 3. Waiter reviews the items and confirms with the customer. 4. Waiter makes any necessary changes (e.g., changing the quantity or removing items). 5. The system updates the cart and displays the new total.
Alternative Flows:	N/A
Exceptions:	1.If an attempt is made to update the cart with an out-of-stock item, the system notifies the waiter and does not allow the addition.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.26 View list order- waiter

2.26.1: UI Specifications

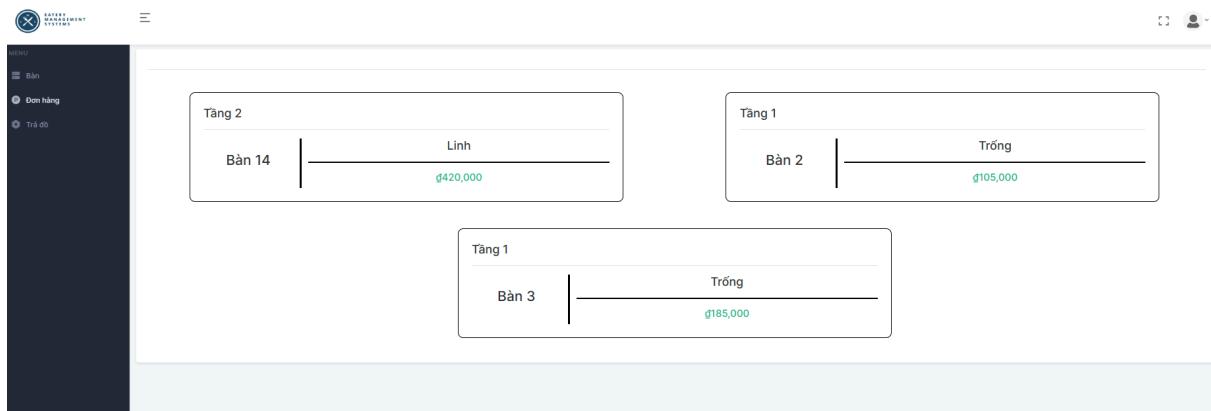


Figure 63- View list order

Field Name	Field Type	Description
Area	text	To display the area of the table.

Table name	text	To display the name of the table.
Customer name	text	To display the name of the customer.
Total money	text	To display total money in order.

Table 79- View list order Description

2.26.2: UC Specifications

ID and Name:	UC 35- View list order		
Created By:	Dungct	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None
Description:	The function allows the Waiters to view all orders of customers.		
Trigger:	When Waiters click “Đơn hàng” nav link in the left navbar.		
Preconditions:	PRE- 1. The Waiters login into the system. PRE- 2. The Waiters click “Đơn hàng” nav link in the left navbar.		
Postconditions:	POST-1. The system will display a successful order list page.		
Normal Flow:	1. Waiters want to check out all orders of customers. 2. System display order list page to waiters successfully.		
Alternative Flows:	N/A		
Exceptions:	1. Order Confirmation Exception: When there is an error during the order confirmation process, possibly due to a problem with the database, server, or network.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

2.27 Confirm order -Waiter

2.27.1 UI Specifications

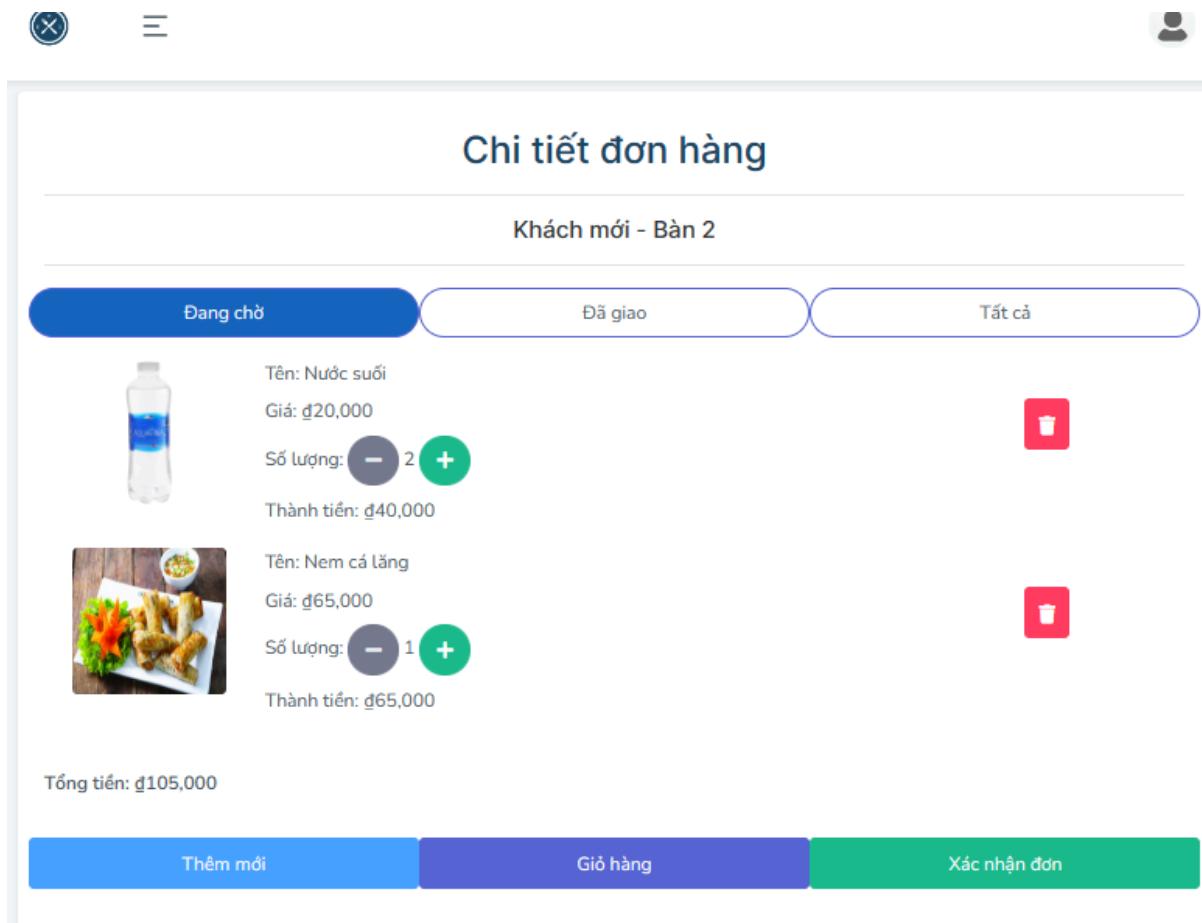


Figure 64- Confirm order

Field Name	Field Type	Description
Xác nhận đơn	button	To confirm the order.

Table 80- Confirm order Description

2.27.2: UC Specifications

ID and Name:	UC 36 - Confirm order		
Created By:	Dunghit	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None
Description:	The function allows the Waiters to confirm the order of customers.		

Trigger:	When Waiters click the “Xác nhận đơn” button in view detail order page.
Preconditions:	PRE- 1. The Waiters login into the system. PRE- 2. The Waiters in view detail order page.
Postconditions:	POST-1. The system will confirm successful orders.
Normal Flow:	1. Waiters want to confirm the order of customers. 2. Waiters click “Xác nhận đơn” button. 3. System will confirm the order successfully.
Alternative Flows:	N/A
Exceptions:	1. Order Confirmation Exception: When there is an error during the order confirmation process, possibly due to a problem with the database, server, or network.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.28 View waiting dish -Waiter

2.28.1 UI Specifications

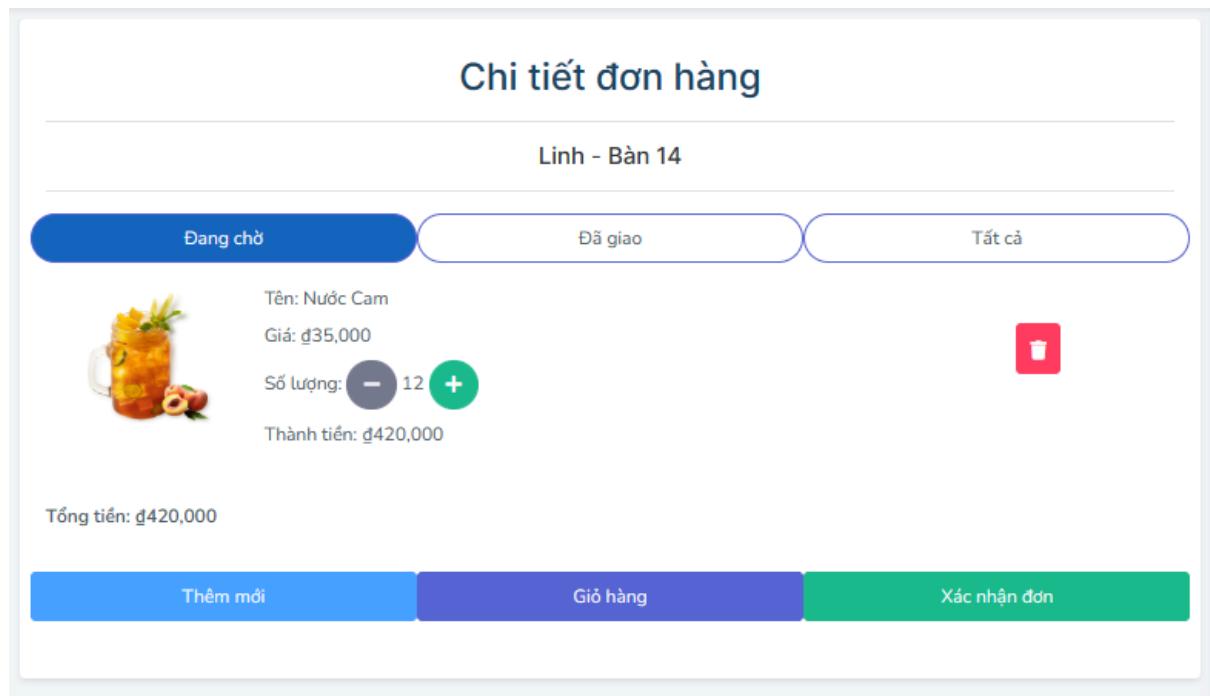


Figure 67- View waiting dish

Field Name	Field Type	Description
Data dish: Name, price, unit, total money of dish	text	To display information about the dish.
Thêm mới	text	To add a new dish.
-	button	To minus 1 unit of dish.
+	button	To add 1 unit of dish.
Xóa	button	To delete dishes.
Total money of order	text	To display total money in order.
Thêm mới	button	To step to menu page.
Giỏ hàng	button	To step to cart.
Xác nhận đơn	button	To confirm order.

Table 82- View waiting dish

2.28.2 UC Specifications

ID and Name:	UC 38 - View waiting dish		
Created By:	Dunght	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None
Description:	The function allows the Waiters to see what customers order.		
Trigger:	When Waiters click view detail of an order.		
Preconditions:	PRE- 1. The Waiters login into the system. PRE- 2. The Waiters click the “Đơn hàng” nav link in the left navbar.		
Postconditions:	POST-1. The system will display waiting dish page successfully.		
Normal Flow:	1. Waiters want to see order of customers to confirm. 2. Waiters click 1 order. 3. System display order detail page to waiters successfully. 4. Waiter clicks the “Thêm mới” button. 5. System will step to the menu page. 6. Waiter clicks the “Giỏ hàng” button. 7. System will step to the cart page. 8. Waiter clicks the “Xác nhận đơn” button. 9. System will confirm order of customer.		
Alternative Flows:	N/A		
Exceptions:	1. MenuPageNavigationException: When there is an error redirecting to the menu page, possibly due to a problem with the network or database. 2. Cart PageNavigationException: When there is an error redirecting to the cart page, possibly due to a problem with the network or database. 3. OrderConfirmationException: When there is an error during the order confirmation process, possibly due to a problem with the database or network.		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

2.29 View delivered dish -Waiter

2.29.1 UI Specifications

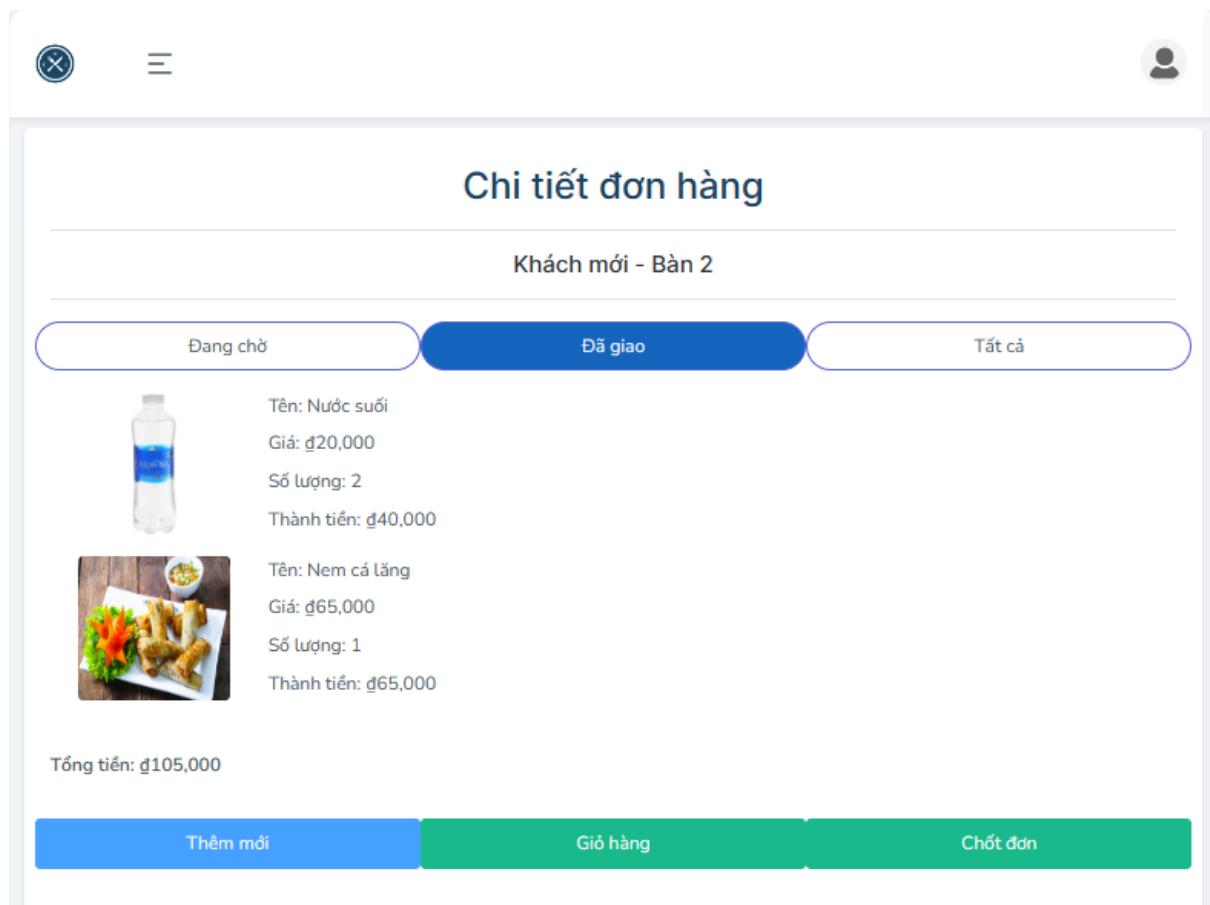


Figure - View delivered dish

Field Name	Field Type	Description
Data dish: name,price, unit, total money of dish	text	To display information of dish.
Total money of order	text	To display total money of order.
Thêm mới	button	To step to menu page.
Giỏ hàng	button	To step to cart.
Chốt đơn	button	To step to view bill page.

Table : View waiting delivered dish description

2.29.2 UC Specifications

ID and Name:	UC 39 - View delivered dish		
Created By:	Namlh	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None
Description:	This use case describes the process by which a waiter view list dish that were delivered to customers.		
Trigger:	Waiter click “Đã giao” button in view detail order page.		
Preconditions:	<p>PRE- 1.The customer's initial order is already placed and exists in the system.</p> <p>PRE- 2.The order must be confirmed.</p> <p>PRE- 3.The dish must be done.</p>		
Postconditions:	POST-1. The waiters can see all the dishes that were delivered to customers.		
Normal Flow:	<ol style="list-style-type: none"> 1. The waiters want to see dishes that were delivered to customers. 2. Waiters click "Đã giao" button on view delivery dish page. 3. The system displays delivered dish list to waiters. 4. Waiter clicks the "Thêm mới" button. 5. System will step to the menu page. 6. Waiter clicks the "GiỎ hàng" button. 7. System will step to cart page. 8. Waiter clicks the "Chốt đơn" button. 9. System will step to view bill page. 		
Alternative Flows:	N/A		
Exceptions:	<p>1. MenuPageNavigationException: When there is an error redirecting to the menu page, possibly due to a problem with the network or database.</p> <p>2. Cart PageNavigationException: When there is an error redirecting to the cart page, possibly due to a problem with the network or database.</p> <p>3. ViewBillException: When there is an error during the view bill process, possibly due to a problem with the database or network.</p>		
Priority:	High		
Frequency of Use:	High		
Business Rules:	N/A		
Other Information:	N/A		
Assumptions:	N/A		

2.30 Confirm bill -Waiter

2.30.1 UI Specifications

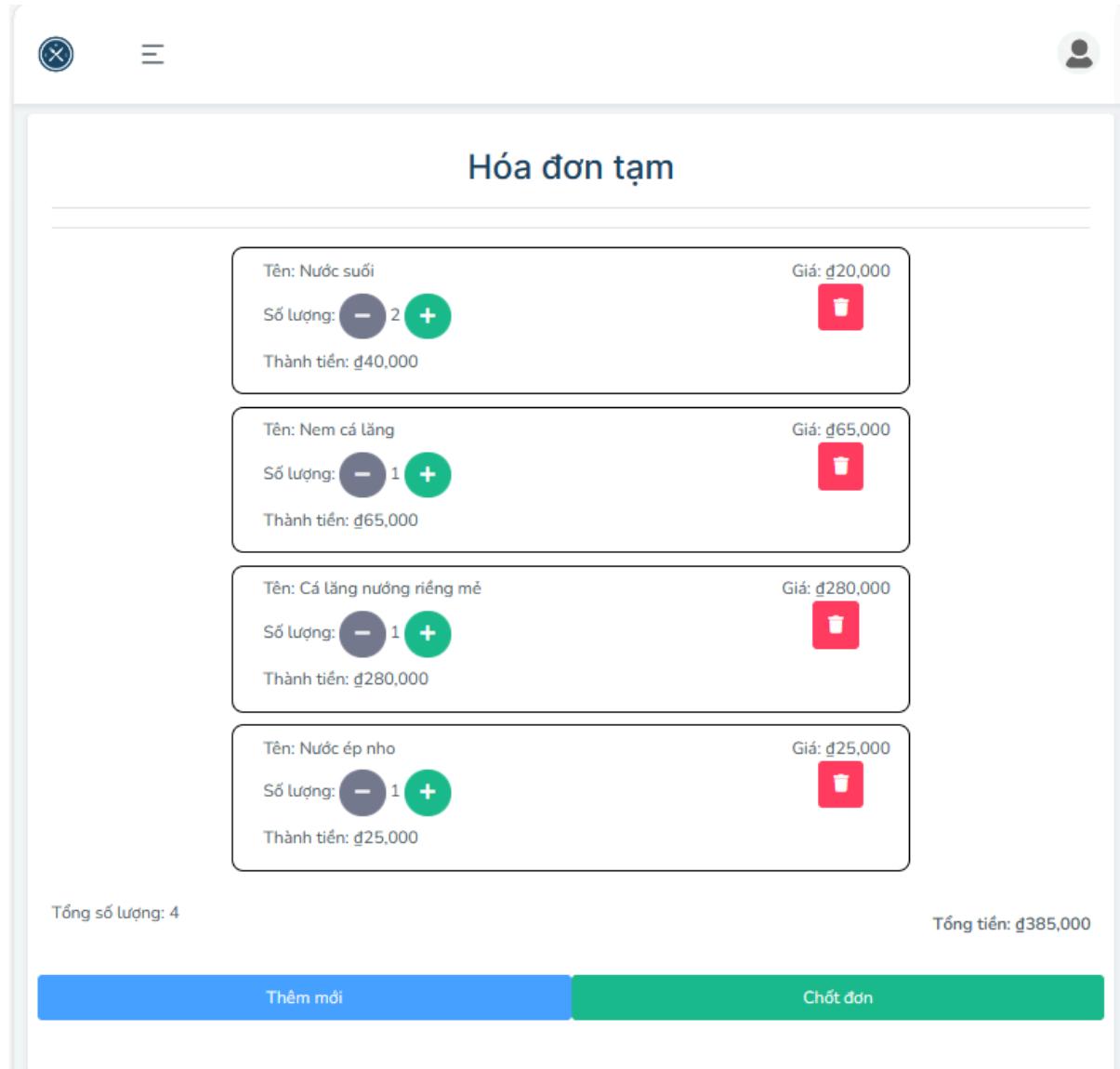


Figure 69- Confirm bill

Field Name	Field Type	Description
Data dish: name, price, unit, total money of dish	text	To display information of dish.
-	button	To minus 1 unit of dish.
+	button	To add 1 unit of dish

Xóa	button	To delete dish.
Thêm mới	button	To step to menu page.
Chốt đơn	button	To confirm bill to customer.

Table 83- Confirm bill description

2.30.2 UC Specifications

ID and Name:	UC 40 - Confirm bill		
Created By:	Dungct	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None
Description:	This use case describes the process by which a waiter view temporary bill that waiter will confirm to customers.		
Trigger:	Waiter click “Tất cả” button in view detail order page, then click “Chốt đơn” button.		
Preconditions:	PRE- 1. The customer's initial order is already placed and exists in the system. PRE- 2. The order must be confirmed. PRE- 3. The dish must be done.		
Postconditions:	POST-1. The waiters can see all the dishes that were delivered to customers.		
Normal Flow:	1. The waiters want to confirm to customers. 2. Waiters click "Chốt đơn" button on view all ordered dish page. 3. The system displays confirm page to waiters. 4. Waiter clicks the "Thêm mới" button. 5. System will step to the menu page. 6. Waiter clicks the "-" button. 7. System will minus 1 unit of dish. 8. Waiter clicks the "+" button. 9. System will add 1 unit of dish. 10. Waiter clicks the "Xóa" button. 11. System will delete the dish. 12. Waiter clicks the "Chốt đơn" button. 13. System will confirm bill to customers.		
Alternative Flows:	N/A		
Exceptions:	1. DishQuantityUpdateException: When there is an error updating the dish quantity (add or decrease), possibly due to a problem with the database or network.		

	<p>2. DishDeletionException: When there was an error deleting a dish from an order, possibly due to a problem with the database or network.</p> <p>3. BillConfirmationException: When there is an error confirming the invoice to the customer, possibly due to a problem with the database or network.</p>
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.31 View waiting dish list -Waiter

2.31.1 UI Specifications

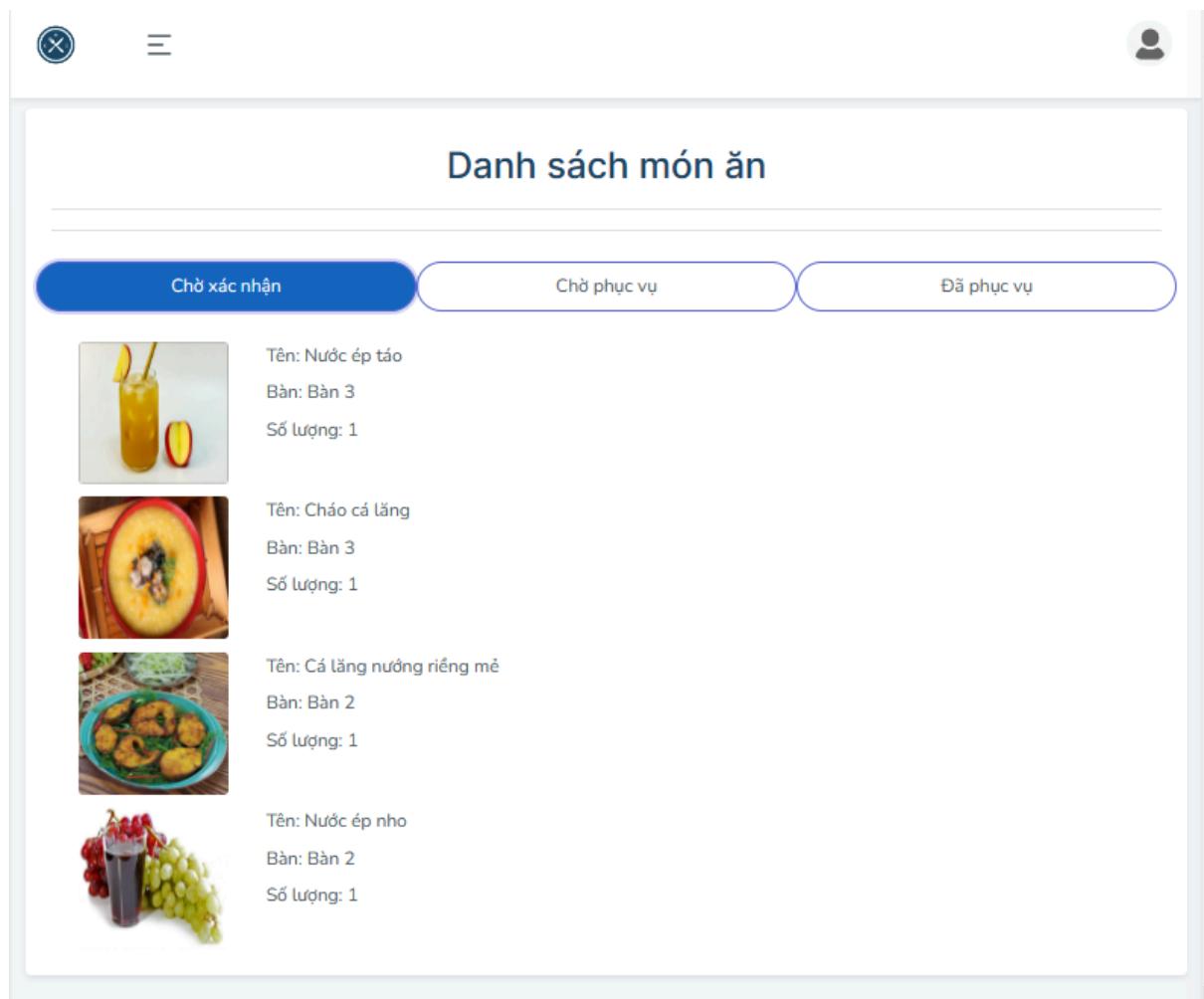


Figure 70- View waiting delivery dish list

Field Name	Field Type	Description
Data dish: name, table of order, unit	text	To display information of dish.

Table 84- View waiting delivery dish list description

2.31.2 UC Specifications

ID and Name:	UC 42 - View waiting dish list		
Created By:	LuanCV	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None

Description:	This use case describes the process by which a waiter view list dish that are waiting to confirm.
Trigger:	Waiter click “Chờ xác nhận” button in view delivery dish page.
Preconditions:	PRE- 1. The customer's initial order is already placed and exists in the system.
Postconditions:	POST-1. The waiters can see all the dishes that are waiting to serve to customers.
Normal Flow:	<ol style="list-style-type: none"> 1. The waiters want to see dishes that are waiting to confirm. 2. Waiters click "Chờ xác nhận" button on view delivery dish page. 3. The system displays waiting dish list to waiters.
Alternative Flows:	N/A
Exceptions:	1. WaitingDishListLoadException: When there is an error loading the dish list waiting for confirmation, possibly due to a problem with the server, database, or network.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.32 View waiting delivery dish list -Waiter

2.32.1 UI Specifications

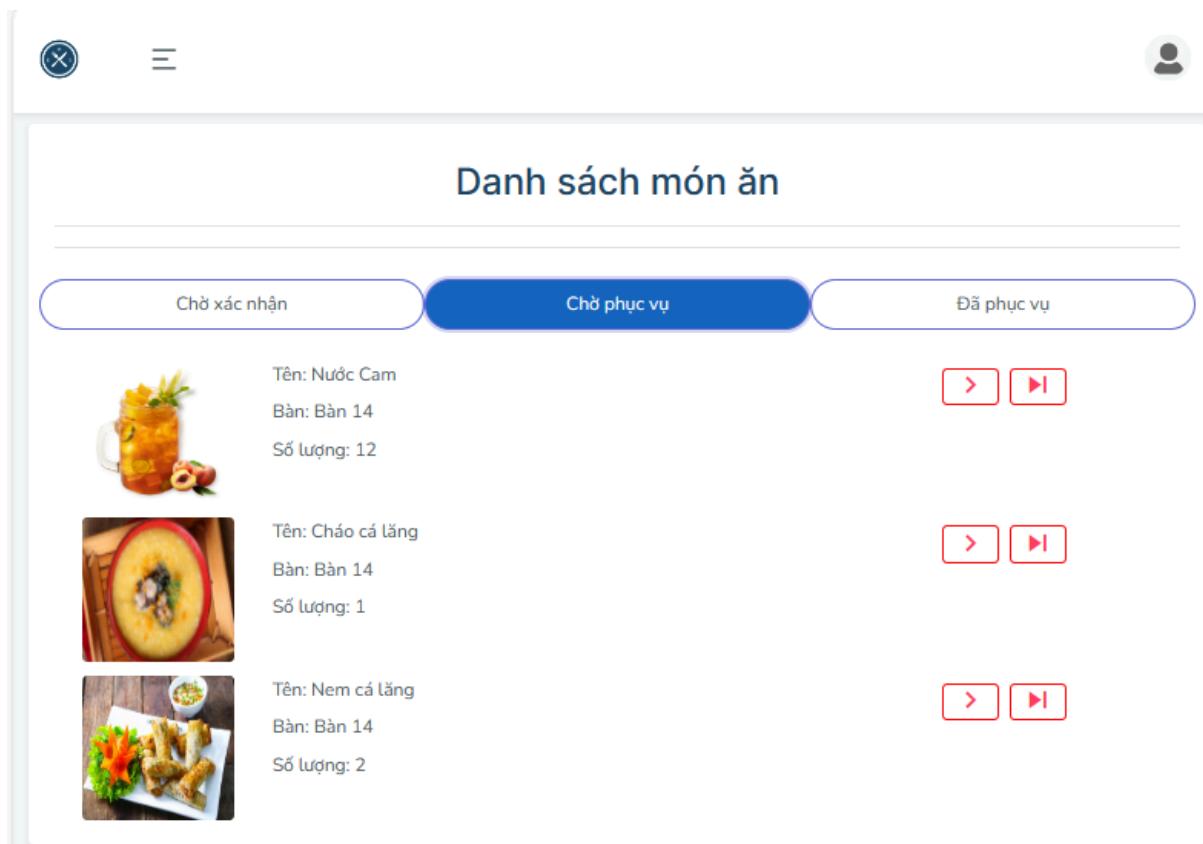


Figure 72- View waiting delivery dish list

Field Name	Field Type	Description
Data dish: name, table of order, unit	text	To display information of dish.
Next 1	button	To update 1 unit of dish status from done to served.
Next all	button	To update all unit of dish status from done to served.

Table 85- View waiting delivery dish list description

2.32.2 UC Specifications

ID and Name:	UC 43 - View waiting delivery dish list		
Created By:	Dungct	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None

Description:	This use case describes the process by which a waiter view list dish that are waiting to serve to customer.
Trigger:	Waiter click “Chờ phục vụ” button in view delivery dish page.
Preconditions:	PRE- 1. The customer's initial order is already placed and exists in the system. PRE- 2. The order must be confirmed. PRE- 3. The dish must be done.
Postconditions:	POST-1. The waiters can see all the dishes that are waiting to serve to customers.
Normal Flow:	1. The waiters want to see dishes that waiting to serve to customer. 2. Waiters click "Chờ phục vụ" button on view delivery dish page. 3. The system display waiting delivery dish list to waiters.
Alternative Flows:	N/A
Exceptions:	1. WaitingDishListLoadException: When there is an error loading the served dishes list, possibly due to a problem with the server, database, or network.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.33 View served dish list -Waiter

2.33.1 UI Specifications



Figure 73- View served dish list

Field Name	Field Type	Description
Data dish: name, table of order, unit	text	To display information of dish.
Back 1	button	To update 1 unit of dish status from served to done .
Back all	button	To update all unit of dish status from served to done .

Table 86- View served dish list description

2.33.2 UC Specifications

ID and Name:	UC 44 - View served dish list		
Created By:	LuanCV	Date Created:	9/03/2024
Primary Actor:	Waiter	Secondary Actors:	None
Description:	This use case describes the process by which a waiter view list dish that are be done and were served to customer.		
Trigger:	Waiter click “Đã phục vụ” button in view delivery dish page.		

Preconditions:	PRE- 1. The customer's initial order is already placed and exists in the system. PRE- 2. The order must be confirmed. PRE- 3. The dish must be done.
Postconditions:	POST-1. The waiters can see all dishes that were served to customers.
Normal Flow:	1. The waiters want to see dishes that were served to customer. 2. Waiters click "Đã phục vụ" button on view delivery dish page. 3. The system display served dish list to waiters.
Alternative Flows:	N/A
Exceptions:	1. ServedDishListLoadException: When there is an error loading the served dishes list, possibly due to a problem with the server, database, or network.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.34 Create Account

2.34.1: UI Specifications

The screenshot shows a modal window titled 'Thêm mới' (Add new) for creating a new account. The form contains five input fields with red asterisks indicating required fields:

- Họ tên*
- Tài khoản*
- Số điện thoại*
- Email*
- Phân quyền*

Below the fields are two buttons: 'Đóng' (Close) in grey and 'Lưu' (Save) in green.

Figure 78- Create account

Field Name	Field Type	Description
Họ tên	Textbox	To input names.
Tài khoản	Textbox	To input username.
Email	Textbox	To input email.
Số điện thoại	Textbox	To input a phone number.
Phân quyền	Select options	To select a role.
Lưu	Button	To accept creating an account.
Đóng	Button	To close, create an account.

Table 89- Create account Description

2.34.2: UC Specifications

ID and Name:	UC 50 - Create account		
Created By:	Dunght	Date Created:	15/03/2024
Primary Actor:	Manager	Secondary Actors:	None
Description:	The function allows the Managers to create a new account for the staff.		

Trigger:	When Managers click “Thêm mới nhân viên” button in manage account page.
Preconditions:	PRE- 1. The Eatery owner login to the EMS Website. PRE- 2. The Eatery owner enters the management account page. PRE- 3 The Eatery owner click “Thêm mới nhân viên” button.
Postconditions:	POST-1. The system will successfully create a new account for Eatery owners.
Normal Flow:	<ol style="list-style-type: none"> 1. Managers want to create new accounts for their staff. 2. System display pop up create account. 3. Managers input fullname. 4. Managers input username. 5. Managers input email. 6. Managers input phone number. 7. Managers select roles. 8. Managers click the “Lưu” button. 9. System validate manager input. 10. System will display the created account successfully. 11. Manager clicks the “Đóng” button. 12. System will close and create an account pop up.
Alternative Flows:	N/A
Exceptions:	<p>1. InputValidationException: When input does not meet formatting requirements or business rules, such as a password that is too short or an invalid email.</p> <p>2. AccountCreationException: When there is an error while creating a new account, possibly due to an issue with the database or source code related to the account creation process.</p>
Priority:	High
Frequency of Use:	Low
Business Rules:	BR-02, BR-10
Other Information:	N/A
Assumptions:	N/A

2.35 View Account

2.35.1: UI Specifications

Người Dùng							
+ Thêm Mới <input placeholder="Nhập tên" style="width: 150px; height: 20px; border: 1px solid #ccc; margin-right: 5px;" type="text"/> <input style="width: 100px; height: 20px; background-color: #007bff; color: white; border: none;" type="button" value="Tim kiếm"/> 							
STT	Tên người dùng	Tên tài khoản	Email	SĐT	Vị trí	Quản lý	
1	Lê Hà Nam	adminNam	clonedz11@gmail.com	0987654321	admin		
2	Lê Hà Nam	managerNam	clonedz11@gmail.com	0975402493	manager		
3	dung tuan chu	dungadmin	dungct@gmail.com	0928602001	admin		
4	cashier NamLH	cashierNam	clonedz30@gmail.com	0975402493	cashier		
5	chef NamLH	chefNam	clonedz11@gmail.com	0975402493	chef		
6	walter Nam	walterNam	namithe153319@fpt.vn	0975402493	walter		
7	Chu Tuấn Dũng	dungcashier	dung@gmail.com	0928602001	cashier		
8	Chu Tuấn Dũng	dungchef	dung@gmail.com	0928602001	chef		
9	Chu Tuấn Dũng	dungwalter	dung@gmail.com	0928602001	walter		
10	Chu Tuấn Dũng	cashier_987	cashier_987@gmail.com	0933838383	cashier		

Hiện 1 đến 10 trong 16 mục

← 1 → 2 ⏪ ⏩ Hiện [10] mục

Figure 79- View account

Field Name	Field Type	Description
Thêm mới	button	To open the create new account pop up.
Tìm kiếm	button, textbox	To search accounts.
Data table: Tên người dùng, Tên tài khoản, Email, SĐT, Vị trí.	text	To display account information such as name, username, email, phone, role
Chi tiết	icon	To open a detailed account pop up.
Chỉnh sửa	icon	To open an update account pop up.
Xóa	icon	To delete an account.

Table 90- View account Description

2.35.2: UC Specifications

ID and Name:	UC 49 - View account		
Created By:	Dunght	Date Created:	15/03/2024
Primary Actor:	Manager	Secondary Actors:	None
Description:	The function allows the Managers to view the management account page and manage accounts.		
Trigger:	When Managers enter the management account page.		
Preconditions:	PRE- 1. The Managers login to the EMS Website. PRE- 2. The Managers enter the management account page.		

Postconditions:	POST-1. The system will display the management account page successfully for Managers.
Normal Flow:	1. Managers want to view all accounts to manage staff's accounts. 2. System will display a management account page.
Alternative Flows:	N/A
Exceptions:	1. AccountManagementUpLoadException: When there is an error loading the account management page, possibly due to a problem with the server, database, or network. 2. Data Mismatch Exception: When account data is different or incomplete, leading to display errors.
Priority:	High
Frequency of Use:	N/A
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

2.37 View List Bill - Cashier

2.37.1: UI Specifications

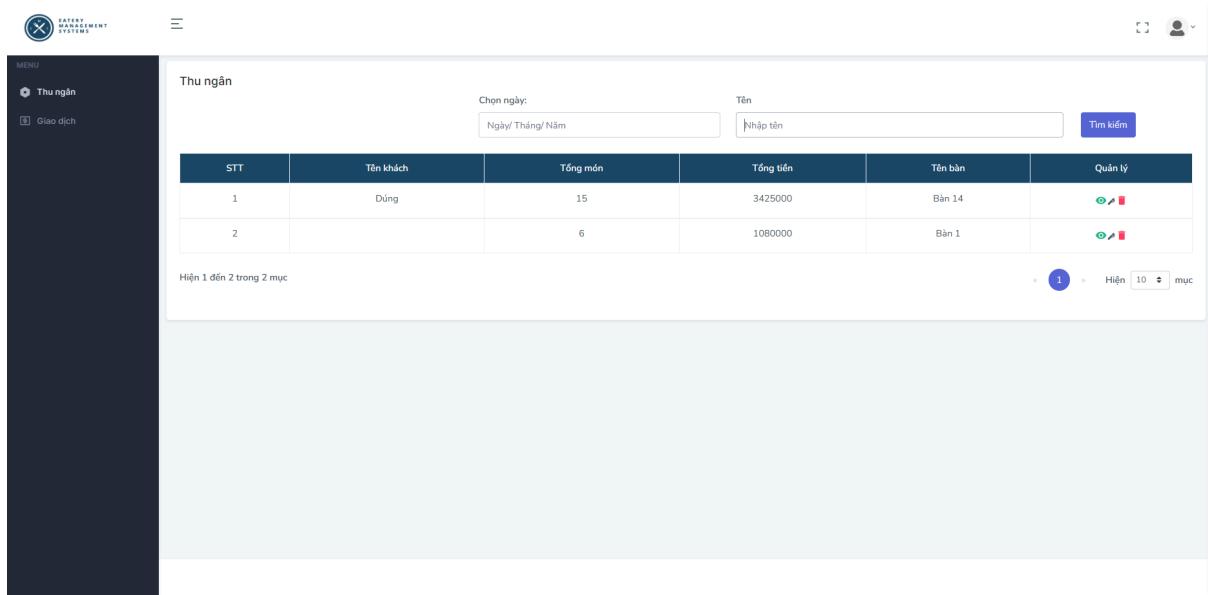


Figure 86: View list bill

Field Name	Field Type	Description
Khu vực	Select Option	This is for users to filter order by region.
Tên	Search	This is for users to search name
Data table: Stt, Tên khách, tổng món, tổng tiền, tên bàn, quản lý	text	This is for users to check the bill information.

2.37.2: UC Specifications

ID and Name:	UC 56 - View Bill - Cashier		
Created By:	LongCH	Date Created:	15/03/2024
Primary Actor:	Cashier	Secondary Actors:	None
Description:	This use case allows a cashier to view a detailed list of customer bills, including their names, total items ordered, and total amount due. It is used to track and manage payment processes within the restaurant. Upon completion, the cashier will have accessed all relevant billing information for service completion.		
Trigger:	The use case begins when a cashier selects the "Thu ngân" (Cashier) option from the system menu to view and manage customer bills.		

Preconditions:	PRE- 1. The system has current and updated data regarding orders and billing.
Postconditions:	POST-1. The cashier's screen displays the list of bills with corresponding details.
Normal Flow:	<ol style="list-style-type: none"> 1. The cashier selects the "Thu ngân" option. 2. The system displays the list of current bills with details such as customer name, total items, total amount, table number, and management controls. 3. The cashier selects a particular bill to view more details or to proceed with payment processing. 4. The system provides options for payment processing, bill editing, or printing.
Alternative Flows:	N/A
Exceptions:	1. If the system cannot retrieve bill data, it displays an error message.
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

3. Non-Functional Requirements

3.1 External Interfaces

- Compatibility: The interface must be compatible with a range of mobile devices and desktop computers, including smartphones, tablets, and personal computers. It should support popular operating systems such as iOS, Android, and Windows.
- Integration with QR Code Scanner: The interface must integrate with QR code scanning capabilities on mobile devices and desktop computers. It should ensure that the system can quickly and accurately read and decode QR codes.
- Communication with Banking Systems: The interface needs to communicate with banking systems or online payment gateways to process payments from customers.

3.2 Quality Attributes

3.2.1 Usability

- Efficient QR Code Scanning: The QR code scanning feature should be easy to access and use. Instructions on how to scan QR codes should be provided clearly, and the scanning process should be quick and reliable. Users should receive immediate feedback after scanning a QR code to confirm that the action was successful.

-Responsive Design: The website should be responsive and optimised for various devices and screen sizes. Whether users are accessing the website from a desktop computer, smartphone, or tablet, the interface should adapt seamlessly to provide an optimal viewing and interaction experience.

-Simple Ordering Process: The ordering process should be streamlined and straightforward. Users should be able to select items, customise their orders (if applicable), and add them to their cart with minimal effort. The steps involved in placing an order should be clearly outlined and easy to follow.

3.2.2 Performance

-Fast Loading Times: The website should load quickly across all devices and internet connection speeds. Optimising images, scripts, and other media assets can help reduce load times and improve the overall user experience.

-Reliability: Users should be able to rely on the website to be available and functional whenever they need to place an order or make a payment. Minimising downtime and addressing any technical issues promptly are essential for maintaining user trust and satisfaction.

-Optimised Performance on Mobile Devices: Given the increasing use of smartphones for online activities, including food ordering, the website must perform well on mobile devices. It should be optimised for mobile browsers, with fast load times and a user-friendly interface that is easy to navigate on smaller screens.

-Database Optimization: Optimising database queries and ensuring efficient data retrieval and storage can help improve the overall performance of the website, particularly during peak usage periods. This includes indexing frequently accessed data, minimising unnecessary database calls, and optimising database schema design.

3.2.3 Documentation and Training

-Providing comprehensive documentation and training resources for administrators, staff, and end-users ensures that everyone can effectively use and manage the website. This includes user manuals, tutorials, online help resources, and training programs to onboard new users and support ongoing operations.

4. Requirement Appendix

4.1 Business Rules

ID	Rule Definition
BR-01	Email field must be filled and properly formatted
BR-02	All the field is required
BR-03	The phone number field must be a valid phone number
BR-04	Start date and End date must be date data type
BR-05	Email must not exist in the system
BR-06	Password and confirm password field must be the same
BR-07	Email must existed in the system
BR-08	Image must be in correct format
BR-09	The product price cannot contain text characters.

IV. Software Design Description

1. System Design

1.1 System Architecture

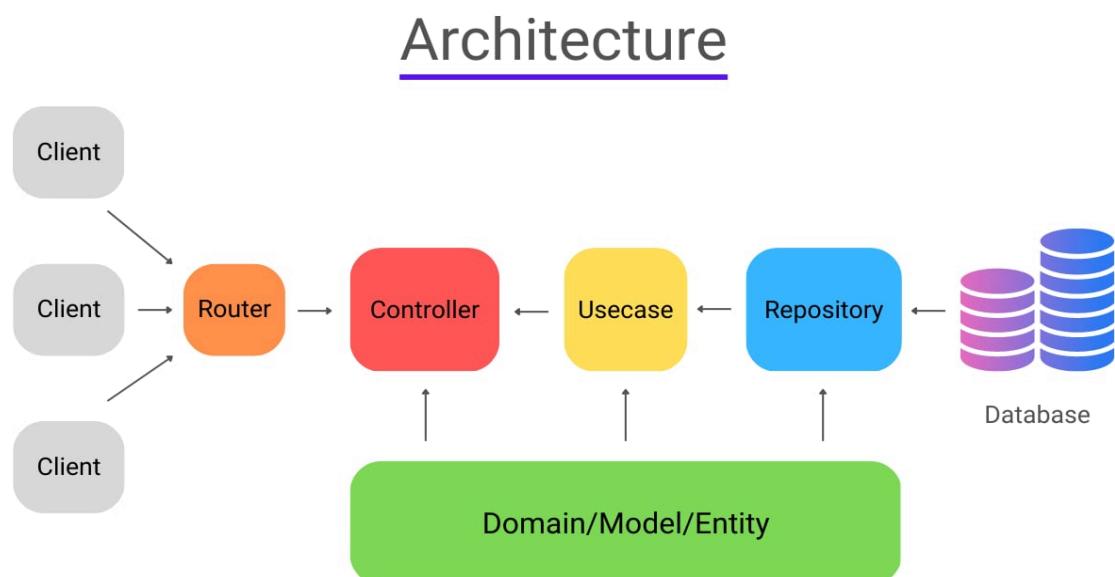


Figure: System Architecture Diagram

1.2 Package Diagram

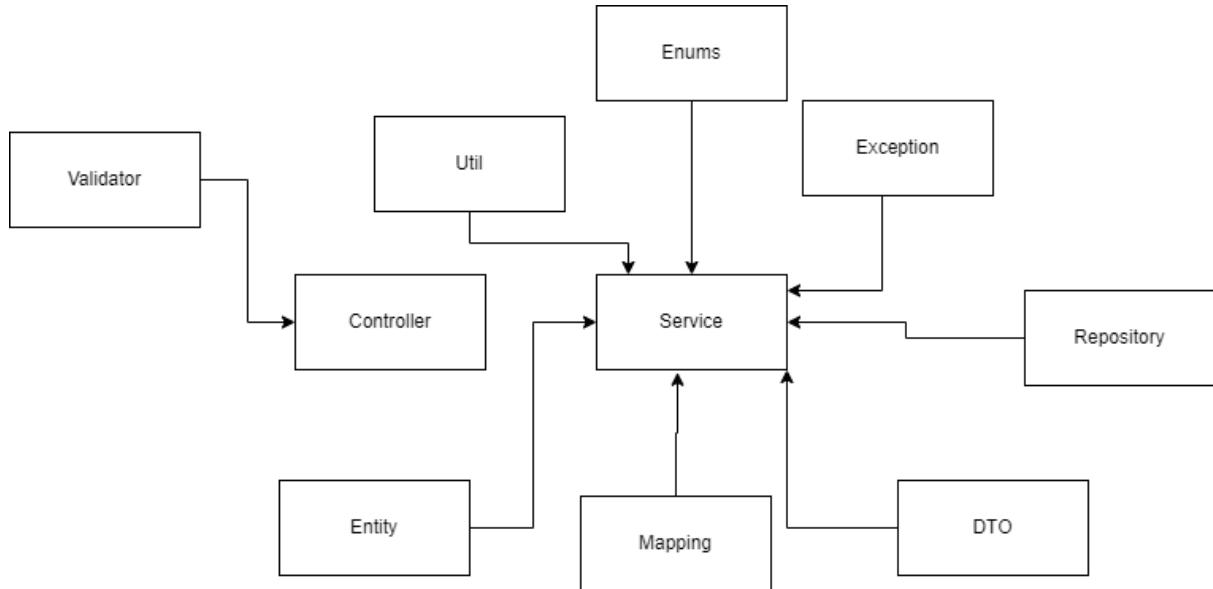


Figure: Package Diagram

Package descriptions

No	Package	Description
01	Validator	This package contains classes and interfaces for validating input data before it is processed by the application. It ensures that all data meets the defined constraints and rules.
02	Util	The Util package provides utility classes and helper functions that are commonly used across different layers of the application, such as formatting, common data manipulations, and shared constants.
03	Controller	The Controller package is responsible for handling incoming HTTP requests, manipulating data using the Service layer, and returning the appropriate responses to the client.
04	Entity	This package includes the domain models or entities that represent the application's core business logic and data structures.
05	Mapping	The Mapping package contains the logic to transform or map one type of object to another, facilitating data transfer between different layers, such as from Entity to DTO (Data Transfer Object).
06	Service	Central to the application, the Service package provides the business logic and orchestrates transactions, data processing, and decision-making.

07	Enums	Enums package includes all the enumeration classes that define a set of named constants used throughout the application.
08	Exception	This package contains custom exception classes that represent specific error conditions within the application, allowing for granular error handling and messaging.
09	Repository	The Repository package acts as the data access layer, containing classes and interfaces for querying and interacting with the database.
10	DTO	The DTO (Data Transfer Object) package consists of objects that carry data between processes, aiming to reduce the number of method calls, particularly in a network environment.

2. Database Design

2.1 Database diagram

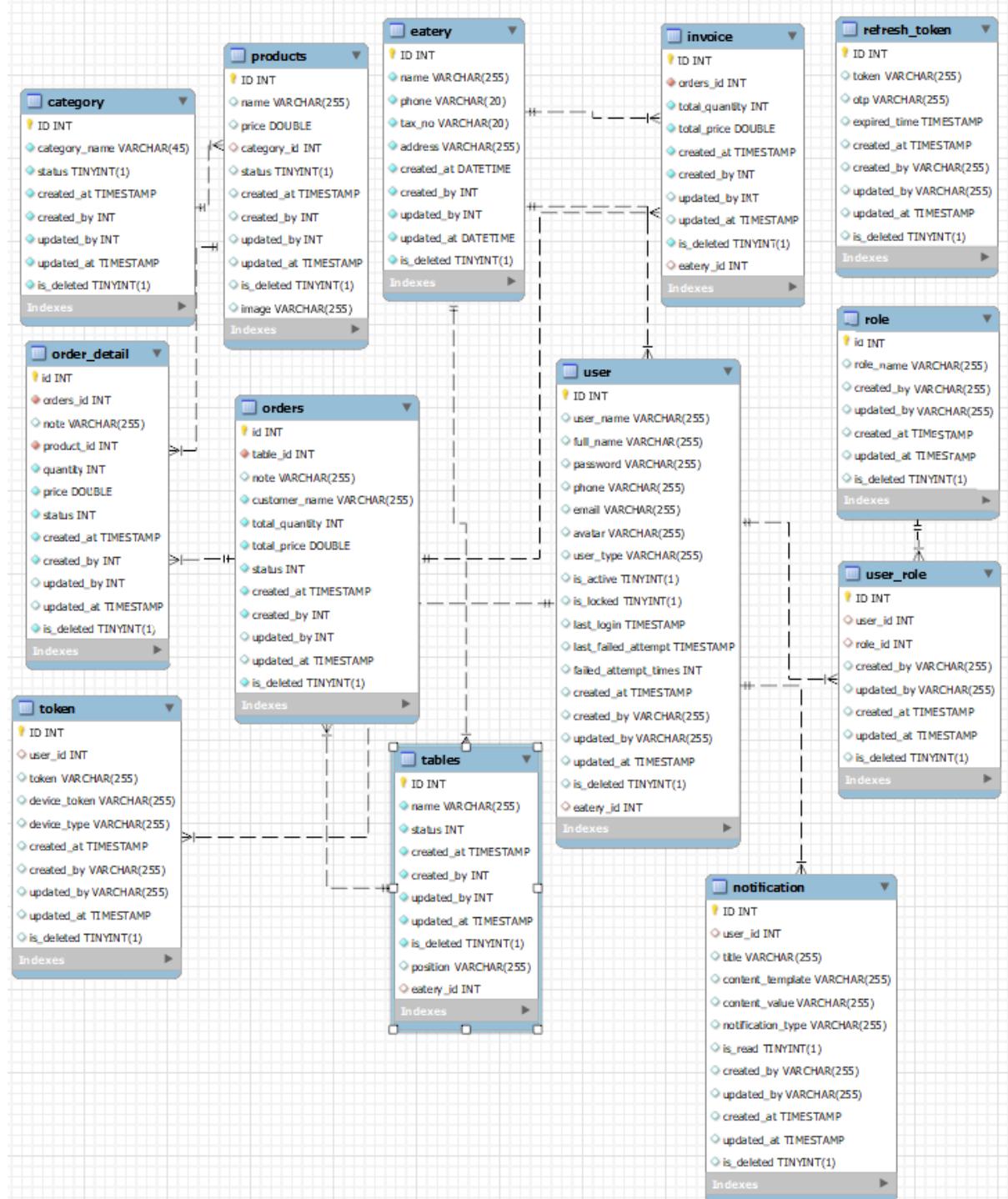


Figure:Database diagram

2.2 Table Descriptions

2.2.1 Orders

No	Field name	Type	Unique	Not null	PK/FK	Note
----	------------	------	--------	----------	-------	------

1	id	INT	x	x	x	Auto Incremental
2	table_id	INT	x	x		
3	note	VARCHAR(255)				
4	customer_name	VARCHAR(255)				
5	total_quantity	INT				
6	total_price	DOUBLE				
7	status	INT				
8	created_at	TIMESTAMP				
9	created_by	INT				
10	updated_by	INT				
11	updated_at	TIMESTAMP				
12	is_deleted	TINYINT(1)				

2.2.2 Product

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT	x	x	x	Auto Incremental
2	name	VARCHAR(255)				
3	price	DOUBLE				
4	category_id	INT				
5	status	TINYINT(1)				
6	created_at	TIMESTAMP				
7	created_by	INT				
8	updated_by	INT		x		
9	updated_at	TIMESTAMP				
10	is_deleted	TINYINT(1)				
11	image	VARCHAR(255)				
12	note	VARCHAR(255)				

2.2.3 User role

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT	x	x	x	Auto Incremental
2	user_id	INT		x		
3	role_id	INT		x		
4	created_by	INT				
5	updated_by	INT				
6	created_at	TIMESTAMP				CURRENT_TIMESTAMP
7	updated_at	TIMESTAMP				CURRENT_TIMESTAMP
8	is_deleted	TINYINT(1)		x		

2.2.4 User

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT	x	x	x	Auto Incremental
2	user_name	VARCHAR(255)				
3	full_name	VARCHAR(255)				
4	password	VARCHAR(255)				
5	phone	VARCHAR(50)				
6	email	VARCHAR(255)				
7	avatar	VARCHAR(255)				
8	user_type	INT				
9	is_active	TINYINT(1)				1
10	is_locked	TINYINT(1)				0
11	last_login	TIMESTAMP				CURRENT_TIMESTAMP
12	last_failed_attempt	TIMESTAMP				CURRENT_TIMESTAMP
13	failed_attempt_times	INT				
14	created_by	INT				
15	updated_by	INT				
16	created_at	TIMESTAMP				CURRENT_TIMESTAMP
17	updated_at	TIMESTAMP				CURRENT_TIMESTAMP
18	is_deleted	TINYINT(1)		x		

2.2.5 Notification

No	Field name	Type	Unique	Not null	PK/FK	Note
1	notification_id	INT	x	x	x	
2	user_id	INT				
3	title	VARCHAR(200)				
4	content_template	VARCHAR(200)				
5	content_value	VARCHAR(200)				
6	notification_type	INT				
7	is_read	INT				
8	created_by	INT				
9	updated_by	INT				
10	created_at	TIMESTAMP				CURRENT_TIMESTAMP
11	updated_at	TIMESTAMP				CURRENT_TIMESTAMP
12	is_deleted	TINYINT(1)		x		

2.2.6 Category

No	Field name	Type	Unique	Not null	PK/FK	Note

1	id	INT	x	x	x	Auto Incremental
2	category_name	VARCHAR(45)				
3	status	TINYINT(1)				
4	created_at	TIMESTAMP				
5	created_by	INT				
6	updated_by	INT				
7	updated_at	TIMESTAMP				
8	is_deleted	TINYINT(1)				

2.2.7 Order_detail

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT	x	x	x	Auto Incremental
2	orders_id	VARCHAR(45)				
3	note	VARCHAR(255)				
4	product_id	INT				
5	quantity	INT				
6	price	DOUBLE				
7	status	INT				
8	created_at	TIMESTAMP				
9	created_by	INT				
10	updated_by	INT				
11	updated_at	TIMESTAMP				
12	is_deleted	TINYINT(1)				
13	done	INT				
14	in_progress	INT				
15	serving	INT				
16	pay	INT				
17	pending	INT				

2.2.8 Token

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT	x	x	x	Auto Incremental
2	user_id	INT				
3	token	VARCHAR(255)				
4	device_token	VARCHAR(500)				
5	device_type	INT				
6	created_by	INT				
7	updated_by	INT				
8	created_at	TIMESTAMP				CURRENT_TIMESTAMP
9	updated_at	TIMESTAMP				CURRENT_TIMESTAMP
10	is_deleted	TINYINT(1)				0

2.2.9 Refresh_token

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT	x	x	x	Auto Incremental
2	user_id	INT				
3	refresh_token	VARCHAR(255)				
4	created_by	INT				
5	updated_by	INT				
6	created_at	TIMESTAMP				
7	updated_at	TIMESTAMP		x		
8	is_deleted	TINYINT(1)				

2.2.10 Invoice

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT		x	x	Auto Incremental
2	orders_id	INT				
3	total_quantity	INT				
4	total_price	DOUBLE				
5	created_at	TIMESTAMP				
6	created_by	INT				
7	updated_by	INT				
8	updated_at	TIMESTAMP				
9	is_deleted	TINYINT(1)				

2.2.11 Tables

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT		x	x	Auto Incremental
2	name	VARCHAR(255)				
3	status	INT				
4	created_at	TIMESTAMP				
5	created_by	INT				
6	updated_by	INT				
7	updated_at	TIMESTAMP				
8	is_deleted	TINYINT(1)				
9	position	VARCHAR(255)				

2.2.12 Role

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT		x	x	Auto Incremental
2	role_name	VARCHAR(255)				
3	created_by	INT				
4	updated_by	INT				
5	created_at	TIMESTAMP				CURRENT_TIMESTAMP
6	updated_at	TIMESTAMP				CURRENT_TIMESTAMP
7	is_deleted	TINYINT(1)		x		

2.2.13 Master Data

No	Field name	Type	Unique	Not null	PK/FK	Note
1	id	INT		x	x	Auto Incremental
2	name	VARCHAR(255)				
3	phone	VARCHAR(255)				
4	tax_no	VARCHAR(255)				
5	address	VARCHAR(255)				
6	created_by	INT				
7	updated_by	INT				
8	created_at	TIMESTAMP				CURRENT_TIMESTAMP
9	updated_at	TIMESTAMP				CURRENT_TIMESTAMP
10	is_deleted	TINYINT(1)		x		

3. Detailed Design

3.1 Authenticated

3.1.1 Class Diagram

Figure:User Class diagram

3.1.2 Login

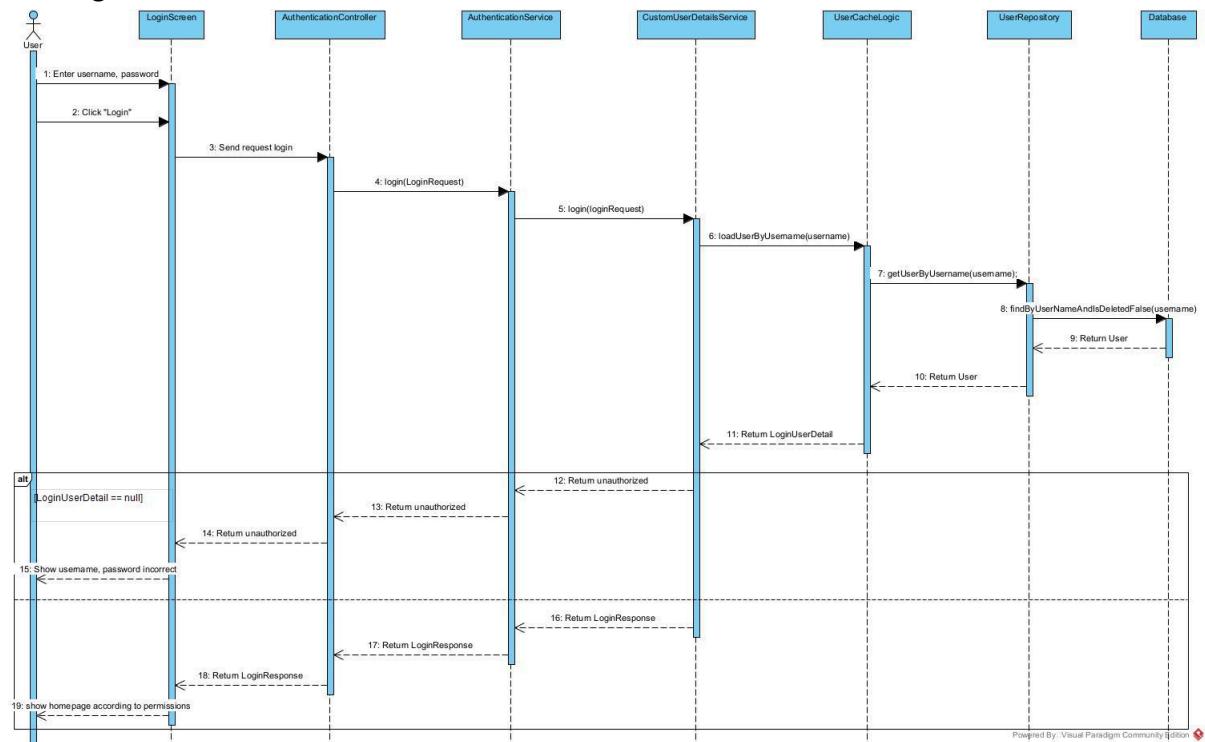


Figure:Login Sequence

3.1.3 Logout

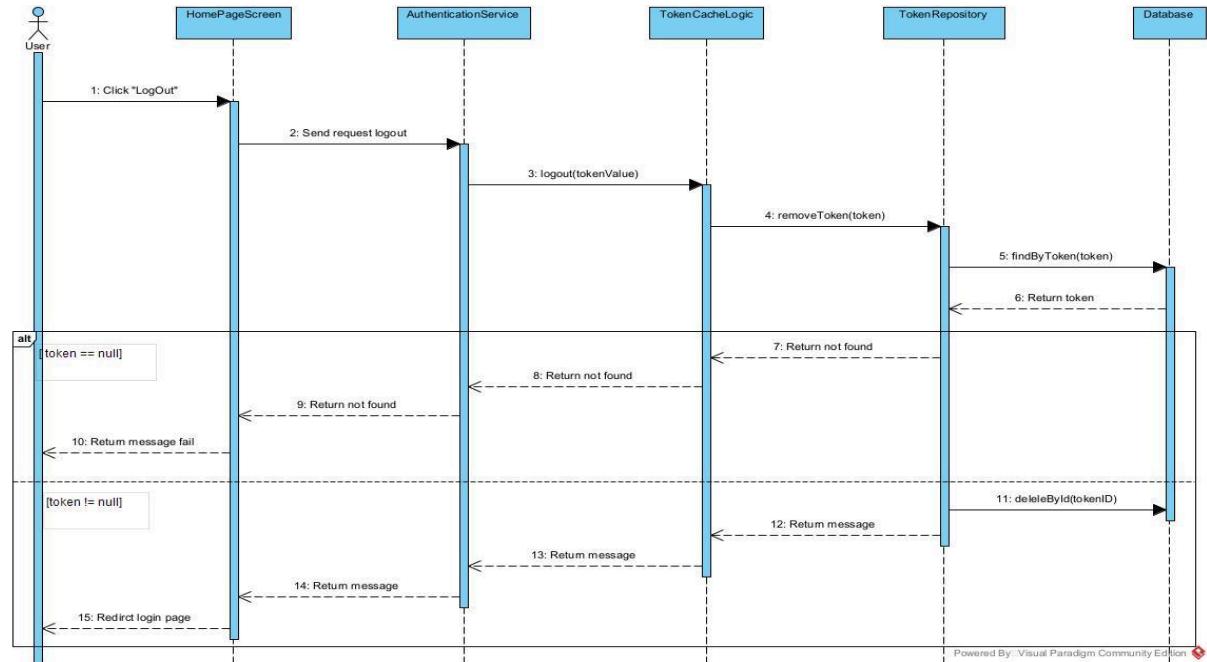


Figure:Logout Sequence

3.1.4 Change password

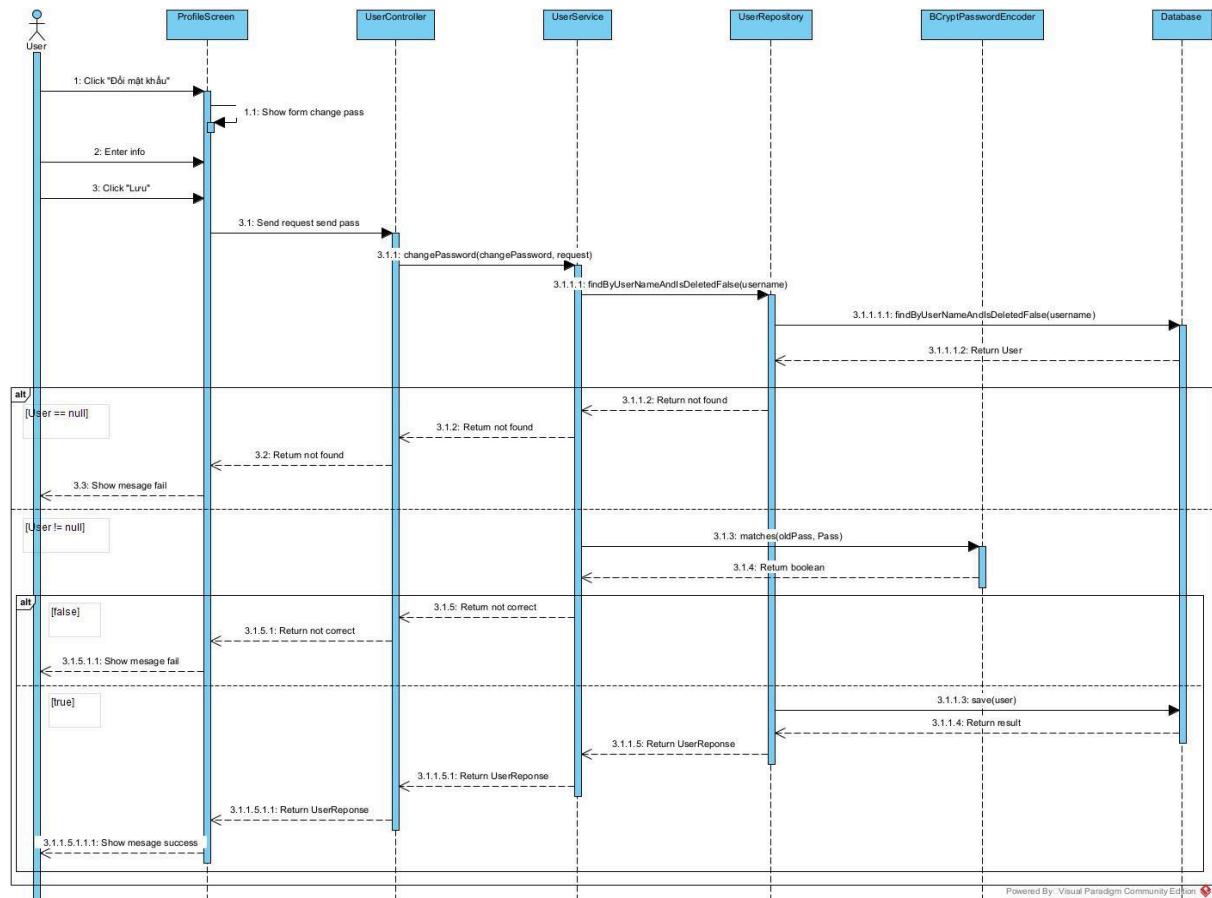


Figure:Change password Sequence

3.2. Waiter

3.2.1 Class Diagram

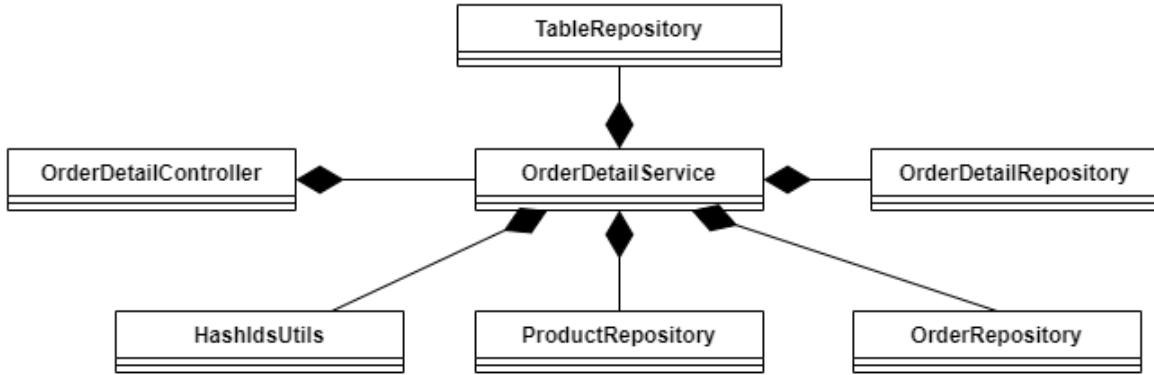


Figure: OrderDetail Class Diagram

3.2.4 View table list

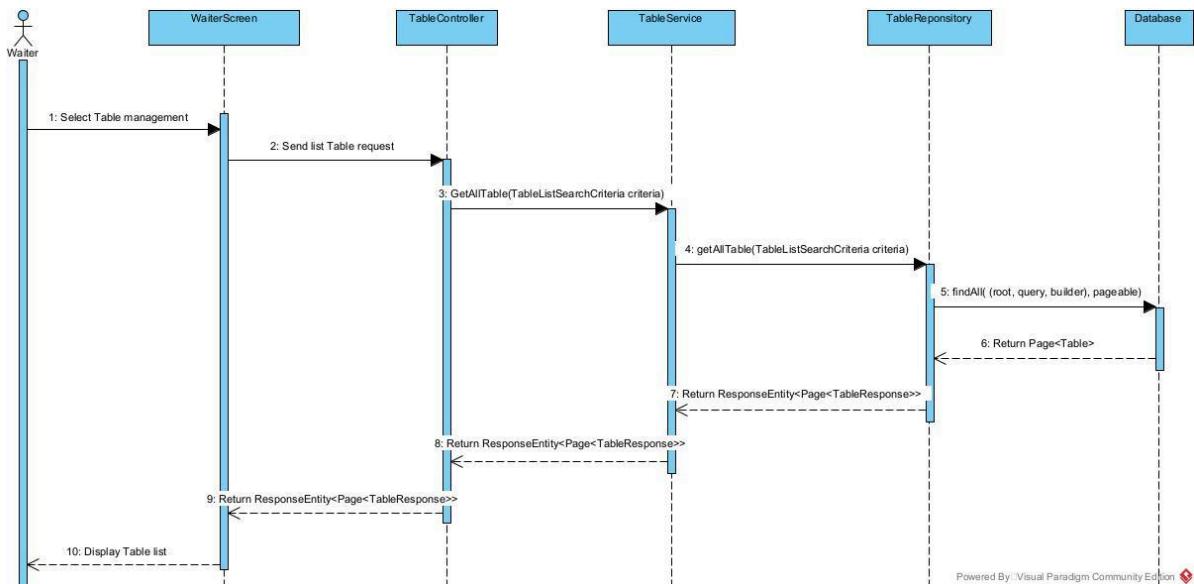


Figure: View Table List Sequence

3.2.8 View Order Dish

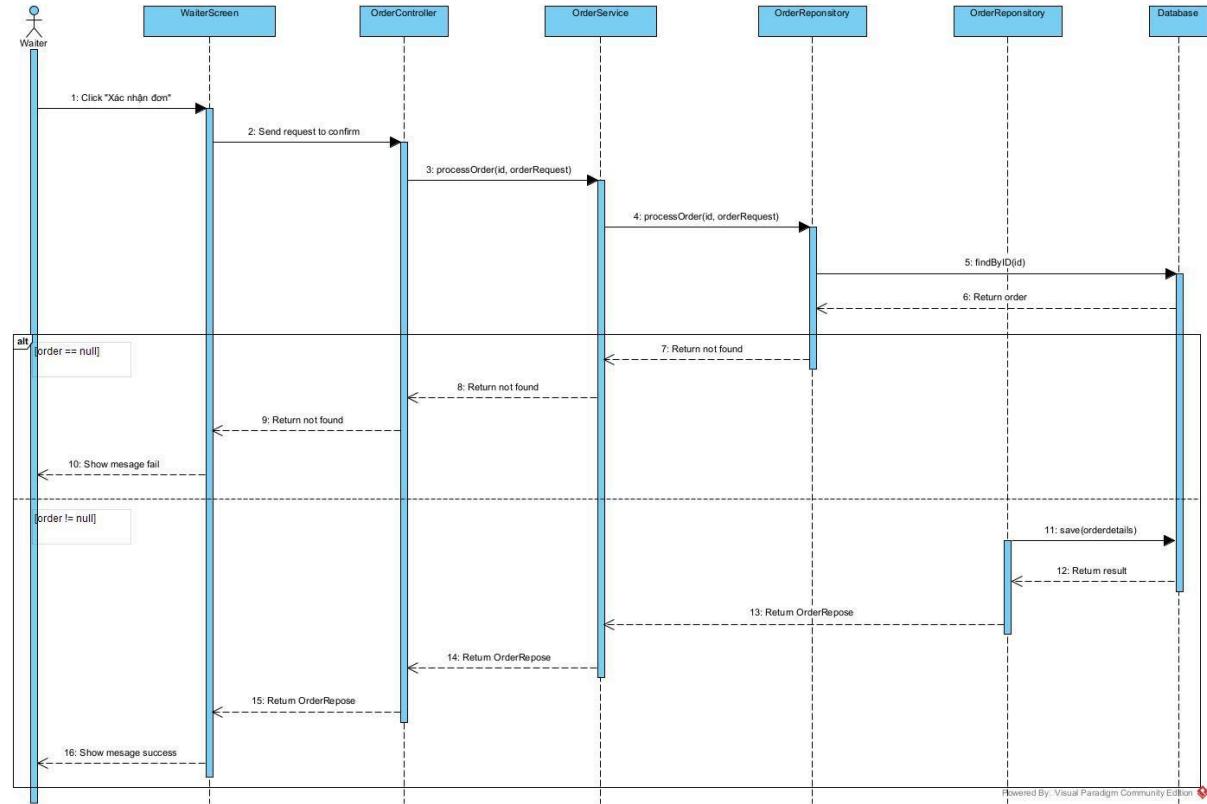
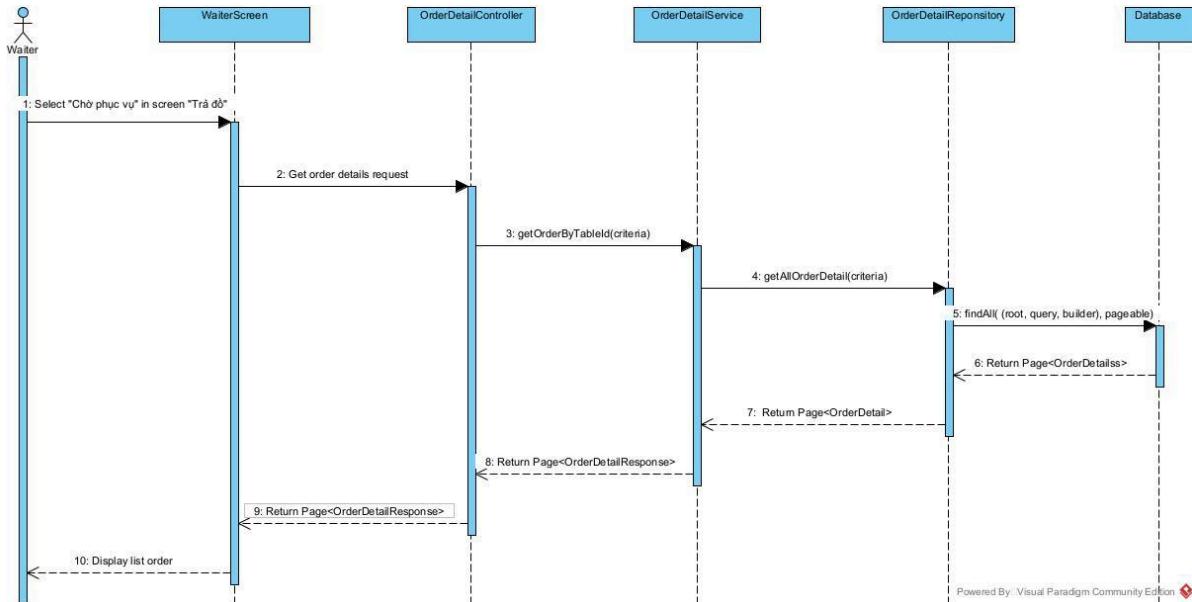
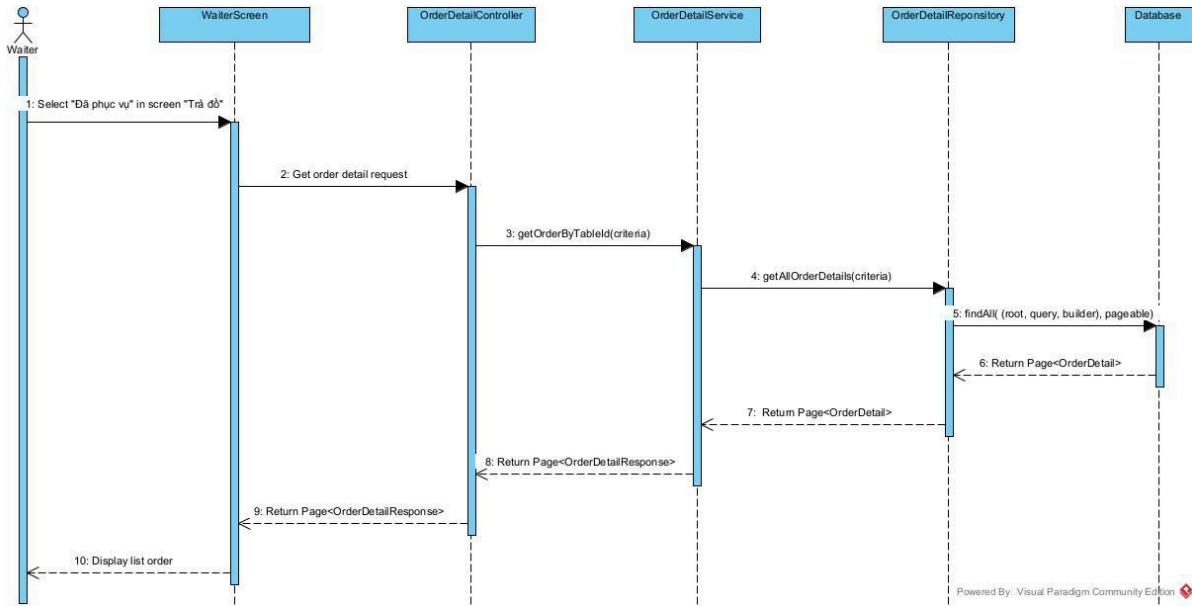


Figure: View Order Dish Sequence

3.2.9 View waiting delivery dish



3.2.10 View served dish list



3.2.11 View order details

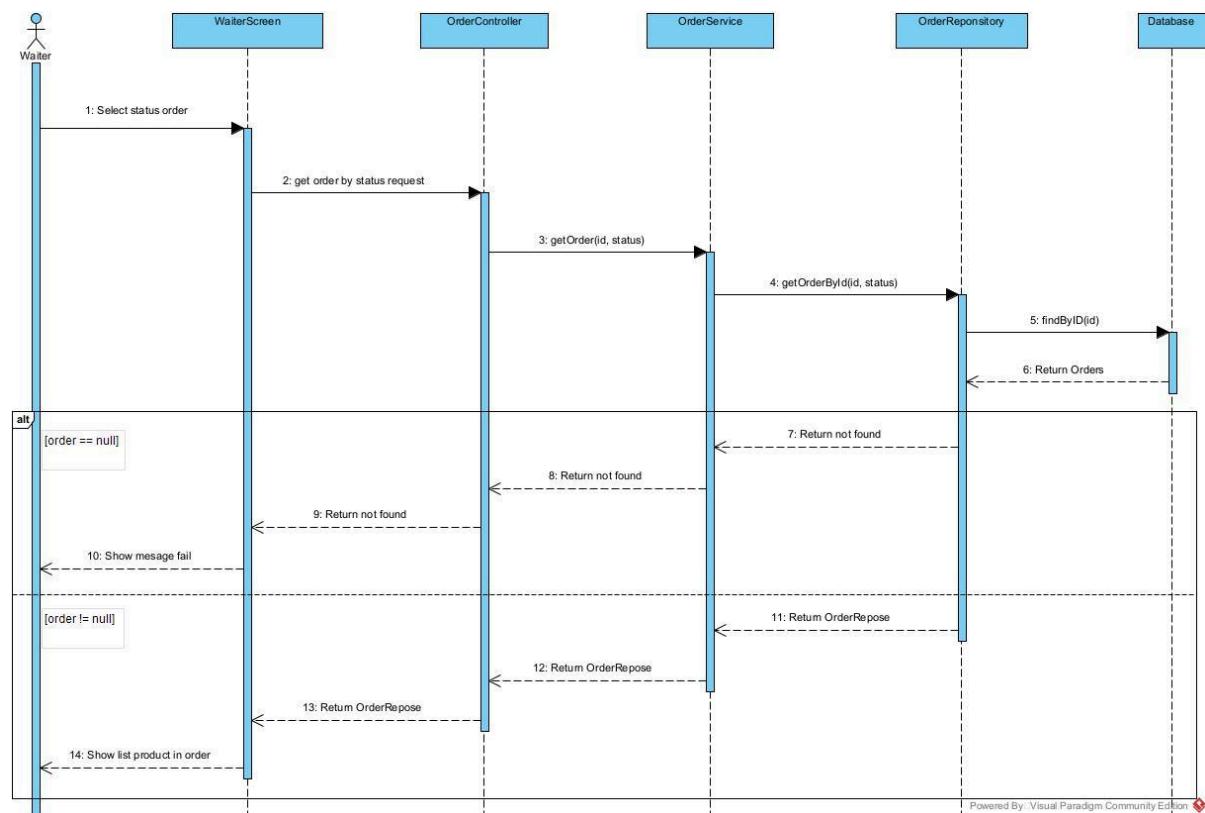
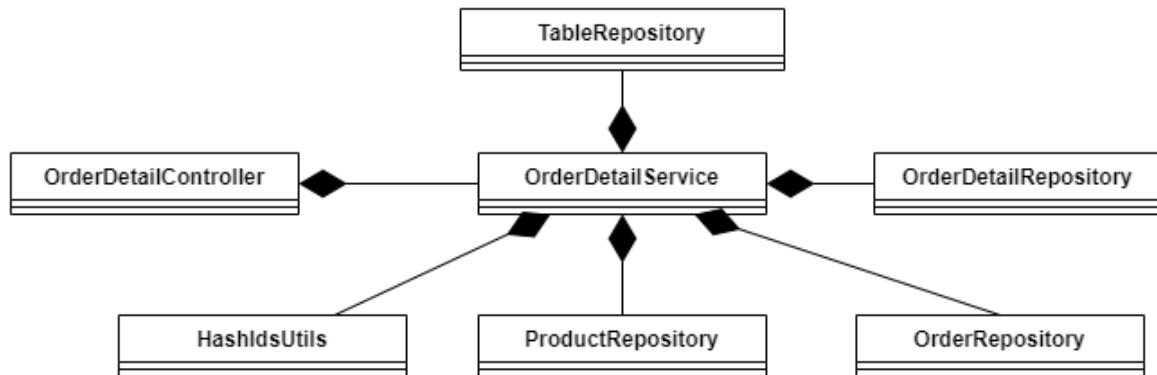


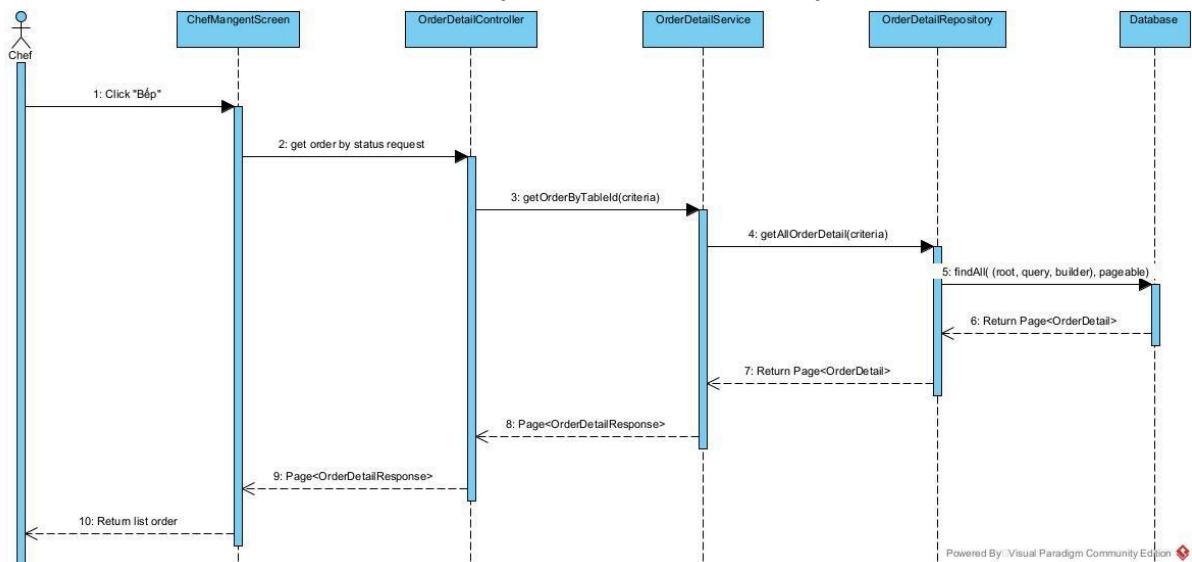
Figure: View order details of tables Sequence

3.3. Chef

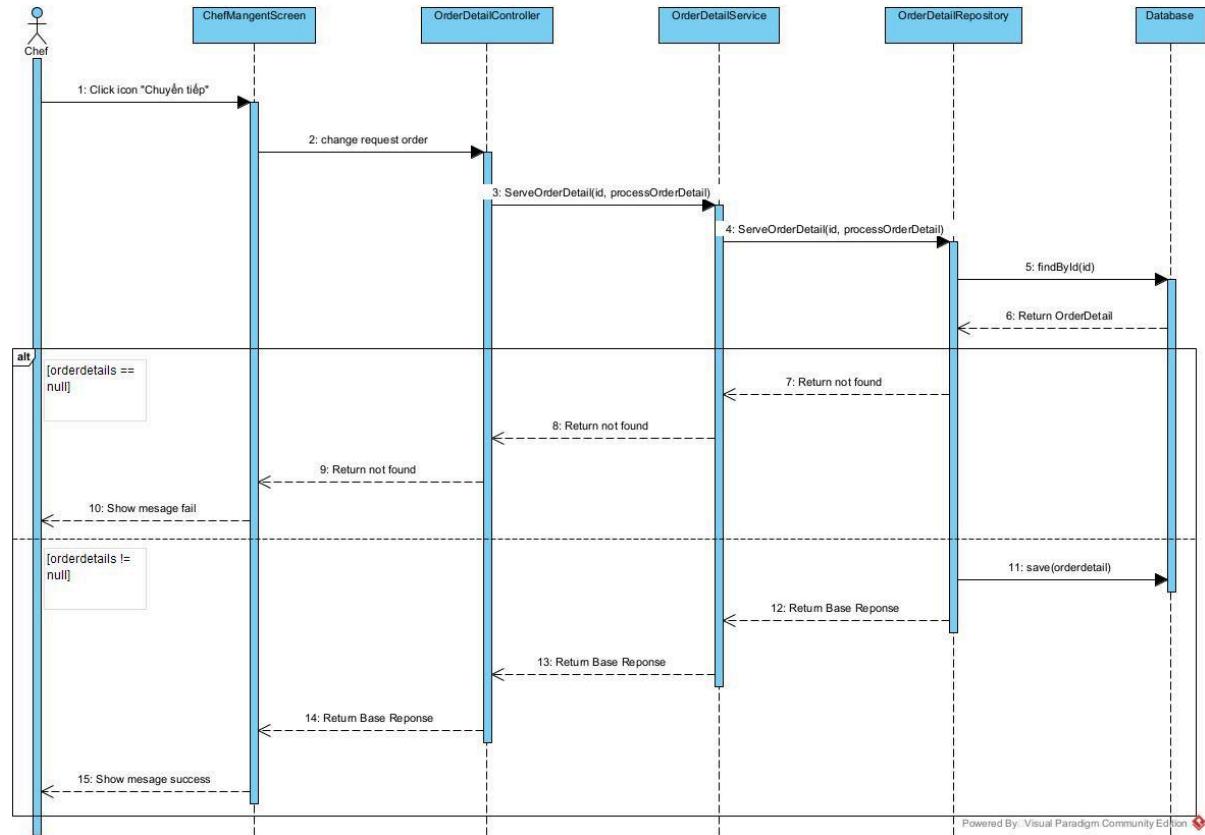
3.3.1 Class Diagram



3.3.2 See the list of dishes that need to be processed and have been processed



3.3.3 Change the status from waiting for processing to completed



3.4. Cashier

3.4.1 Class Diagram

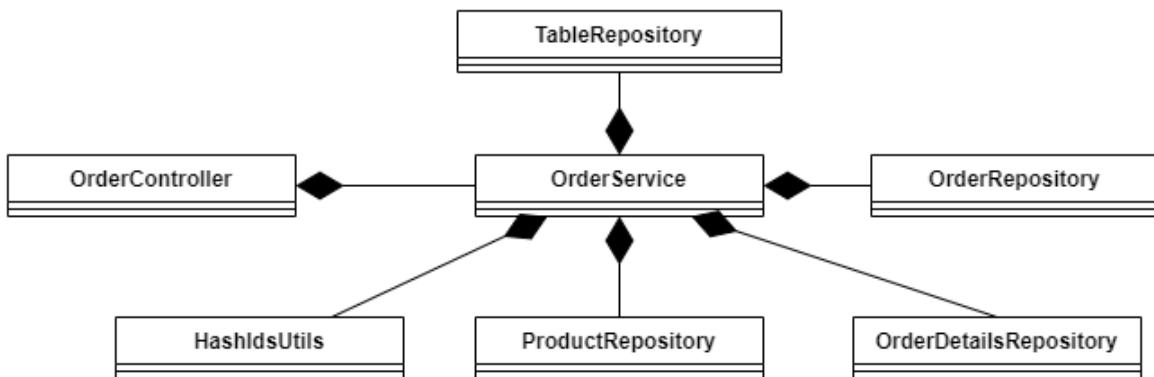


Figure: Order Class Diagram

3.4.2 View list bill

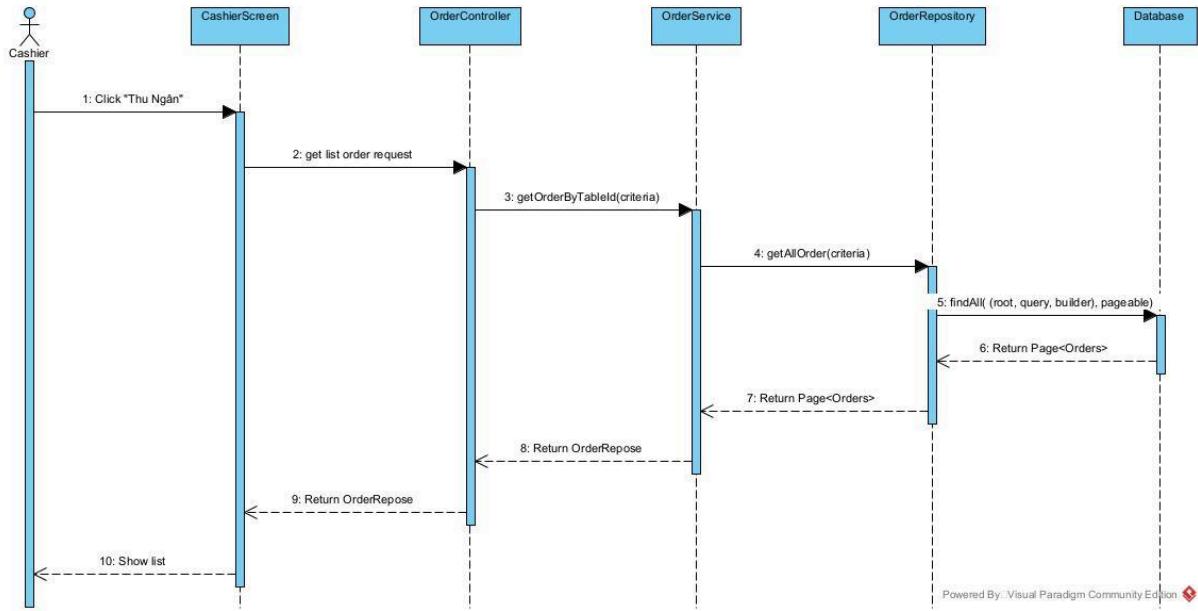


Figure: View List Bill Sequence

3.4.3 View bill detail

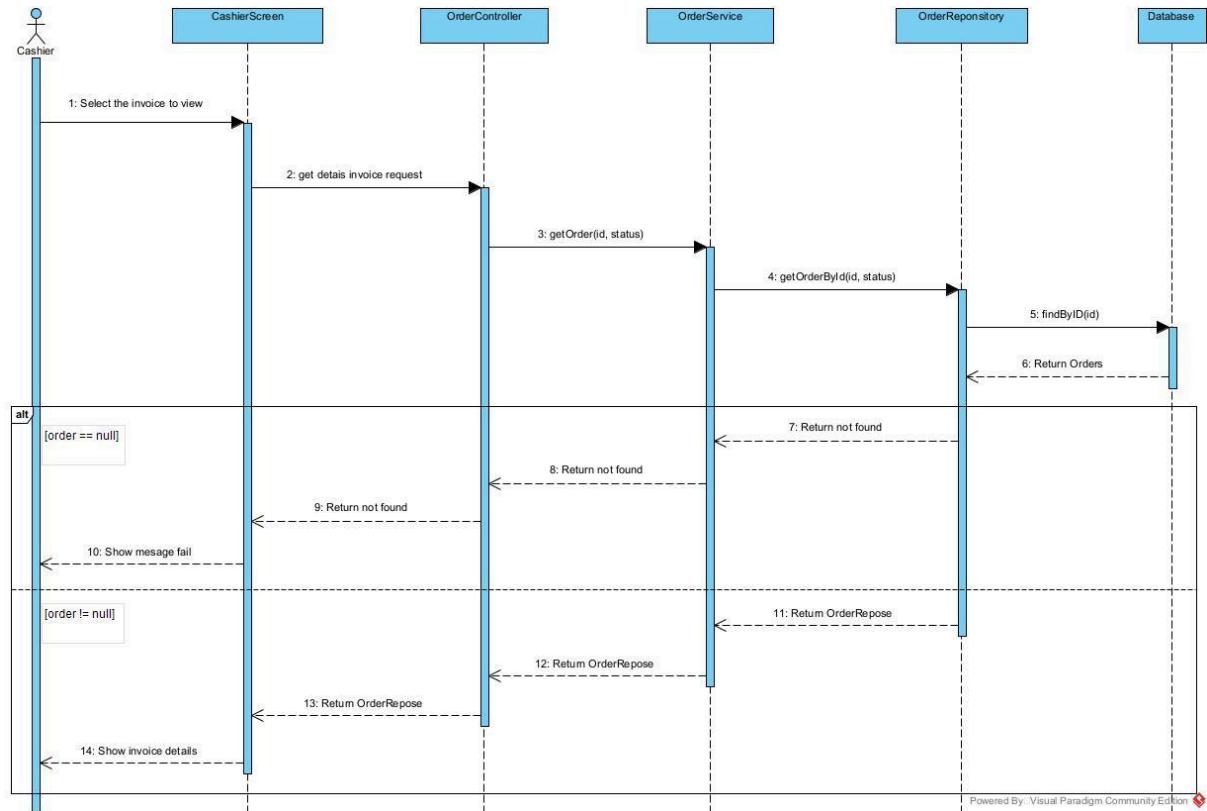


Figure: View Detail Bill Sequence

3.5. Eatery owner

3.5.1 Class Diagram

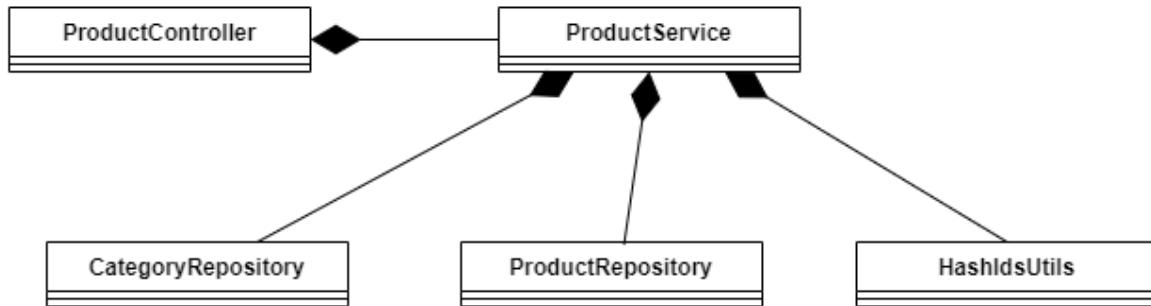


Figure:Product Class Diagram

3.5.2 View Product

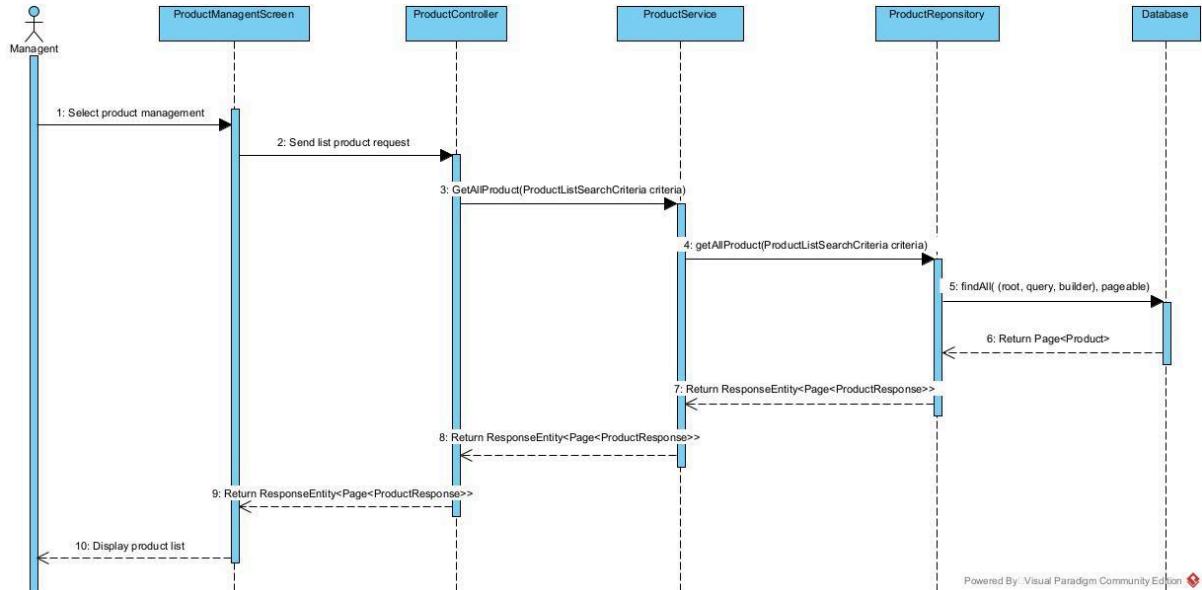


Figure:View Product Sequence

3.5.3 Create Product

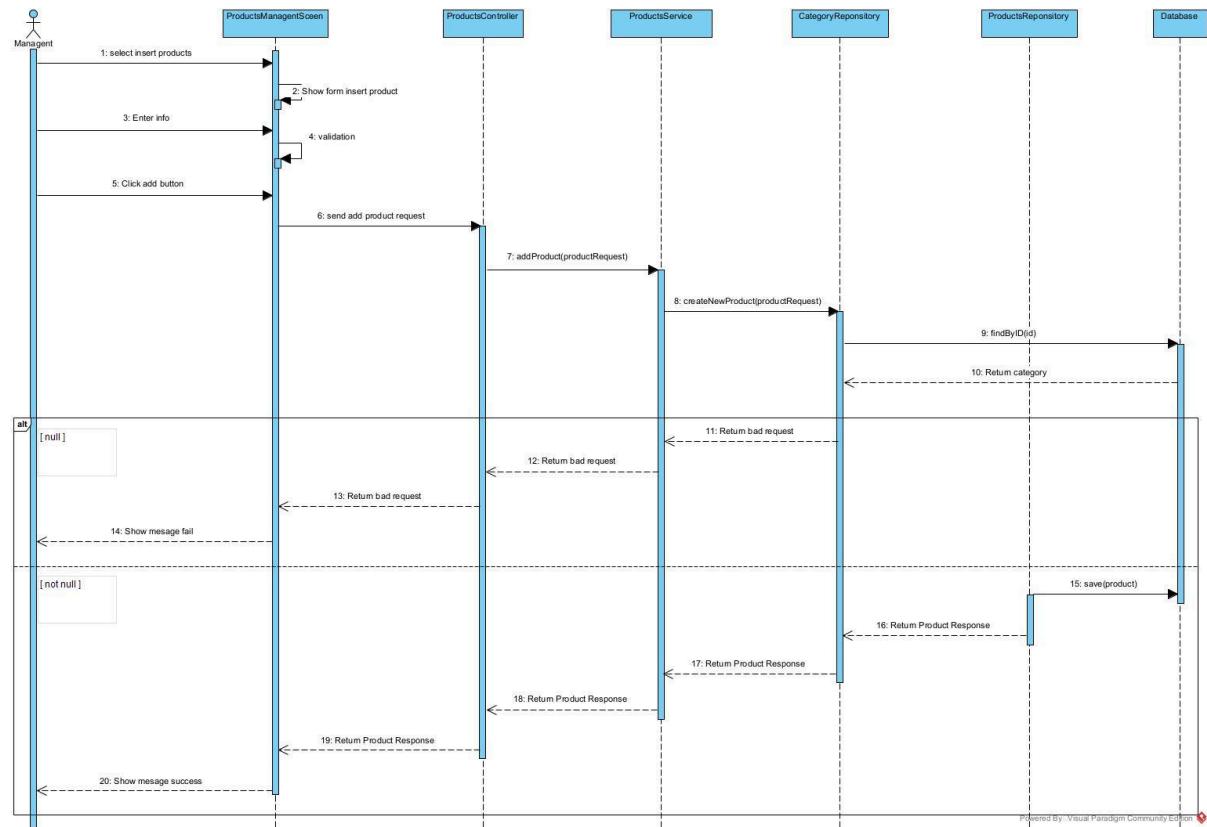


Figure:Create Product Sequence

3.5.4 Detail Product

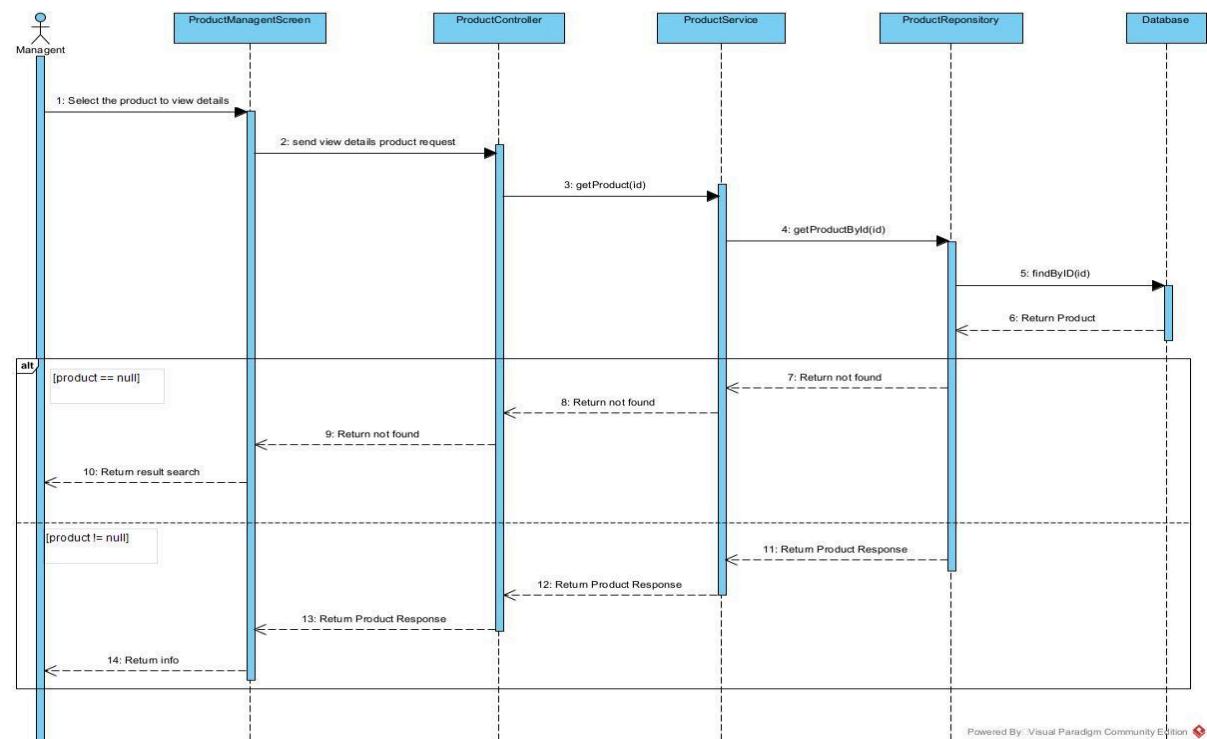


Figure:Detail Product Sequence

3.6. Manager

3.6.1 Class Diagram

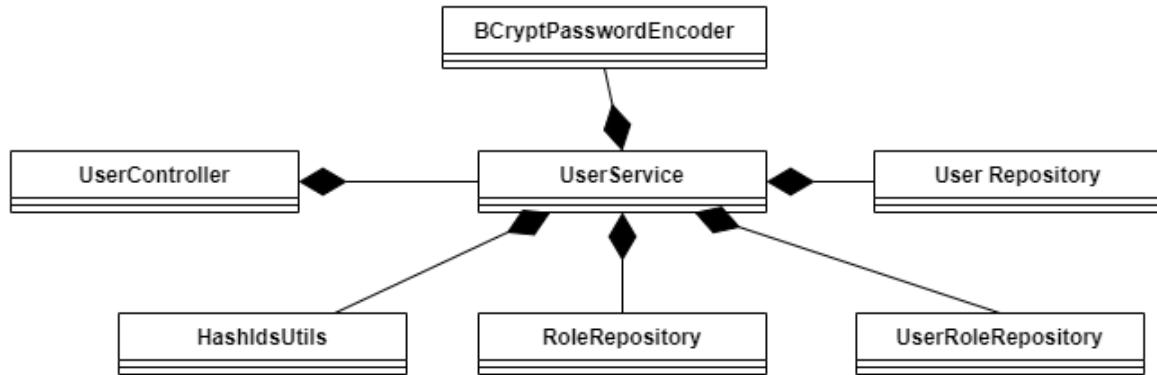


Figure: User Class Diagram

3.6.2 View Account

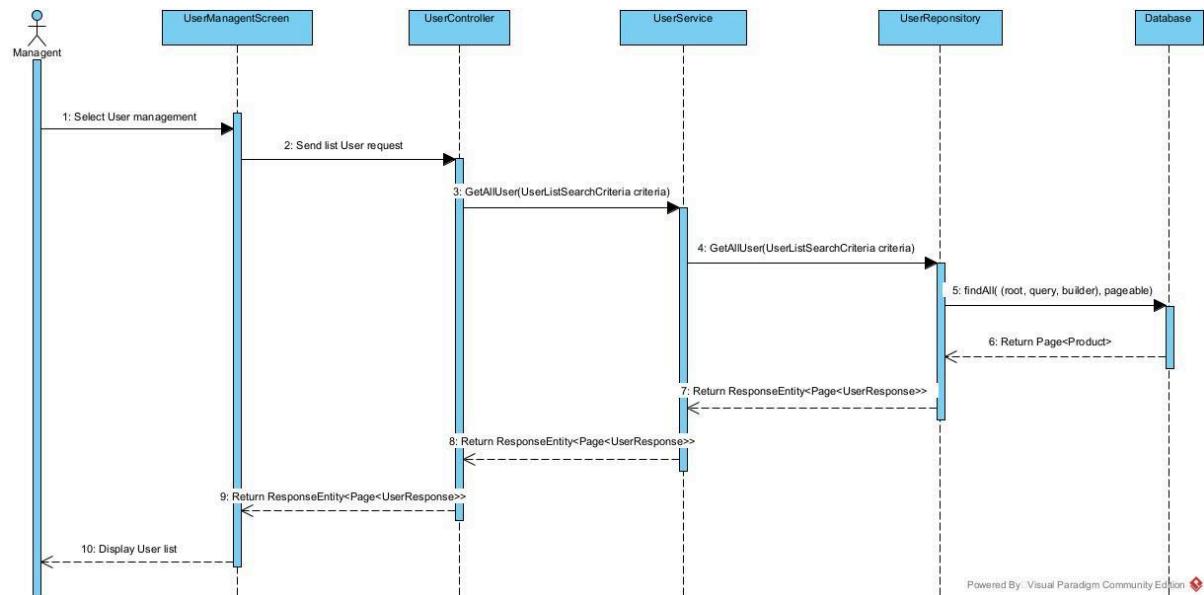


Figure: View Account Sequence

3.6.2 Detail Account

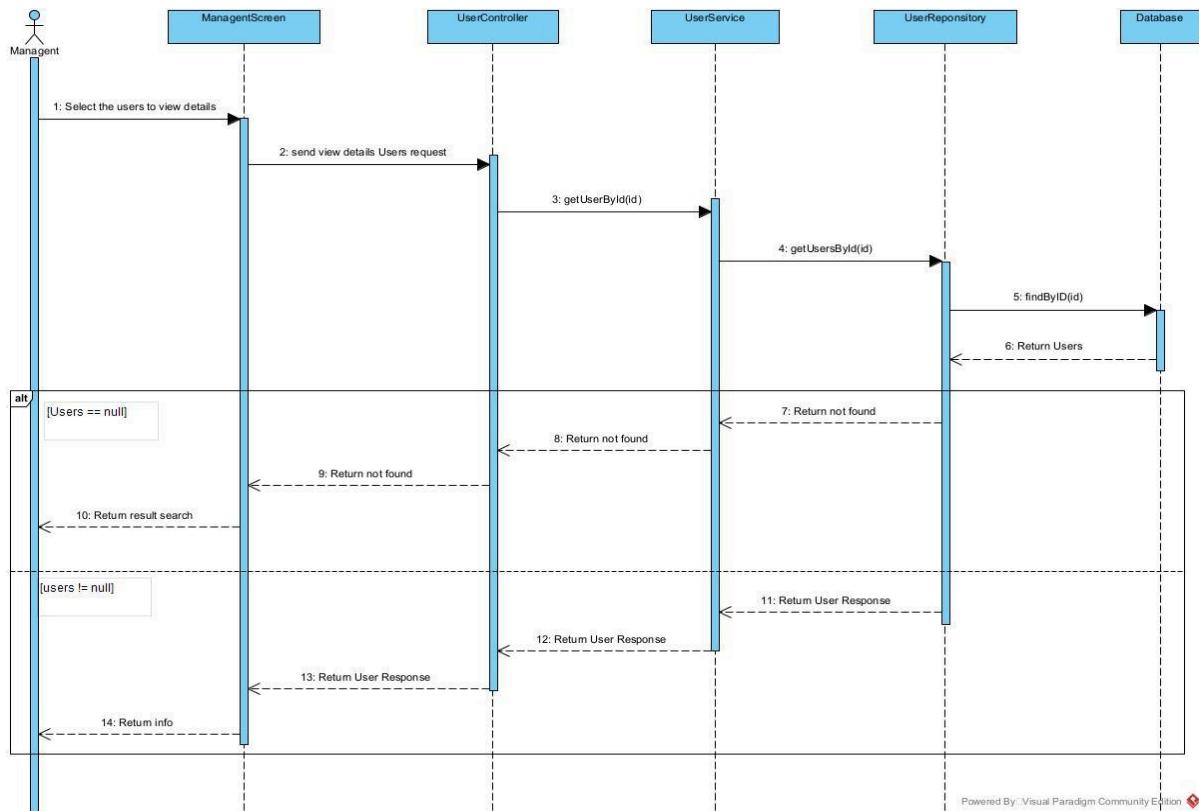


Figure: Detail Account Sequence

V. Software Testing Documentation

1. Scope of Testing

1.1 Target of Testing

Our test scope includes the following features, functions, and functional requirements:

Functions: Some features – defined in section 3 of [SRS] document.

Non-functional:

1. External Interfaces

+) The system is not connected to any external applications.

2. User Interface

+) Utilise responsive design to ensure seamless interaction across all devices.

3. Performance Requirements

+) The system allows customers to order food quickly.

4. Security Requirements

+) Users MUST authenticate with a password that is a minimum of 4 characters and a maximum of 20 characters and contains no spaces.

1.2 Software testing life cycle.

1. Test planning : Determine the test objective and approach to achieve the goal, can be reviewed based on feedback from monitoring and control activities, information about test basis, output criteria (used throughout the monitoring and control process).
2. Test monitoring and control : Includes continuous comparison of actual progress against test plan using test monitoring metrics identified in the test plan, includes performing the necessary activities to achieve the test plan's goals, check the test results and log the coverage criteria, evaluate the quality level of components or the entire system based on test results and logs.
3. Test analysis : Requirements specification, design and implementation information, evaluate test basis and test items to identify errors, information about test conditions, report an error in test basis.
4. Test design : Design and prioritise test cases and test case sets, identify the test data needed to support test conditions and test cases, design the test environment and determine the necessary infrastructure and tools, capture two-way traceability between test basis, test conditions, test cases and test procedures.
5. Test implementation : Develop and prioritise test procedures, and may create automated test scripts, create test suites from test procedures and automated test scripts (if any), build the test environment and verify that everything necessary is installed correctly, prepare test data and ensure they are loaded correctly in the test environment.
6. Test execution : Analyse anomalies to determine possible causes, defect reports are based on observed failure symptoms, repeat testing activities when there are abnormal results, verify and update 2-way traceability between test basis, test conditions, test cases, test procedures and test results.

1.3 Test phases

ID	Phases of testing	Description
1	Unit test	The main aim of this endeavour is to determine whether the application functions as designed. In this phase, a unit can refer to a function, individual program, or even a procedure, and a White-box Testing method is usually used to get the job done
2	Integration test	Integration testing allows individuals the opportunity to combine all of the units within a program and test them as a group. This testing level is designed to find interface defects between the modules/functions. This is particularly beneficial because it determines how efficiently the units are running together.
3	System test	System testing is the first level in which the complete application is tested as a whole. The goal at this level is to evaluate whether the system has complied with all of the outlined requirements and to see that it meets Quality Standards.

2. Test Strategy

2.1 Testing Types

Function test : Unit testing stands as a cornerstone practice in modern software development, offering a myriad of advantages throughout the development lifecycle. By systematically testing individual units or components of software in isolation, unit testing contributes significantly to the overall quality, reliability, and maintainability of software systems.

Integration test: Integration testing complements unit testing as another crucial aspect of software quality assurance. While unit testing focuses on verifying the functionality of individual units or components in isolation, integration testing examines the interactions between these units when integrated into larger modules or systems.

Integration testing plays a pivotal role in software development by validating the interactions and interfaces between various modules, ensuring that they function seamlessly together as intended. By simulating real-world scenarios and testing the integration points, this testing approach uncovers potential issues such as communication failures, data inconsistencies, and interface mismatches early in the development cycle. Consequently, integration testing helps mitigate risks associated with system integration, preventing costly defects from surfacing in production environments.

System test: System testing represents the final frontier in the quality assurance process of software development. Unlike unit testing, which focuses on individual components, or integration testing, which verifies interactions between modules, system testing evaluates the entire software system as a unified entity.

System testing serves as the ultimate validation step, encompassing all aspects of the software, including its user interface, functionality, performance, and reliability. By subjecting the system to a battery of tests that simulate real-world usage scenarios, system testing aims to uncover any defects or discrepancies between the software's intended behaviour and its actual performance. This comprehensive testing approach helps identify issues such as usability problems, compatibility issues, security vulnerabilities, and performance bottlenecks, ensuring that the software meets the specified requirements and delivers a satisfactory user experience.

2.2 Test Levels

Type of Tests	Test Level			
	Unit	Integration	System	Acceptance
Function test	X			
Integration test		X		
System test			X	

2.3 Supporting Tools

Details of the tools the project will use for testing:

Purpose	Tool	Vendor/In-house
View website	Google Chrome	Google
Manage test cases, logging bug	Google Sheet	Google
Manage test plan	Google Doc	Google
Unit Test	Postman	Postman
Integration Test	Google Sheet	Google
System Test	Google Sheet	Google

3. Test Plan

3.1 Human Resources

Below are the roles and responsibilities of team members involved in testing activities in the project:

Worker/Doer	Role	Specific Responsibilities/Comments
Lê Hà Nam	PM	Managing software testing time and bug fixing.
Nguyễn Phương Linh	Develop back-end + fix bug	Back-end processing and bug fixing.
Chu Văn Luân	Develop front-end + fix bug.	Front-end development and bug fixing.

Chu Tuấn Dũng	Develop front-end + fix bug.	Front-end development and bug fixing.
Chu Hồng Long	Leader Test.	Assign task to team member with test summary.

3.2 Test Environment

Details of the devices the project will use for testing:

Purpose	Tool	Provider	Version
View UI of customer.	Iphone XS Max	Apple	IOS 17
View UI of customer.	Sam Sung	Android	Android 11
View manage website	Laptop	Asus	Win 11
View chef website	Laptop	Asus	Win 11
View eatery owner website	Laptop	Asus	Win 11

3.3 Test Milestones

Milestone Task	Start Date	End Date
Create Test Plan	07/03/2024	09/03/2024
Create and execute Unit Test for Iteration 1	12/03/2024	13/03/2024
Create and execute Unit Test for Iteration 2	14/03/2024	16/03/2024
Create and execute Unit Test for Iteration 3	17/03/2024	17/03/2024
Create and execute Integration Test for Iteration 1	18/03/2024	22/03/2024
Create and execute Integration Test for Iteration 2	23/03/2024	26/03/2024
Create and execute Integration Test for Iteration 3	27/03/2024	30/03/2024
Create and execute System Test for Iteration 1	01/04/2024	04/04/2024
Create and execute System Test for Iteration 2	05/04/2024	08/04/2024
Create and execute System Test for Iteration 3	09/04/2024	12/04/2024

4. Test Cases

4.1 Unit Test

Details are shown in the excel file Report5.1_Unit Test.xlsx

Code Module	ProductModule	Method	createNewProduct														
Created By		Executed By	LongCH														
Test requirement	Passed	Failed	Untested			N/A/B			Total Test Cases								
	5	5	5			7	2	1	15								
			UTCID01	UTCID02	UTCID03	UTCID04	UTCID05	UTCID06	UTCID07	UTCID08	UTCID09	UTCID10	UTCID11	UTCID12	UTCID13	UTCID14	UTCID15
Condition	Precondition		▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
	Login successful	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	categoryId	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
	"1"	0	0	▼	▼	0	0	0	0	0	0	0	0	0	0	0	
	null	▼	▼	0	0	▼	▼	▼	▼	0	0	0	0	0	0	0	
	image	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
	product.jpg	0	▼	0	0	▼	▼	0	0	0	0	0	0	0	0	0	
	null	▼	0	▼	▼	0	0	0	0	0	0	0	0	0	0	0	
	name	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
	product_1	0	0	▼	▼	0	▼	0	0	0	0	0	0	0	0	0	
	product_2	▼	▼	0	▼	0	▼	0	0	0	0	0	0	0	0	0	
	price	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
	12500	0	0	0	▼	▼	0	0	0	0	0	0	0	0	0	0	
	null	▼	▼	▼	0	0	▼	0	0	0	0	0	0	0	0	0	
	status	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
	TRUE	0	0	0	▼	▼	0	▼	0	0	0	0	0	0	0	0	
	FALSE	▼	▼	▼	0	▼	0	0	0	0	0	0	0	0	0	0	
Confirm	Return	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
	success	0	▼	0	▼	▼	0	0	0	0	0	0	0	0	0	0	
	failed	▼	0	▼	0	0	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
	Log message	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	
Result	Type(N : Normal, A : Abnormal, B : Boundary)	N	N	N	B	A	A	N	N	N	N	N	N	N	N	N	
	Passed/Failed	P	P	P	P	P	P	F	F	F	F	F	F	F	F	F	
	Executed Date	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
		/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Defect ID																	

Figure Test case unit test

4.2 Integration Test

Details are shown in the excel file Report5.2_Integration Test.xlsx

Feature	Update Product	Test date	Tester	Round 2	Test date	Tester	Round 3	Test date				
Test requirement	Update product											
Number of TCs	9											
Testing Round	Passed	Failed	Pending	N/A								
Round 1	5	0	0	0								
Test Case ID	Test Case Description	Test Case Procedure	Expected Results	Pre-conditions	Round 1	Test date	Tester	Round 2				
Product_15	Test UI update product.	1. Click icon update of product in each line of product. 2. Click "Edit" button.	1. Updated product pop-up is displayed with fields "Danh mục", "Tên sản phẩm", "Giá", "Trạng thái", "Anh" with data, button "Đồng ý", "Lưu". 2. Redirect to list product screen.	Login with manager account or employee, go to the product page.	Failed	18/03/2024	LongCH	Failed	23/03/2024	LongCH	Passed	27/03/2024
Product_16	Test update product with change "Danh mục".	1. Change "Danh mục" of this product. 2. Click "Lưu".	1. "Danh mục thêm công" is display. 2. "Danh mục" of this product change. 3. Redirect to list product screen.	Login with manager account or employee, go to the product page and choose product to update.	Passed	18/03/2024	LongCH	Passed	23/03/2024	LongCH	Passed	27/03/2024
Product_17	Test update product with change "Tên sản phẩm".	1. Change "Tên sản phẩm" of this product. 2. Click "Lưu".	1. "Tên sản phẩm thêm công" is display. 2. "Tên sản phẩm" of this product change. 3. Redirect to list product screen.	Login with manager account or employee, go to the product page and choose product to update.	Failed	18/03/2024	LongCH	Failed	23/03/2024	LongCH	Passed	27/03/2024
Product_18	Test update product with change "Giá" is number.	1. Change "Giá" of this product. 2. Click "Lưu".	1. "Giá thêm công" is display. 2. "Giá" of this product change. 3. Redirect to list product screen.	Login with manager account or employee, go to the product page and choose product to update.	Passed	18/03/2024	LongCH	Passed	23/03/2024	LongCH	Passed	27/03/2024
Product_19	Test update product with change "Giá" is not number.	1. Change "Giá" of this product is "ABCCC". 2. Click "Lưu".	1. "Giá thêm công" is display. 2. "Giá" of this product change. 3. "ABCCC" is display.	Login with manager account or employee, go to the product page and choose product to update.	Failed	18/03/2024	LongCH	Passed	23/03/2024	LongCH	Passed	27/03/2024
Product_20	Test update product with change "Trạng thái".	1. Change "Trạng thái" of this product. 2. Click "Lưu".	1. "Trạng thái thêm công" is display. 2. "Trạng thái" of this product change. 3. Redirect to list product screen.	Login with manager account or employee, go to the product page and choose product to update.	Passed	18/03/2024	LongCH	Passed	23/03/2024	LongCH	Passed	27/03/2024
Product_21	Test update product with change "Anh".	1. Change "Anh" of this product. 2. Click "Lưu".	1. "Anh thêm công" is display. 2. "Anh" of this product change. 3. Redirect to list product screen.	Login with manager account or employee, go to the product page and choose product to update.	Failed	18/03/2024	LongCH	Passed	23/03/2024	LongCH	Passed	27/03/2024
Product_22	Test update product with change "Anh" when click button "Tùi Anh Lên".	1. Choose "Anh" from device and click "Open". 2. Click "Lưu".	1. "Anh thêm công" is display. 2. "Anh" of this product change. 3. "Tùi Anh Lên" is display.	Login with manager account or employee, go to the product page and choose product to update, click button "Tùi Anh Lên".	Failed	18/03/2024	LongCH	Failed	23/03/2024	LongCH	Passed	27/03/2024
Product_23	Test update product with change all "Danh mục", "Giá", "Trạng thái", "Tên sản phẩm", "Anh".	1. Change all product data fields.	1. "Danh mục thêm công" is display. 2. "Giá thêm công" is display. 3. "Trạng thái thêm công" is display. 4. "Tên sản phẩm thêm công" is display. 5. "Anh thêm công" is display.	Login with manager account or employee, go to the product page and choose product to update.	Failed	18/03/2024	LongCH	Failed	23/03/2024	LongCH	Passed	27/03/2024

Figure Test case integration test

4.3 System Test

System test:

Details are shown in the excel file Report5.3_System Test.xlsx

Workflow	Manage Product													
Test requirement	Manage Product													
Number of TCs	12													
Status	Passed Failed Pending N/A													
Total	12 0 0 0													
Test Case ID	Test Case Description	Test Case Procedure	Expected Results	Pre-conditions	Round 1	Test date	Tester	Round 2	Test date	Tester	Round 3	Test date	Tester	Note
Manager_Product_1	Test view list products.	1. Click on "Sản phẩm" button on left-corner menu. 2. Product list screen is displayed with fields: "SD thứ tự", "Anh", "Tên sản phẩm", "Giá", "Danh mục", "Trạng thái", "Quản lý".	Login with account manager or eatery owner role.	Passed	02/04/2024	LongCH	Passed	06/04/2024	LongCH	Passed	10/04/2024	LongCH		
Manager_Product_2	Test view UI of create products.	1. Click on "Sản phẩm" button on left-corner menu. 2. Product list screen is displayed. 3. Click button "Thêm mới". 4. Create product pop-up is displayed. 5. Enter input : - Danh mục : Món tráng miệng - Tên sản phẩm : Bánh gao - Giá : 25000 - Trạng thái : Đánh kính doanh - Anh :  6. Click "Lưu".	Login with account manager or eatery owner role.	Failed	02/04/2024	LongCH	Passed	06/04/2024	LongCH	Passed	10/04/2024	LongCH		
Manager_Product_3	Test create product successfully.	1. Click on "Sản phẩm" button on left-corner menu. 2. Product list screen is displayed. 3. Click button "Thêm mới". 4. Create product pop-up is displayed. 5. Enter input : - Danh mục : Món tráng miệng - Tên sản phẩm : Bánh gao - Giá : 25000 - Trạng thái : Đánh kính doanh - Anh :  6. Click "Lưu".	Login with account manager or eatery owner role.	Failed	02/04/2024	LongCH	Failed	06/04/2024	LongCH	Passed	10/04/2024	LongCH		
Manager Product_4	Test create product with do not select "Trạng thái".	1. Click on "Sản phẩm" button on left-corner menu. 2. Product list screen is displayed. 3. Click button "Thêm mới". 4. Create product pop-up is displayed. 5. Enter input : - Danh mục : Món ăn phở - Tên sản phẩm : Nước ngọt - Giá : Pizza.png - Trạng thái : Ngừng kinh doanh 6. Click "Lưu".	Login with account manager or eatery owner role.	Passed	02/04/2024	LongCH	Passed	06/04/2024	LongCH	Passed	10/04/2024	LongCH		
Manager Product_5	Test create product with Danh mục , Tên sản phẩm, Trạng thái,Giá,Anh empty	1. Click on "Sản phẩm" button on left-corner menu. 2. Product list screen is displayed. 3. Click button "Thêm mới". 4. Create product pop-up is displayed. 5. Enter input : - Danh mục : - Tên sản phẩm : - Giá : - Trạng thái : - Anh : 6. Click "Lưu".	Login with account manager or eatery owner role.	Failed	02/04/2024	LongCH	Passed	06/04/2024	LongCH	Passed	10/04/2024	LongCH		

Figure Test case system test

5. Test Reports

5.1 Unit Test

The following is the unit test statistics table.

UNIT TEST REPORT

Project Name	<i>Eatery Management System</i>	Creator	LongCH
Project Code	<i>EMS</i>	Reviewer/Approver	NAMLH
Document Code	<i>EMS_Test_Report_v1.0</i>	Issue Date	13/03/2024
Notes			

No	Function code	Passed	Failed	Untested	N	A	B	Total Test Cases
1	ben	9	0	0	6	3	0	9
2	createNewCategory	6	0	0	3	2	1	6
3	getAllCategory	5	0	0	3	1	1	5
4	getCategoryById	6	1	0	3	3	1	7
5	updateCategory	6	0	0	3	1	2	6
6	deleteCategory	6	0	0	3	2	1	6
8	createNewProduct	5	5	0	3	2	1	10
9	getAllProduct	6	0	0	3	2	1	6
10	getProductById	9	0	0	5	2	2	9
11	updateProduct	7	0	0	4	2	1	7
12	deleteProduct	9	0	0	5	1	3	9
Sub total		74	6	0	41	21	14	80

Test coverage 100.00 %
Test successful coverage 92.50 %
Normal case 51.25 %
Abnormal case 26.25 %
Boundary case 17.50 %



Figure Test reports unit test

5.2 Integration Test

Here we have combined many functions together for IT. that will ensure the product has the fewest possible defects.

TEST STATISTICS

Project Name	Eatery Management System	Creator	LongCH
Project Code	EMS	Reviewer/Approver	NAMLH
Document Code	EMS Integration Test Report v1.2	Issue Date	23/02/2024
Notes			

No	Module code	Passed	Failed	Pending	N/A	Number of test cases
1	Login	6	0	0	0	6
2	Logout	3	0	0	0	3
3	View List Product	4	0	0	0	4
4	Create product	10	0	0	0	10
5	Update Product	9	0	0	0	9
6	View Detail Product	1	0	0	0	1
7	View List Category	4	0	0	0	4
8	Create Category	4	0	0	0	4
9	Update Category	4	0	0	0	4
10	View Detail Category	1	0	0	0	1
11	View List User	4	0	0	0	4
12	Create User	10	0	0	0	10
13	Update User	9	0	0	0	9
14	View Detail User	1	0	0	0	1
15	View List Table	3	0	0	0	3
16	Create Table	4	0	0	0	4
17	Update Table	4	0	0	0	4
18	View Menu	6	0	0	0	6
19	Add To Cart	3	0	0	0	3
20	View Cart	6	0	0	0	6
21	View List Order Dish	5	0	0	0	5
22	View List Order	3	0	0	0	3
23	View Order Detail	1	0	0	0	1
24	View List Bill	3	0	0	0	3
Sub total		108	0	0	0	108

Test coverage **100.00 %**
 Test successful coverage **100.00 %**

Figure Test reports integration test

5.3 System Test

Here we have used a common restaurant flow that customers often use to test possible customer situations.

TEST STATISTICS

Project Name	Eatery Management System	Creator	LongCH
Project Code	EMS	Reviewer/Approvers	NAMLH
Document Code	Report5.3 System Test v1.3	Issue Date	25/02/2024
Notes			

No	Module code	Passed	Failed	Pending	N/A	Number of test cases
1	Login	6	0	0	0	6
2	Logout	3	0	0	0	3
3	Manage Product	12	0	0	0	12
4	Manage Category	9	0	0	0	9
5	Manager User	10	0	0	0	10
6	Manage Table	8	0	0	0	8
7	Manage Cart	7	0	0	0	7
8	Manager Order	2	0	0	0	2
Sub total		57	0	0	0	57

Test coverage **100.00 %**
 Test successful coverage **100.00 %**

Figure Test reports system test

5.4 Summary Test

The table below summarises the results of the testing process.

SUMMARY TEST REPORT						
Project Name	Eatery Management Systems		Creator	Long CH		
Project Code	EMS		Reviewer/Approver	NamLH		
Document Code			Issue Date	15/04/2024		
Notes	Release 1 (v0.01.0)					
No	Module code	Pass	Fail	Pending	N/A	Number of test cases
1	Unit Test	80	0	0	0	80
2	Integration Test	108	0	0	0	108
3	System Test	57	0	0	0	57
Sub total		245	0	0	0	245
			Test coverage	100.00 %		
			Test successful coverage	100.00 %		

Figure Summary test

VI. Release Package & User Guides

1. Deliverable Package

No.	Deliverable Item	Description
Code Package		
1	Backend – Server side	<u>ems_v2_be</u> , <u>ems_v2_customer</u>
2	Frontend – Client side	<u>ems_v2_fe</u>
Database		
3	Database Script(s)	
Documents		
4	Final Report	Report7_Final Project Report
5	Project Introduction	Report1_Project Introduction
6	Software Requirement Specification	Report3_Software Requirement Specification
7	Project Management Plan	Report2_Project Management Plan
8	Software Design Document	Report4_Software Design Document
9	Software User Guide	Report6_Software User Guides
10	Slide	
Testing		
11	Test Cases Document	Report5_Test Documentation
12	Unit Test Report	
13	Integration Test Report	
14	System Test Report	
15	Issues List	

2. Installation Guides

2.1 System Requirements

2.1.1. Client environment

- The project has a management website for the system
- System requirements:

- NodeJs
- Angular
- Visual Studio Code
- MySQL Server

2.1.2. Server environment

-Backend Server

- Java JDK 17
- Java IDE (recommended Visual Studio Code)

- Database Server:

- Mysql
- Database size (On fresh deployment): 12 tables

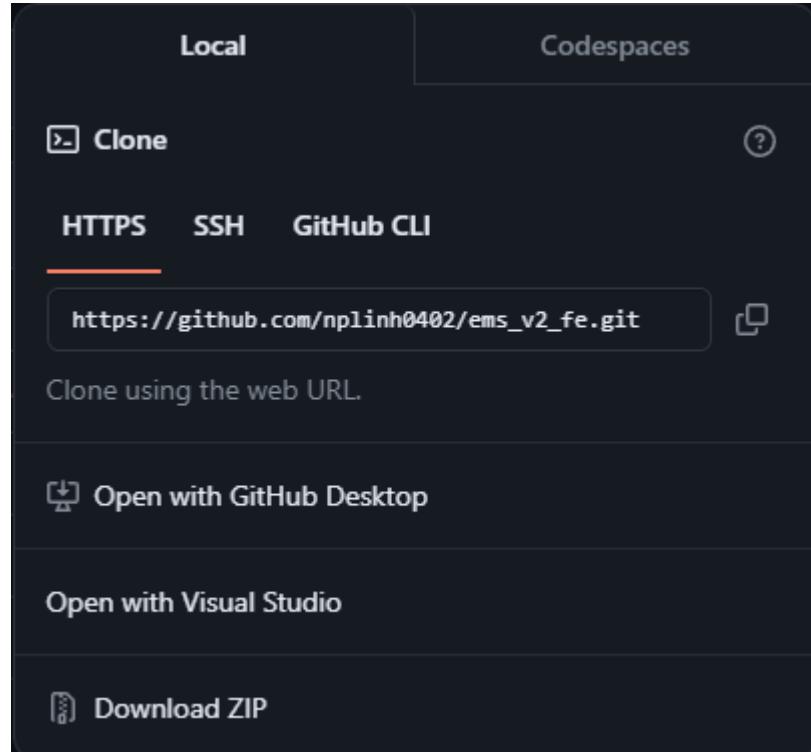
-Storage recommendation:

- Java (on server): OpenJDK version 17
- NodeJs (on server): NodeJS version v16.20.2
- NPM:Node Package Manager version 8.19.4

2.2 Installation Instruction

2.2.1.Frontend Installation

After we install NodeJs version v16.20.2 ,we will be able to download project code with the path on GitHub



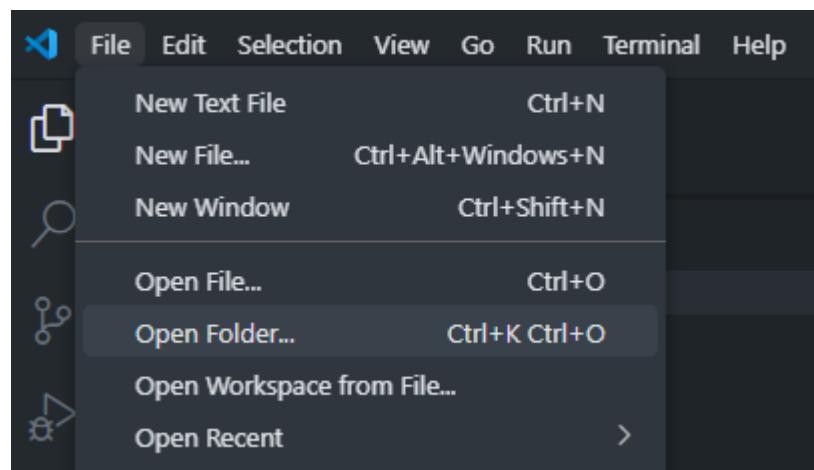
We use the 'git clone' command to copy code from a Git repository to the local machine

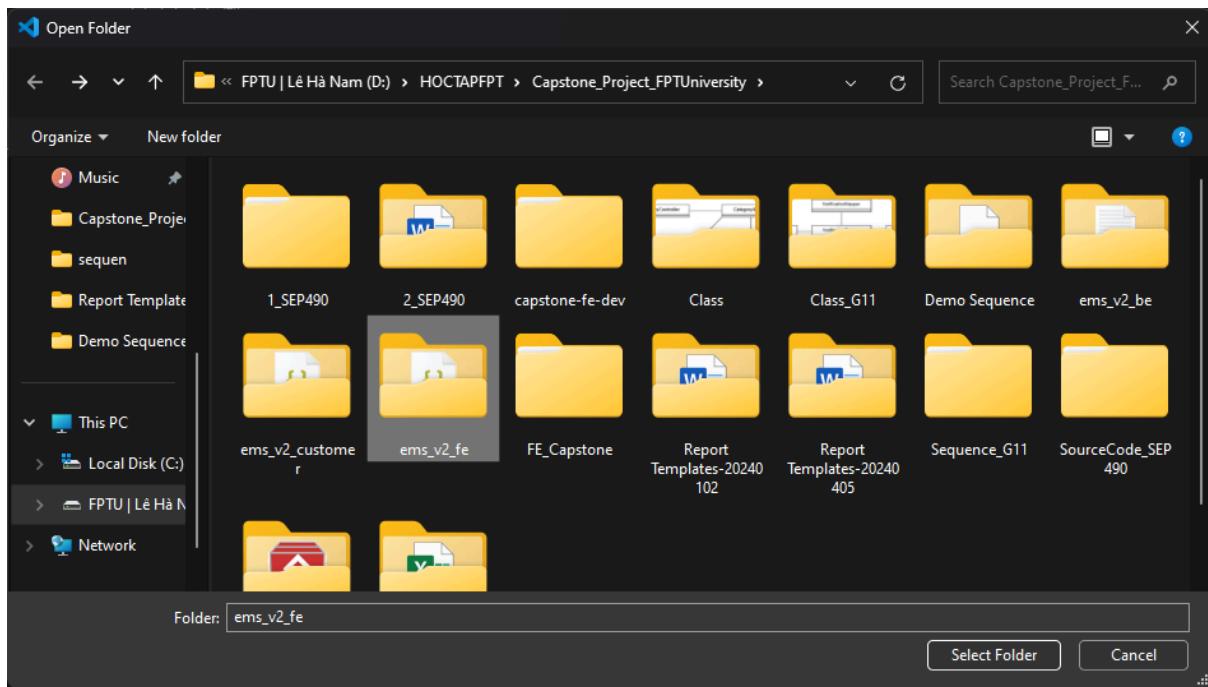
```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS D:\HOCTAPFPT\Capstone_Project_FPTUniversity> git clone https://github.com/nplinh0402/ems_v2_fe.git
Cloning into 'ems_v2_fe'...
remote: Enumerating objects: 2688, done.
remote: Counting objects: 100% (498/498), done.
remote: Compressing objects: 100% (276/276), done.
remote: Total 2688 (delta 397), reused 283 (delta 221), pack-reused 2190
Receiving objects: 100% (2688/2688), 15.05 MiB | 3.33 MiB/s
Receiving objects: 100% (2688/2688), 15.85 MiB | 3.34 MiB/s, done.
Resolving deltas: 100% (1787/1787), done.
PS D:\HOCTAPFPT\Capstone_Project_FPTUniversity> |
```

Click the “Open Folder” button of the screen visual studio code then choose file name “ems_v2_fe” .





When the folder is opened, type in the terminal at the bottom “npm start” and hit Enter to run the program

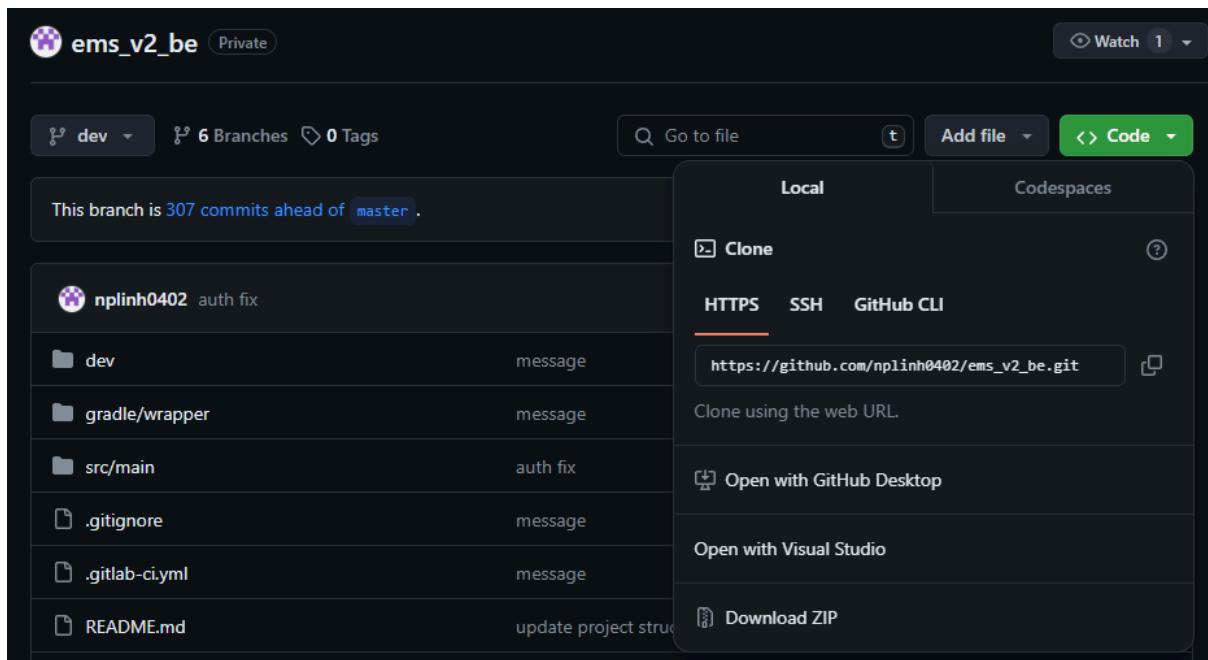
Initial Chunk Files	Names	Size
vendor.js	vendor	9.13 MB
main.js	main	2.06 MB
styles.css, styles.js	styles	1.18 MB
polyfills.js	polyfills	536.69 kB
runtime.js	runtime	9.08 kB
	Initial Total	12.89 MB

2.2.2. Backend Installation

Step 1: go these links:

https://github.com/nplinh0402/ems_v2_be/tree/dev

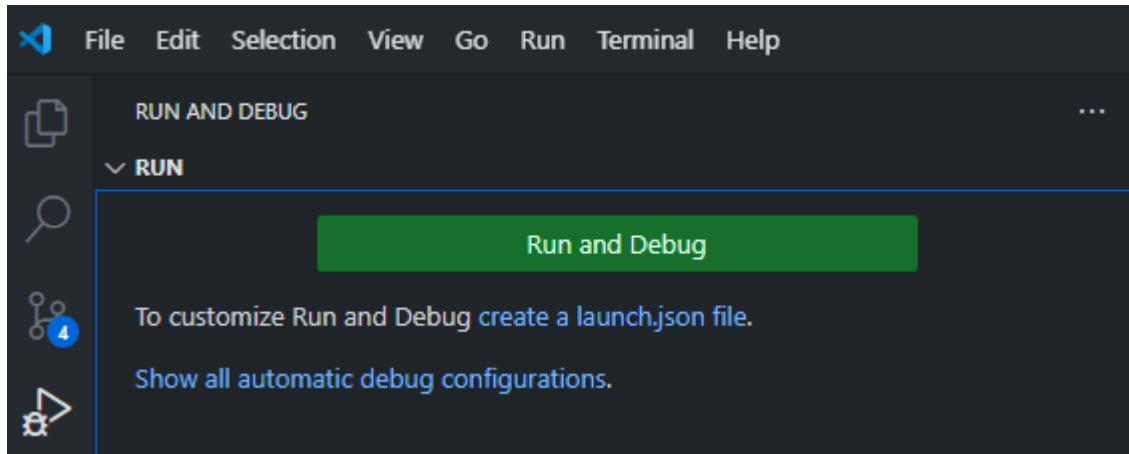
Step 2: Click button code and download ZIP with each link



Step 3: Extract those ZIP files

Step 4: Go to folder ems_v2_be and open with Visual Studio Code (need to install environment before)

Step 5: Go to Visual Studio Code, Click button Run and Debug to run the program



3. User Manual

3.1 Overview

Given that the application's functionality heavily relies on user roles, the User Manual will be structured into distinct sections tailored to specific user roles. Some workflows may overlap, and these will be cross-referenced to similar functions covered earlier.

Please note that within all available forms across workflows, any fields marked with a red asterisk are mandatory and must not be left empty when submitting a request.

Throughout this document, we will use the term "Navigation Bar" to refer to the left bar present on every screen. This bar contains commonly used features of the EMS system.

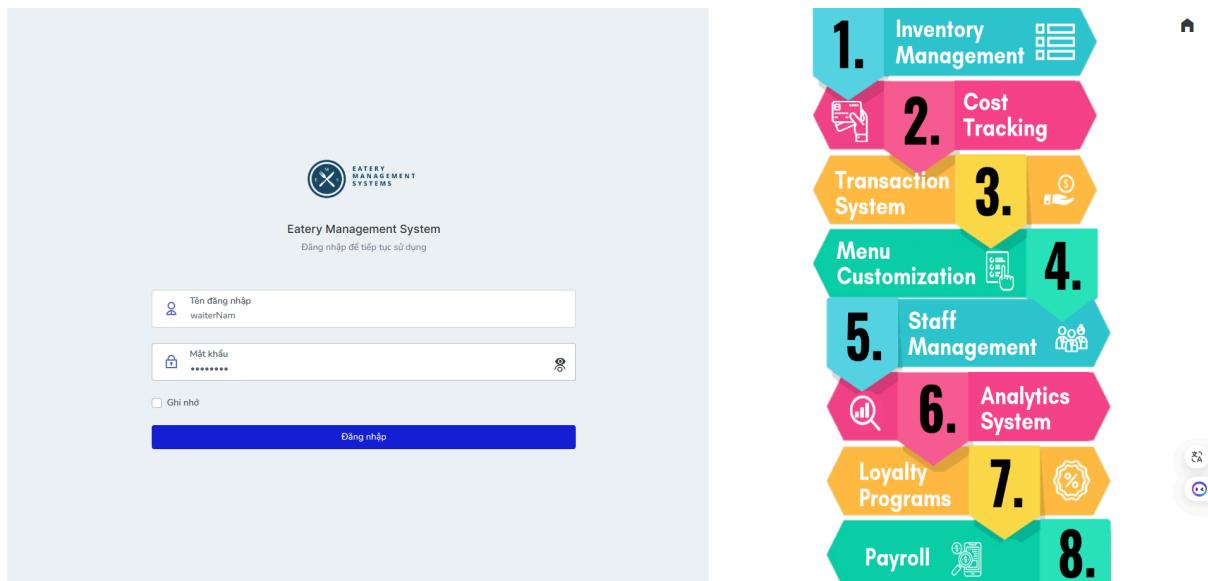
3.2 User Workflow

These workflows are common to the eatery owner and staff roles of the EMS system and are considered the basic functions of the system.

3.2.1.Login

Once you have an approved account, you can login to the EMS system. This workflow is required for almost every function of the system

- Step 1: Once you have an account, you can login to the EMS system. This workflow is required for almost every function of the system.
- Step 2: Open the application or website to access the Login screen



- Step 3: The Homepage is loaded

Bàn				
STT	Tên bàn	Vị trí	Trạng thái	Quản lý
1	Bàn 14	Tầng 2	Trống	
2	Bàn 9	Tầng 2	Trống	
3	Bàn 8	Tầng 2	Trống	
4	Bàn 7	Tầng 2	Trống	
5	Bàn 6	Tầng 2	Trống	
6	Bàn 5	Tầng 1	Trống	
7	Bàn 4	Tầng 1	Trống	
8	Bàn 3	Tầng 1	Trống	
9	Bàn 2	Tầng 1	Trống	
10	Bàn 1	Tầng 1	Trống	

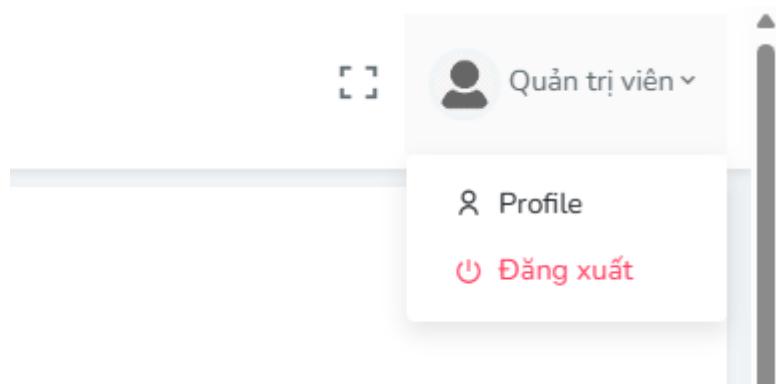
Hiện 1 đến 10 trong 10 mục

1 Hiển 10 mục

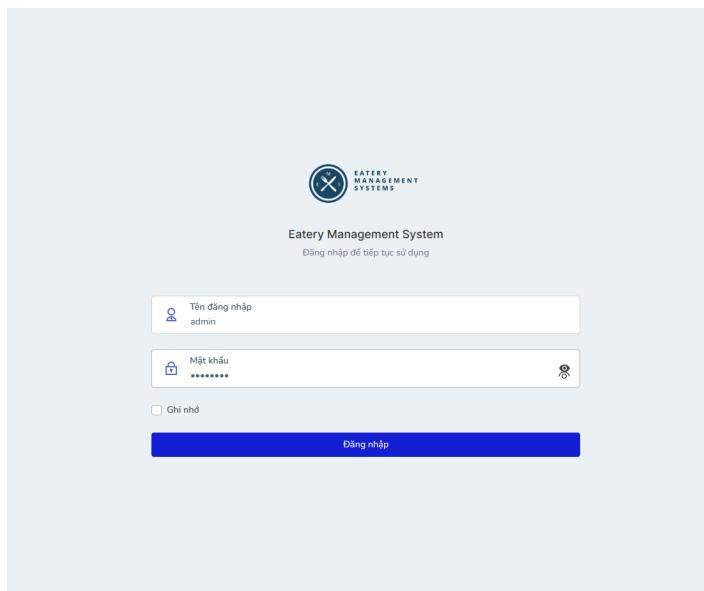
3.2.2.Logout

When logged into the system, you can access the Navigation Bar on the top of the screen at any time. This navigation bar will contain the common features such as the Logout feature to end a session with the system.

- Step 1: Click on the User icon (located in the right of the Navigation Bar).



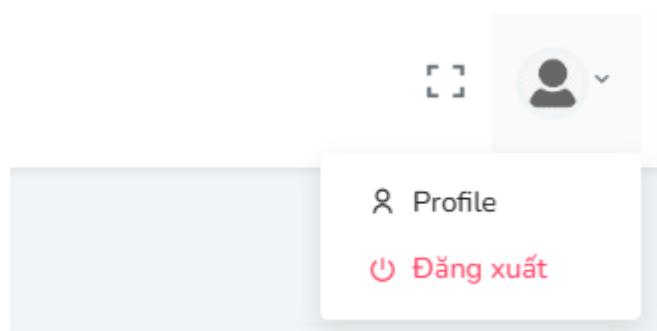
- Step 2: Click on “Đăng xuất” button. You will end the session and get navigated to the login page of the system.



3.2.3. View User Profile

This workflow allows you to view user profiles. In this screen you will have access to functions such as change password, edit profile. All roles can use this function.

- Step 1: In the Navigation Bar, click on the User icon (located in the right of the Navigation Bar). Then Click “Profile”.



- Step 2: You will get redirected to the Profile screen.

Thông tin cá nhân		
Tên	Họ	
Hà Nam	Lê	
Địa chỉ		
Hương Tràch - Hương Khê		
Thành phố	Email	Số điện thoại
Hà Tĩnh	namthhe153319@fpt.edu.vn	0975402493
Tiểu sử		
Tiểu sử cá nhân		
<input type="button" value="Thay đổi"/>		<input type="button" value="Đổi mật khẩu"/>

3.3 Waiter Workflow

3.3.1 View List Table, Filter Table

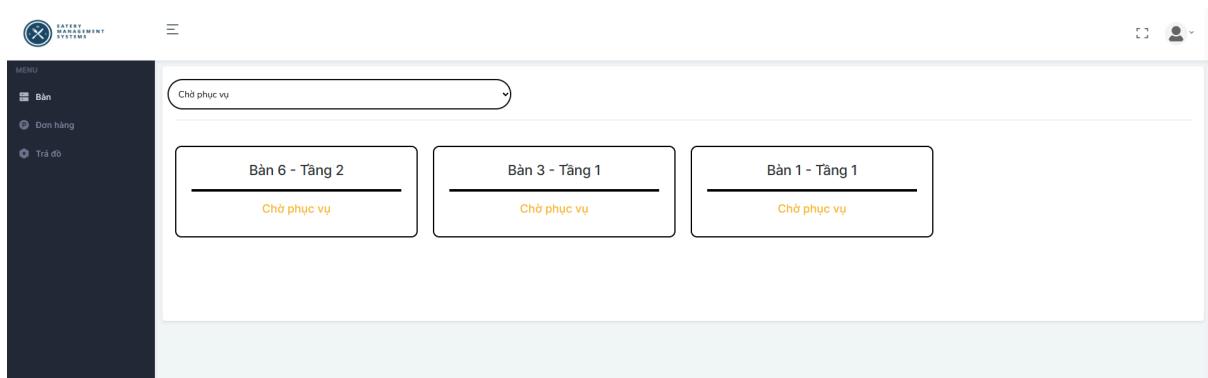
The workflow is exclusive to the role of Waiter. This allows the Waiter to manage users of the system.

- Step 1: In the homepage of the Waiter, click on the “Bàn” button on the Left Menu. The table list screen will be loaded.

The screenshot shows the 'Bàn' (Tables) page from the EATERY MANAGEMENT SYSTEM. On the left, there's a sidebar with a logo and three menu items: 'Bàn', 'Đơn hàng', and 'Trả đũ'. The main area displays a grid of 12 table cards. Each card contains the table number and floor ('Tầng 1' or 'Tầng 2'), its current status (e.g., 'Đợi thanh toán', 'Bàn trống', 'Chờ phục vụ'), and a small circular icon. Above the grid, a dropdown menu is open, showing filter options: 'Tất cả', 'Bàn trống', 'Chờ phục vụ', and 'Đợi thanh toán'. The 'Bàn trống' option is highlighted.

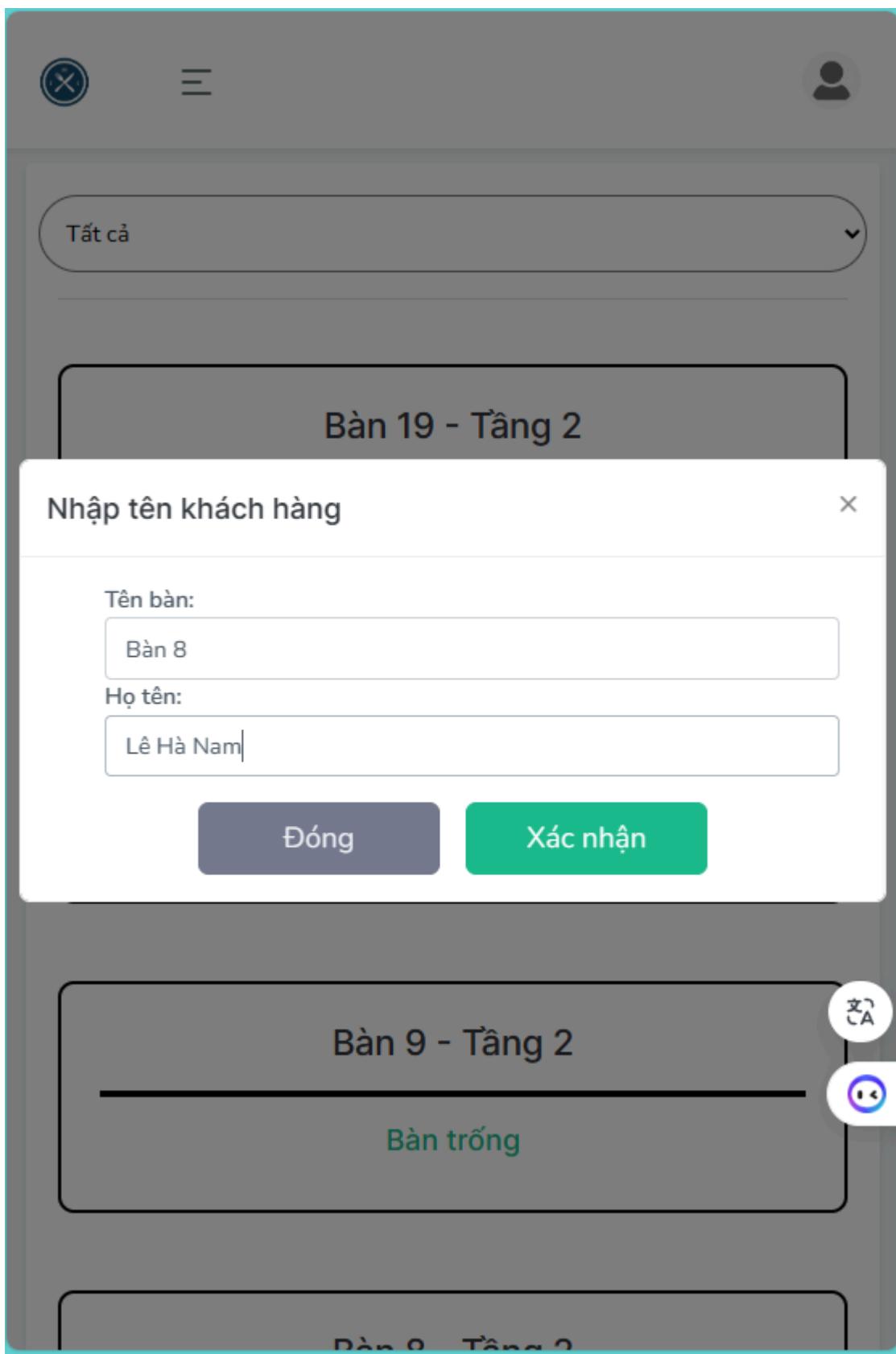
- Step 2: Click the value Waiter want to filter, the result display will be load

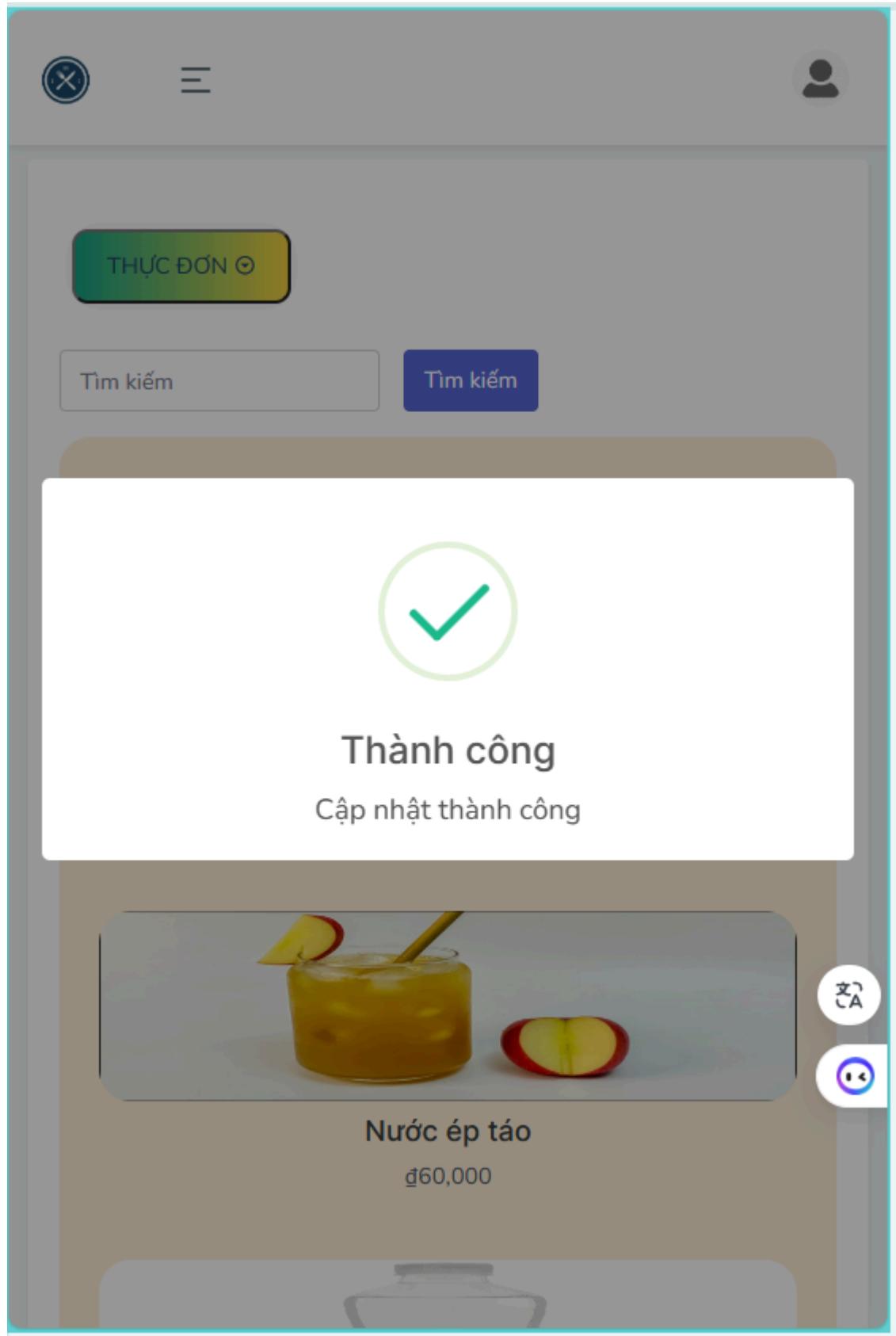
This screenshot shows the same 'Bàn' page after applying the 'Bàn trống' filter. The dropdown menu now only shows 'Bàn trống'. The table list has been updated to show only the 'Bàn trống' status across all tables. The cards are identical to the ones in the previous screenshot but are now filtered by availability.



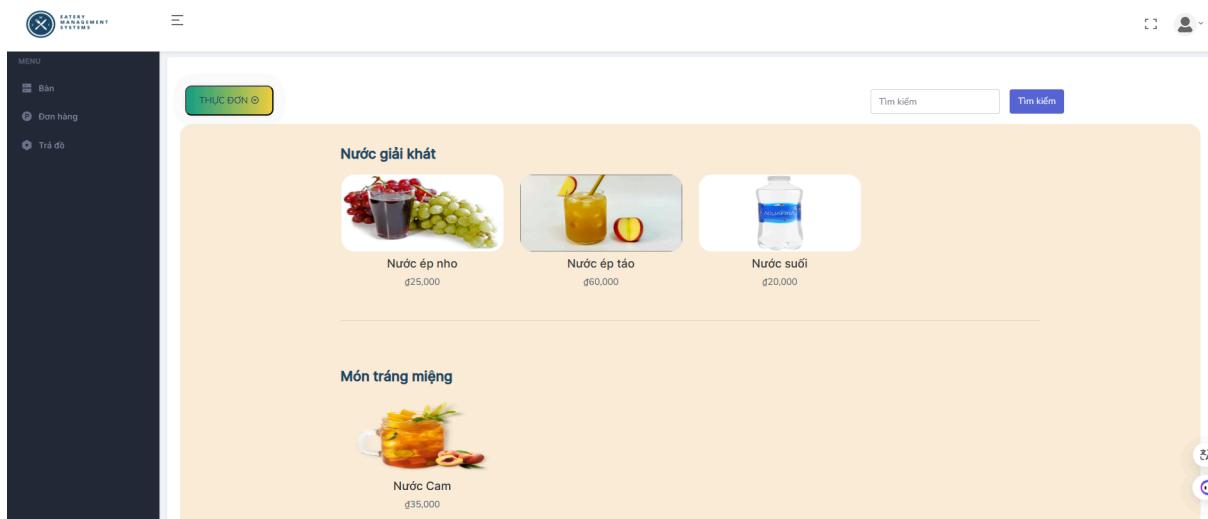
3.3.2 Create Order, View Menu, Filter Menu, Search Dish, View Cart

- Step 1: In the table list screen, select the table with status "Bàn trống". Then fill in the customer's name and click the "Confirm" button to create a table for the customer.

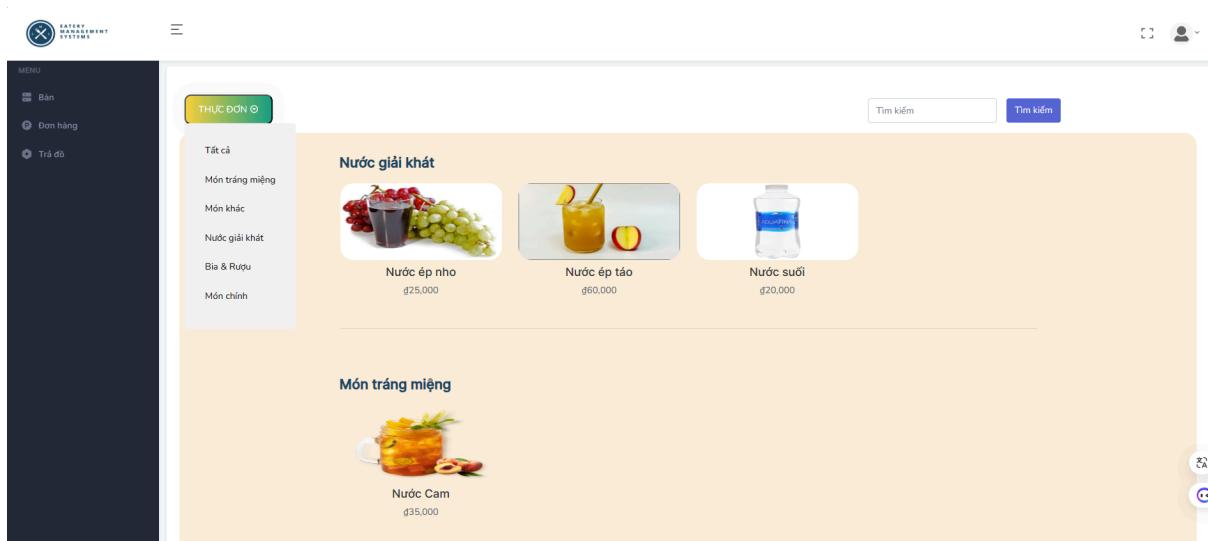


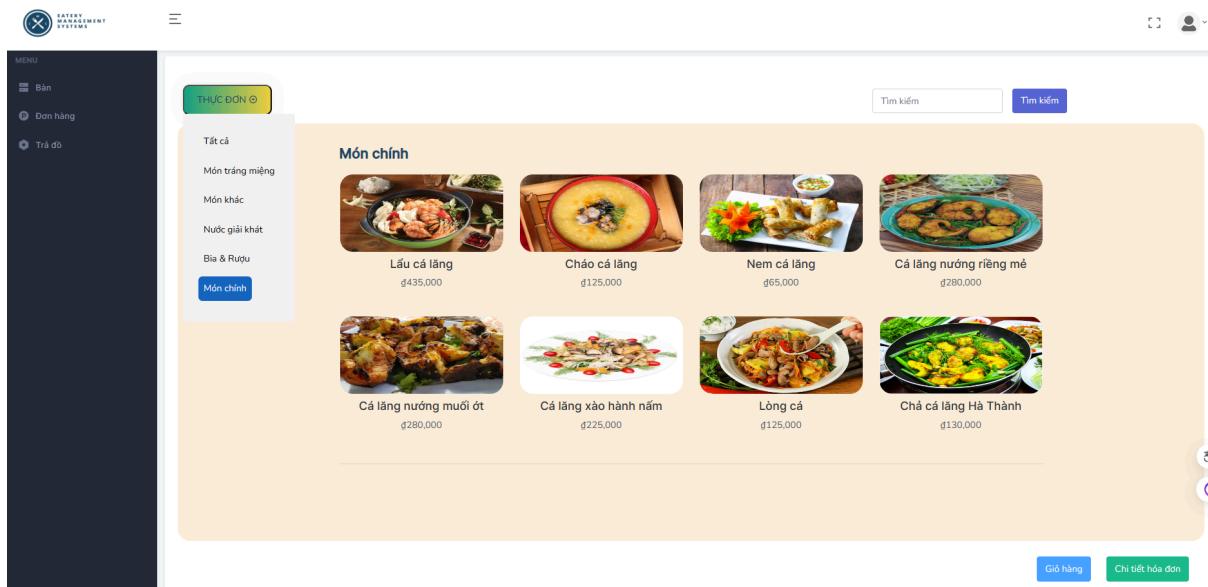


- Step 2: After creating a table, the waiter looks at the menu to choose dishes for customer

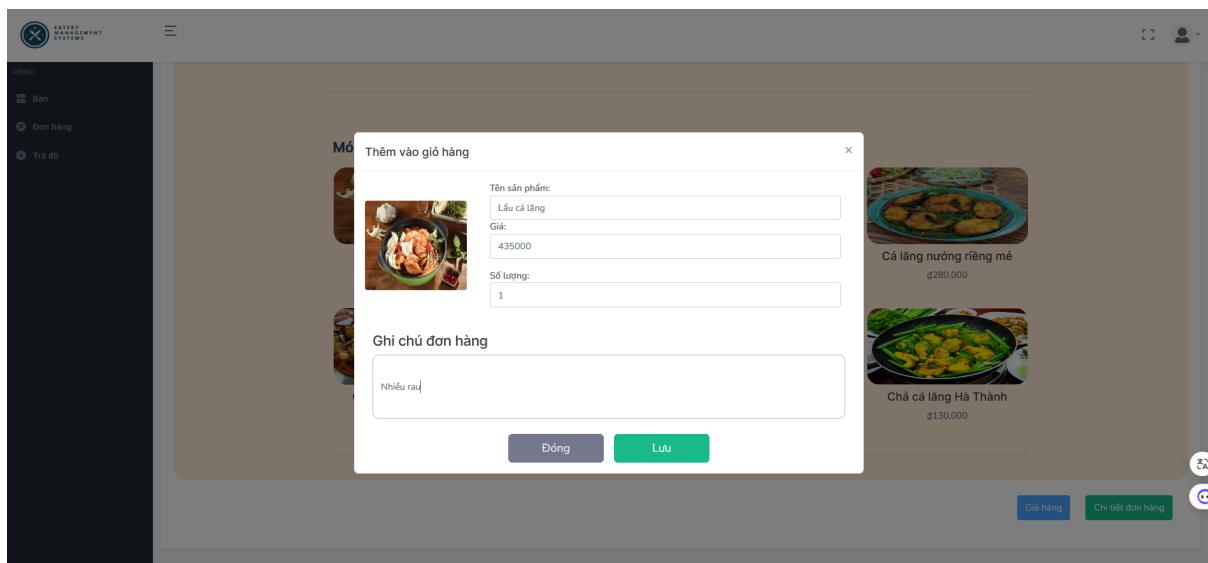


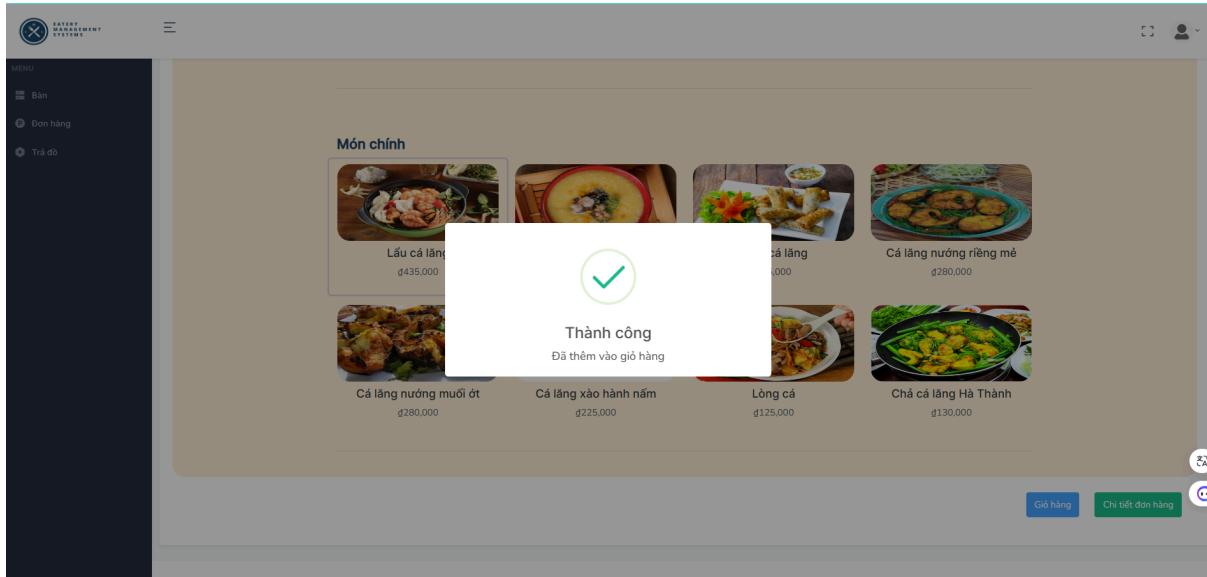
- Step 3: Click button "THỰC ĐƠN", select the value dish Waiter want to filter, the result display will be load



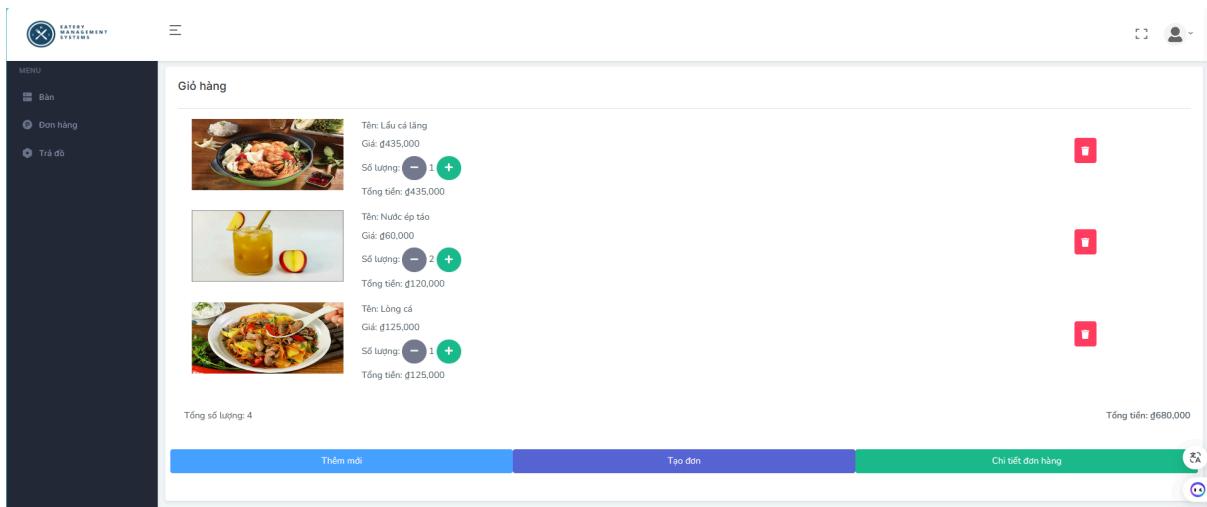


- Step 4: Select the dish you want to add to the cart in the menu, fill in the quantity and notes. Then click the "Lưu" button. The dish will be transferred to the cart.

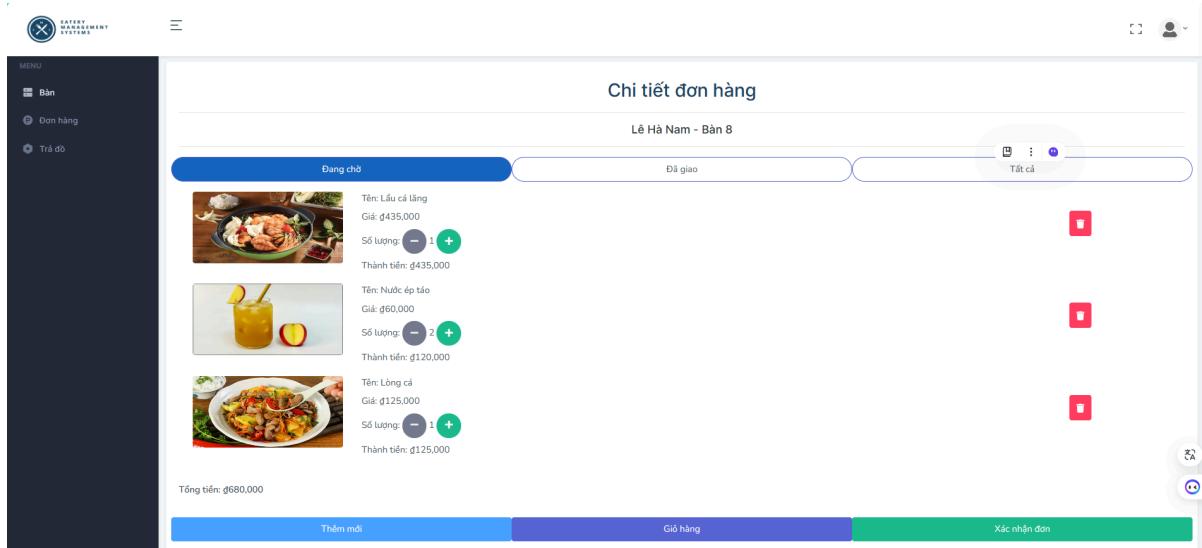




- Step 5: Click the “Tạo đơn” button to create an order. The screen will move on to the order details



- Step 6: Click the “Xác nhận đơn” button ,the dish list will be transferred to the kitchen

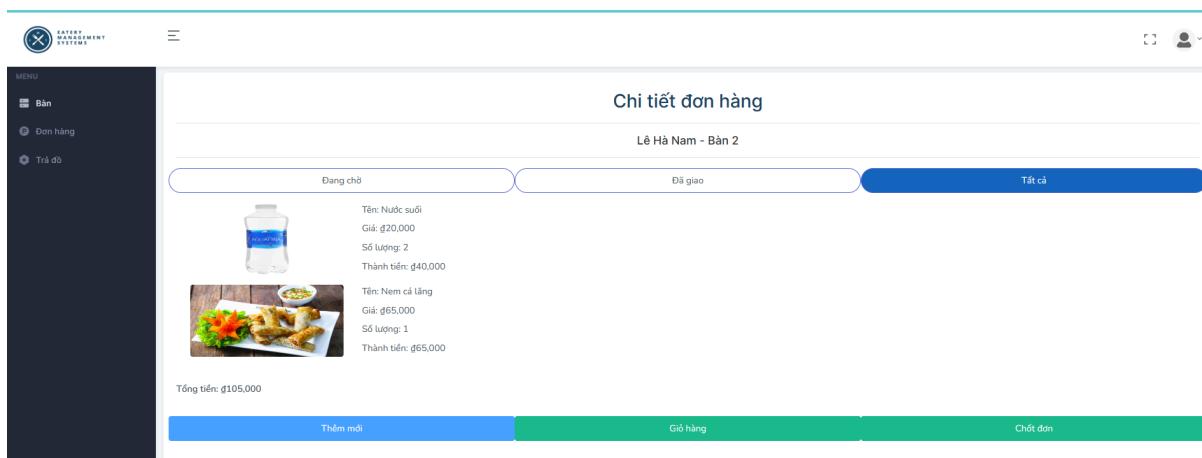


3.3.3 View List Order, Edit Order

- Step 1: In the homepage of the Waiter, click on the “Đơn hàng” button on the Left Menu. The table call order list screen will be loaded.

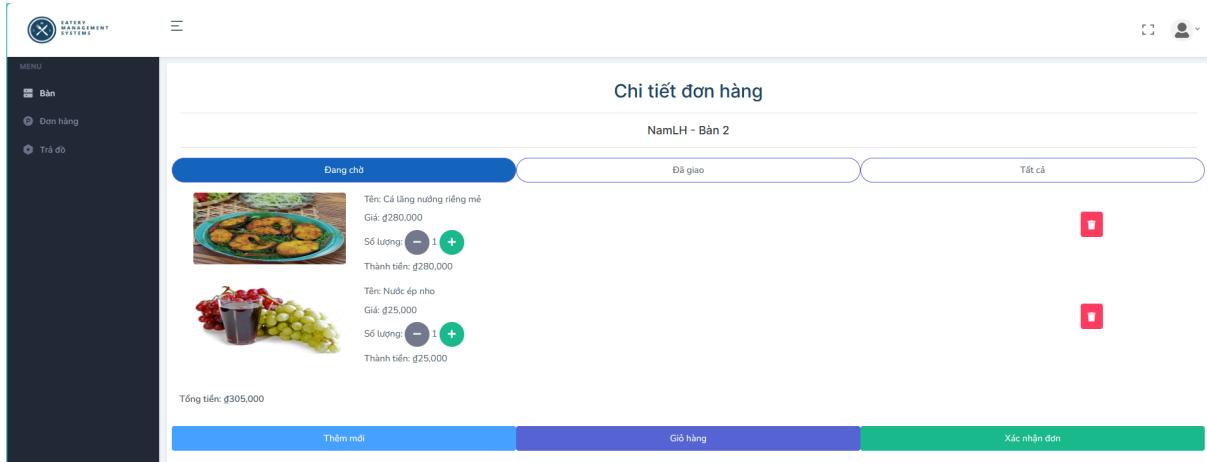


- Step 2: Click on the table where the order was placed to view order details and edit the order

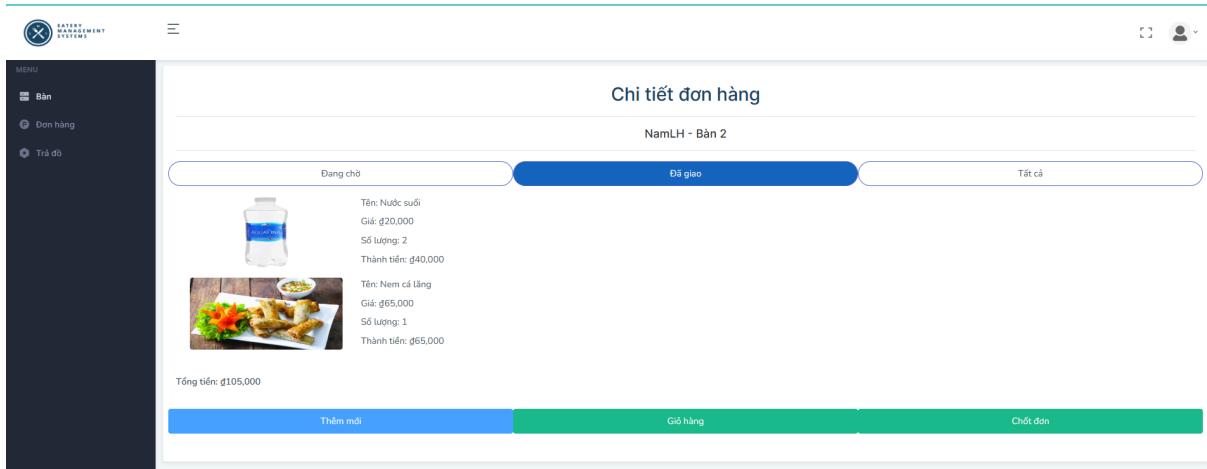


3.3.4 View Waiting Dish, View Delivery Dish

- Step 1: In the Order Detail of the Waiter, click on the “Đang chờ” button. Screen will be see the list of dishes that need to be confirmed

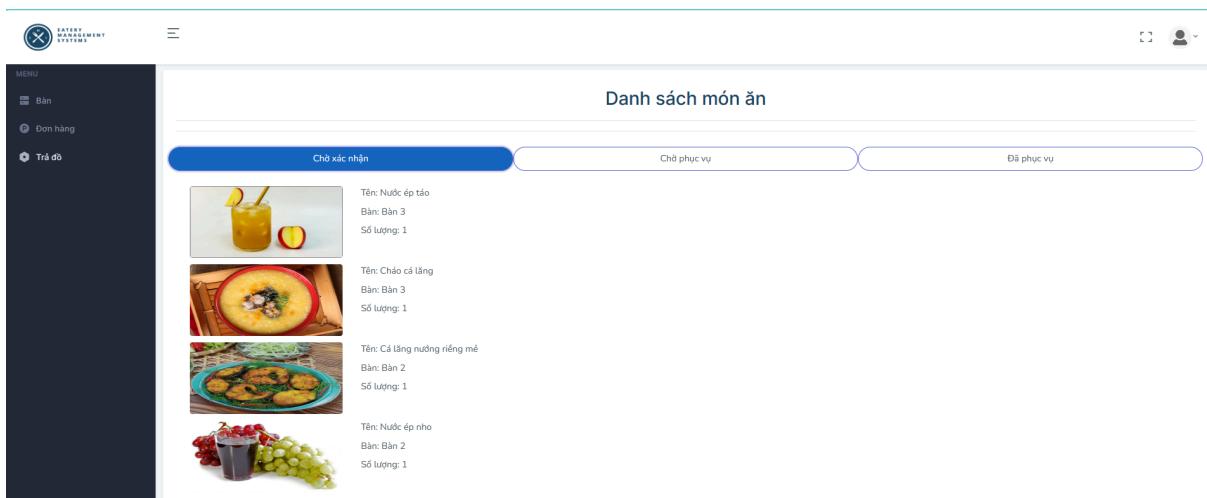


- Step 2: In the Order Detail of the Waiter, click on the “Đã giao” button. Screen will be see the list of dishes has been delivered



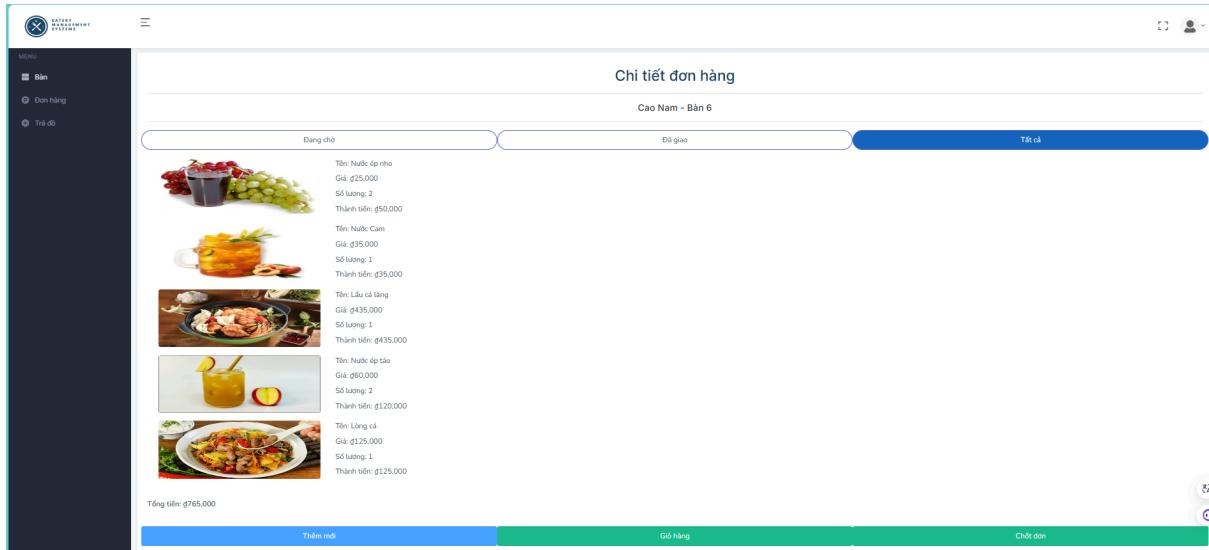
3.3.5 View Waiting Dish List

- Step 1: In the homepage of the Waiter, click on the “Trả đồ” button on the Left Menu. After click “Chờ xác nhận” button the list of dishes waiting to be confirmed will be loaded.

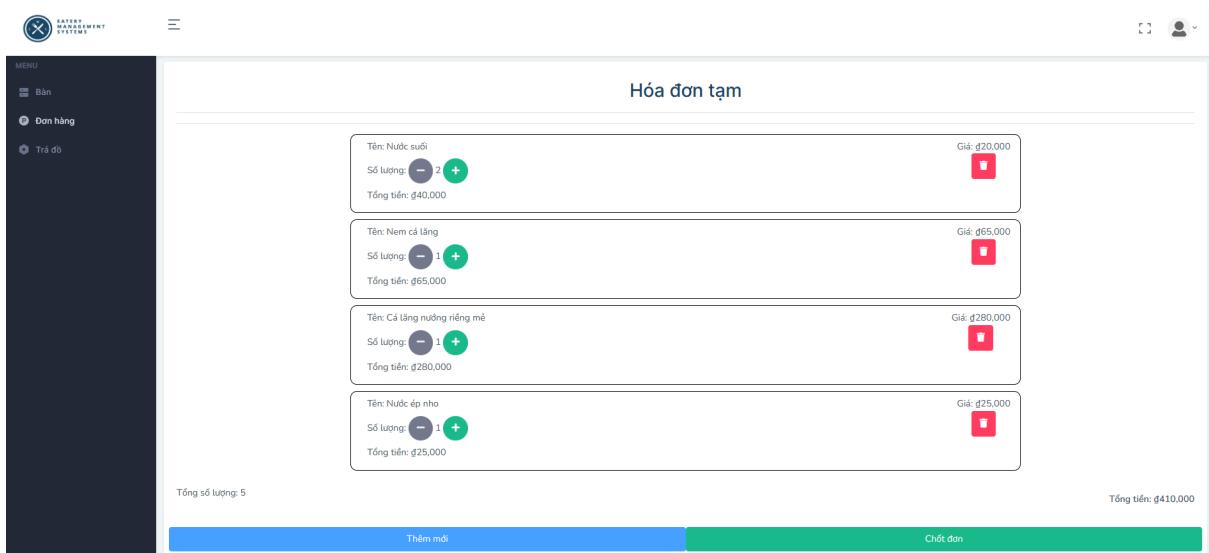


3.3.6 Confirm bill

- Step 1: In screen order detail, click “Chốt đơn” button go to temp bill



- Step 2: In screen temp bill, click “Chốt đơn” button to confirm bill. Waiter can edit temp bill in this screen



3.4 Chef Workflow

3.4.1 View list order dish, View list finished dish, Update status order dish

- Step 1: After the waiter confirms the order, the kitchen will see the list of dishes waiting to be processed

Chờ chế biến				Đã xong		
Tên món	Ghi chú	Số lượng	Quản lý	Theo món	Theo bàn	
Lẩu cá lăng	Nhiều rau	1				
Nước ép táo	ít ngọt	2				
Lòng cá	Không có	1				

Hiện 1 đến 3 trong 3 mục

Hiện 10 mục

- Step 2: Click on the “” button, screen will be see dishes will move each dish to the served dishes list.

Chờ chế biến				Đã xong		
Tên món	Ghi chú	Số lượng	Quản lý	Theo món	Theo bàn	
Lẩu cá lăng	Nhiều rau	1				
Nước ép táo	ít ngọt	2				Chuyển từng món
Lòng cá	Không có	1				

Hiện 1 đến 3 trong 3 mục

Hiện 10 mục

Chờ chế biến				Đã xong		
Tên món	Ghi chú	Số lượng	Quản lý	Theo món	Theo bàn	
Nước ép táo	ít ngọt	2				
Lòng cá	Không có	1				

Hiện 1 đến 2 trong 2 mục

Hiện 10 mục

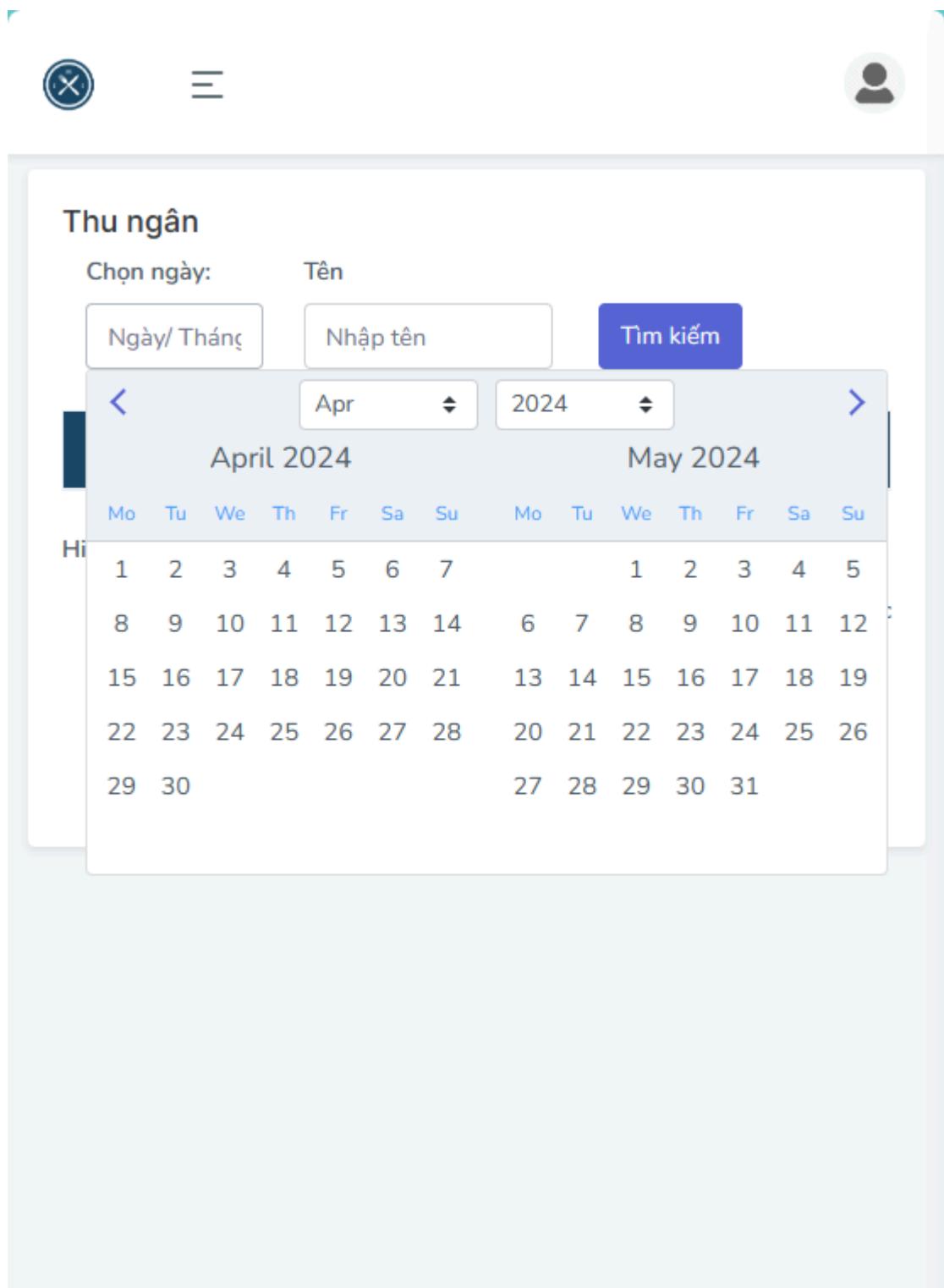
- Step 3: Click on the “” button, dishes will forward all to the served dishes list

3.5 Cashier Workflow

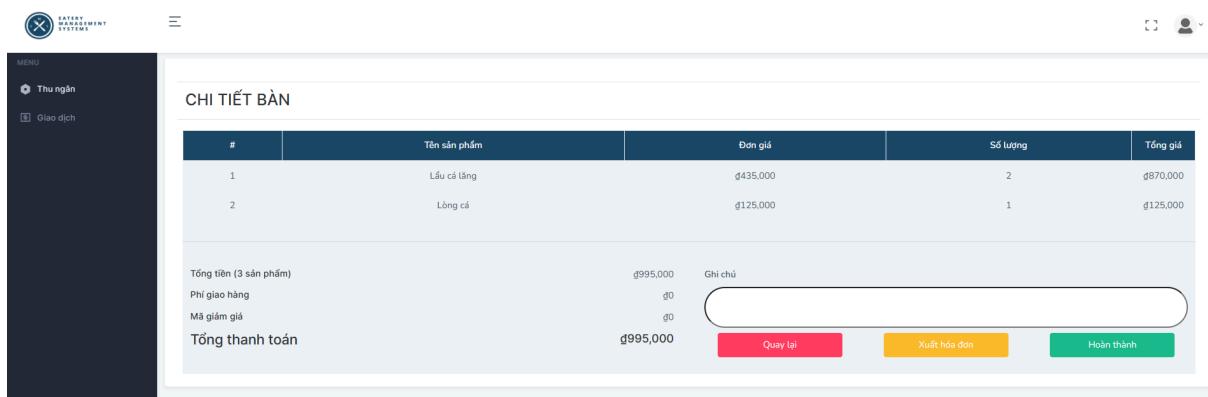
3.5.1. View List Bill, View Detail Bill, Filter Bill

The workflow is exclusive to the role of Cashier. This allows the Waiter to manage users of the system.

- Step 1: In the homepage of the Cashier, click on the “Thu ngân” button on the Left Menu. The list bill screen will be loaded. Select the value dish Cashier want to filter, the result display will be load

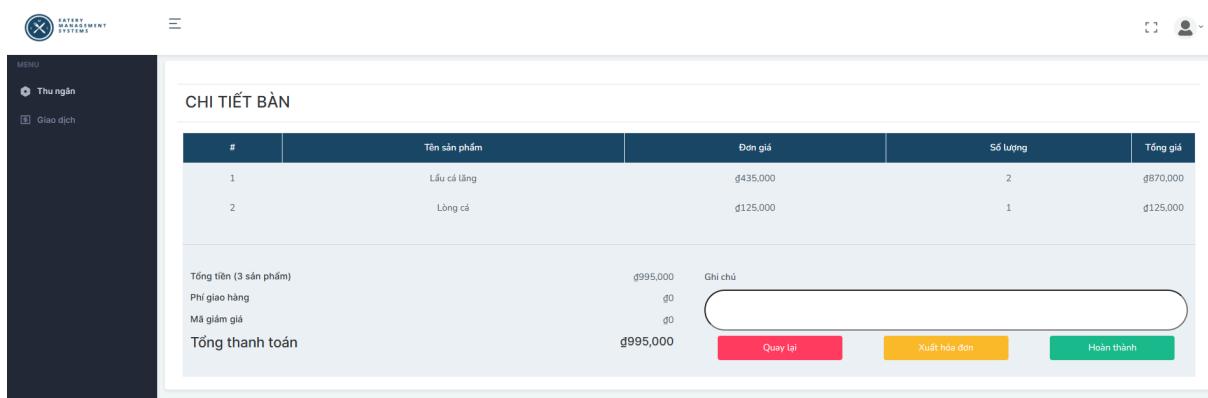


- Step 2: Click the edit icon on the category management screen. The detail bill screen will be loaded.



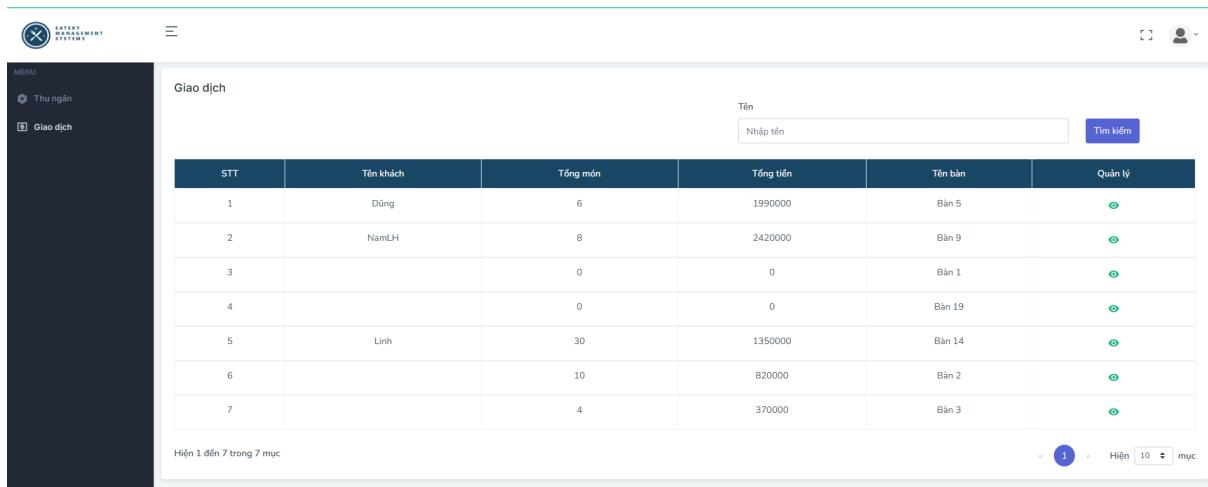
3.5.2. Export Invoice

- Step 1: Click “Xuất hóa đơn” button to export invoice
- Step 2: Click “Hoàn thành” button to done transaction



3.5.3. View transaction,View detail transaction

- Step 1: In the homepage of the Cashier, click on the “Giao dịch” button on the Left Menu. The list transaction screen will be loaded

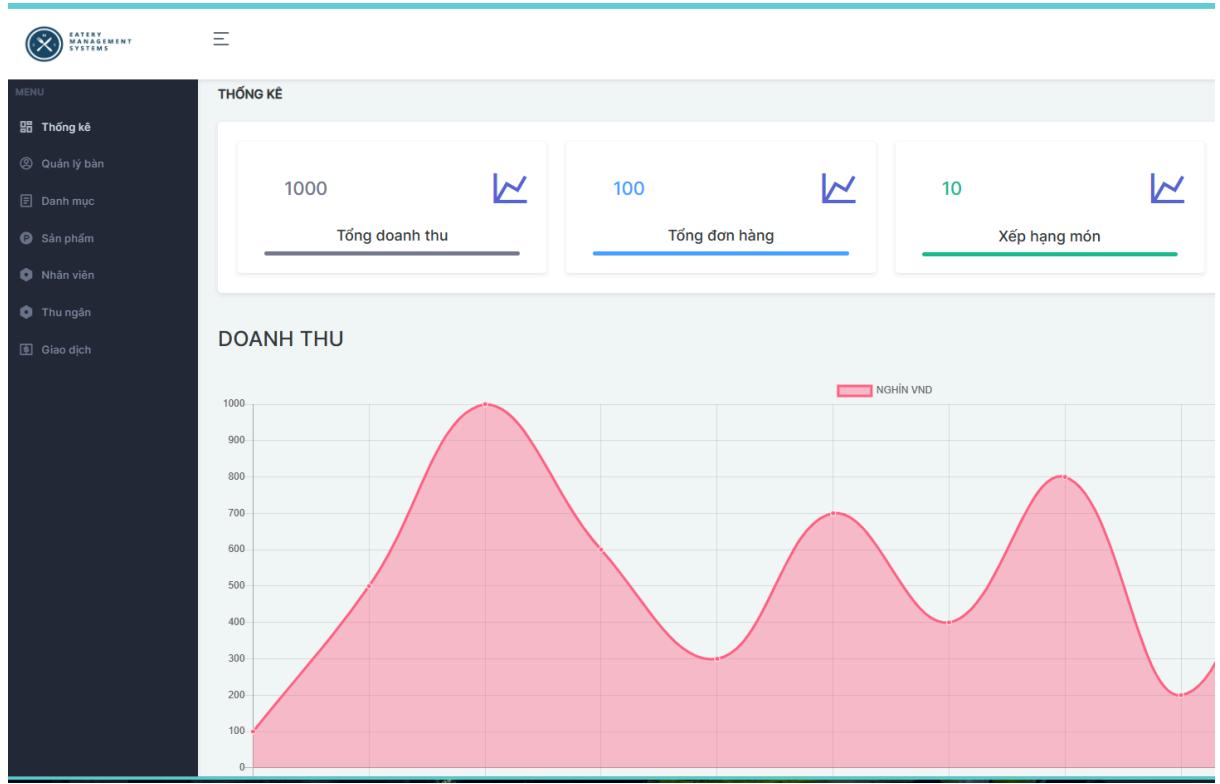


- Step 2: Click “” icon in the screen,cashier view detail transaction

3.6 Eatery Owner Workflow

3.6.1. View Dashboard

- Step 1: In the homepage of the admin, click on the “Thống kê” button on the Left Menu. The list transaction screen will be loaded.



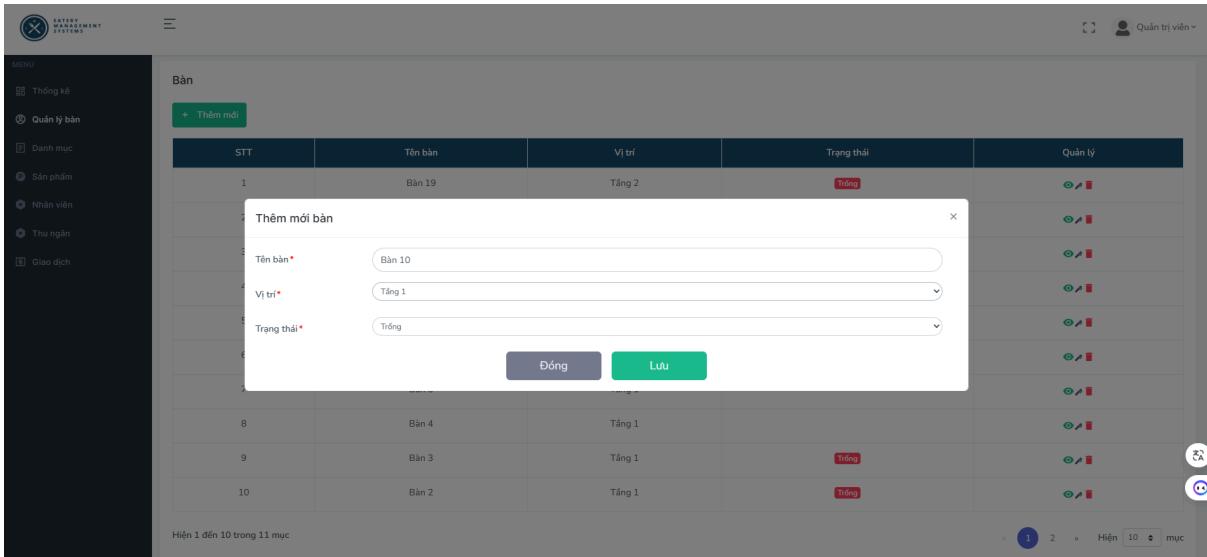
3.6.2. View List Table, Create Table, Edit Table, Delete Table

- Step 1: In the homepage of the Eatery Owner, click on the “Quản lý Bàn” button on the Left Menu. The list screen will be loaded.

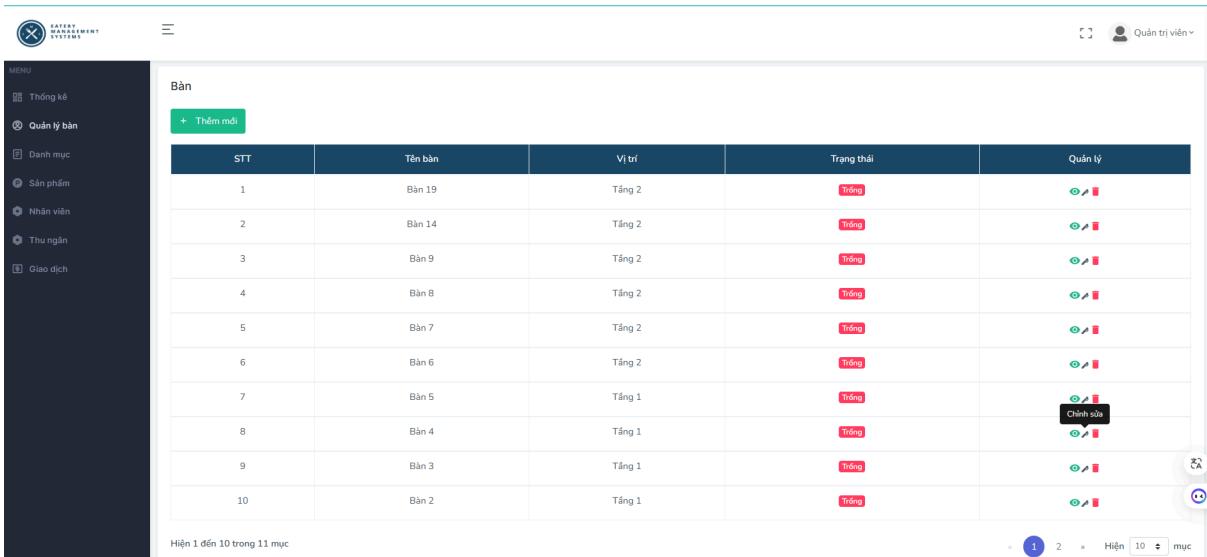
The screenshot shows the 'Bàn' (Tables) management screen. The left sidebar menu includes 'Thống kê' and 'Quản lý bàn' (selected). The main table lists 10 tables with columns: STT (Số thứ tự), Tên bàn (Table name), Vị trí (Location), Trạng thái (Status), and Quản lý (Management). The status column for all tables is 'Trống' (Empty). The last row (STT 10) has a 'Xoá' (Delete) icon in the 'Quản lý' column. Navigation at the bottom shows 'Hiện 1 đến 10 trong 11 mục' (Showing 1 to 10 of 11 items) and a page number '2'.

STT	Tên bàn	Vị trí	Trạng thái	Quản lý
1	Bàn 19	Tầng 2	Trống	
2	Bàn 14	Tầng 2	Trống	
3	Bàn 9	Tầng 2	Trống	
4	Bàn 8	Tầng 2	Trống	
5	Bàn 7	Tầng 2	Trống	
6	Bàn 6	Tầng 2	Trống	
7	Bàn 5	Tầng 1	Trống	
8	Bàn 4	Tầng 1	Trống	
9	Bàn 3	Tầng 1	Trống	
10	Bàn 2	Tầng 1	Trống	

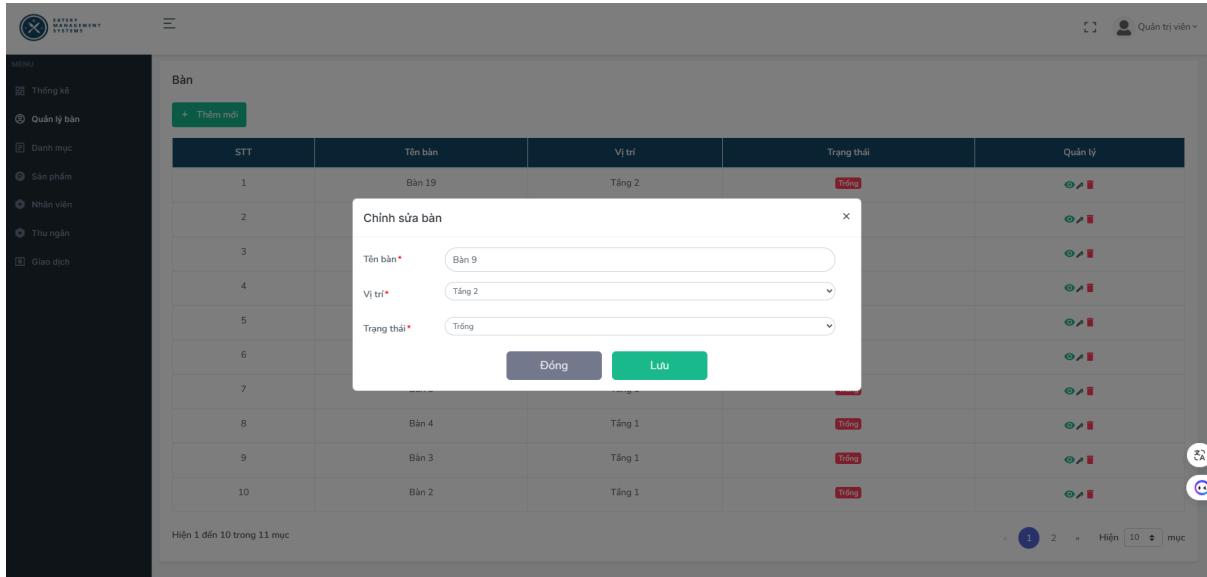
- Step 2: Click the "Thêm mới" button on the user management screen. Enter table information and Click the "Lưu" button.



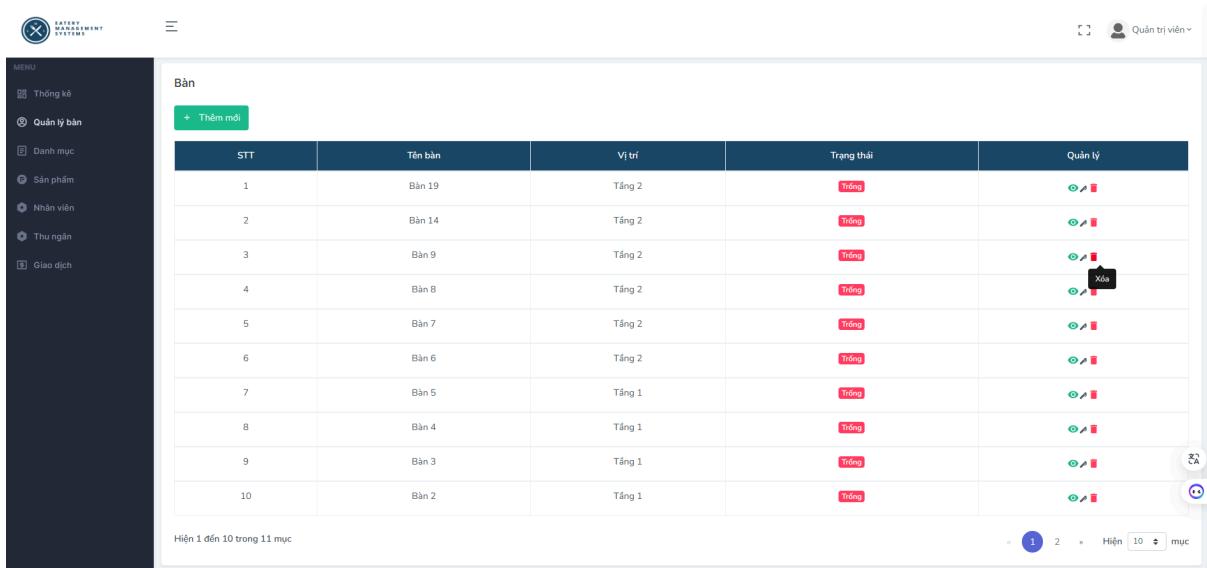
- Step 3: Click the edit icon on the table management screen



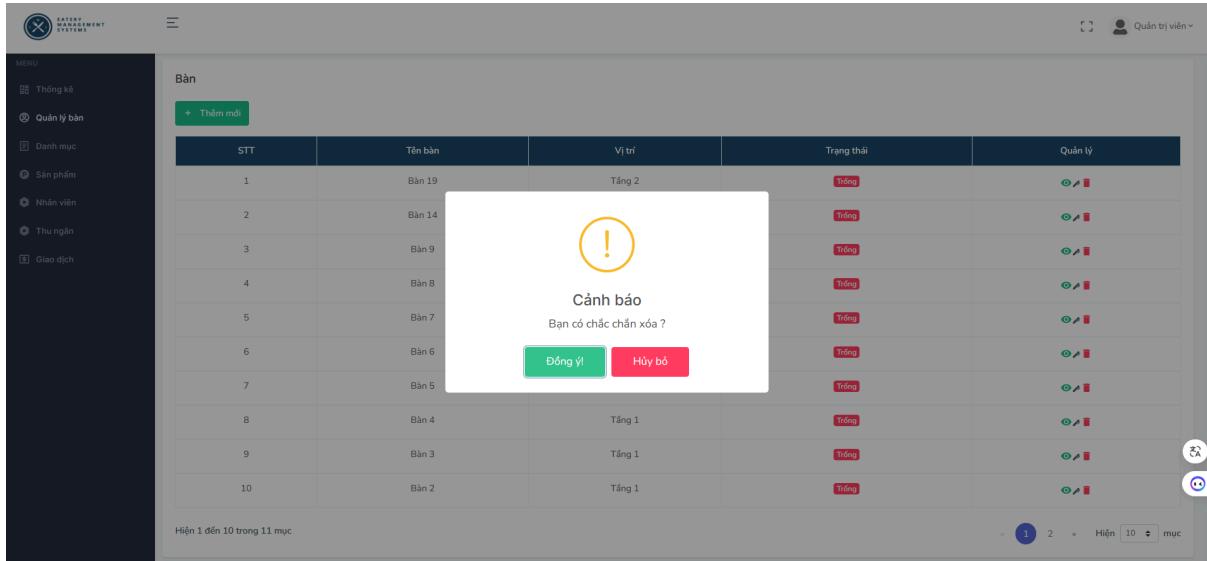
- Step 4: The edit table form appears, enter table information and click the "Lưu" button.



- Step 5: Click the delete icon on the table management screen

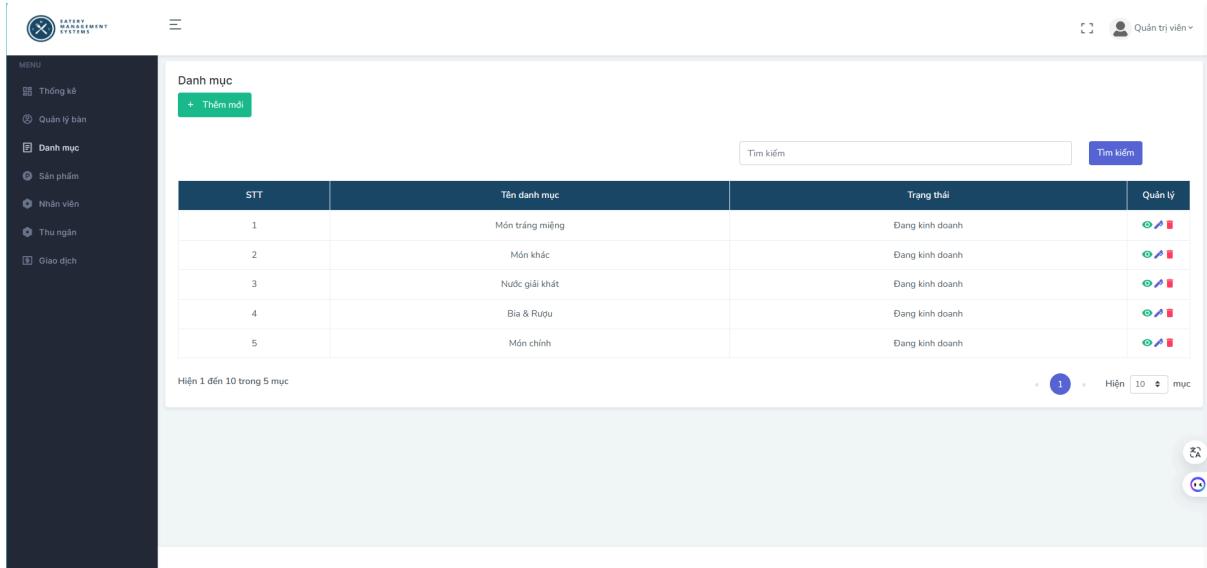


- Step 6: Click on the “Đồng ý!” button to confirm delete Table

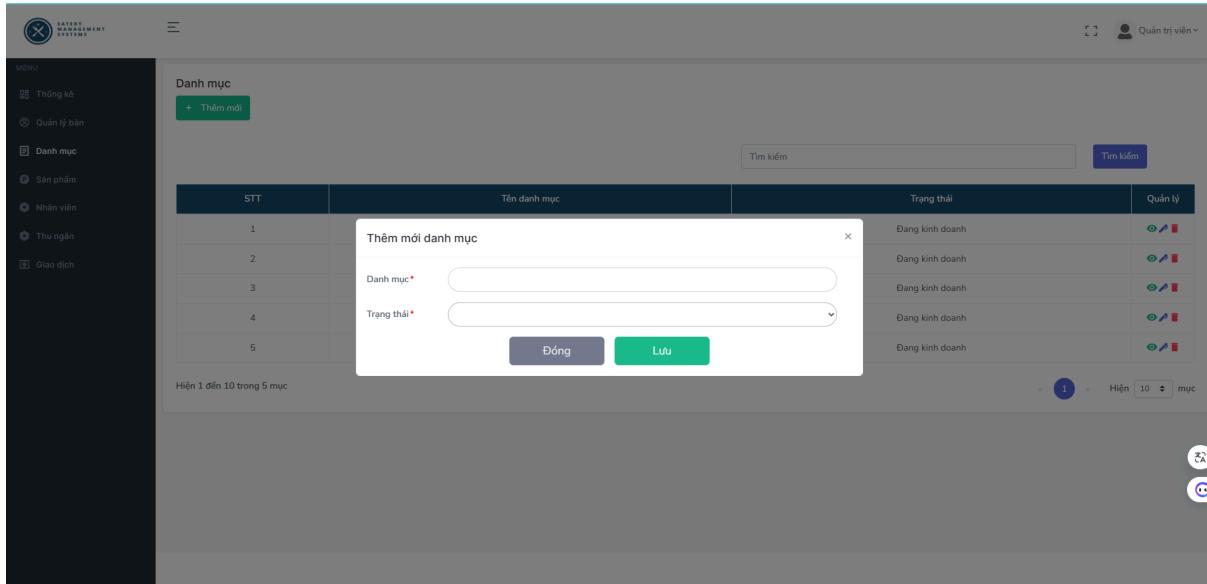


3.6.3. View List Category,View Category Detail,Create Category,Edit Category,Delete Category,Search Category, Change Status Category

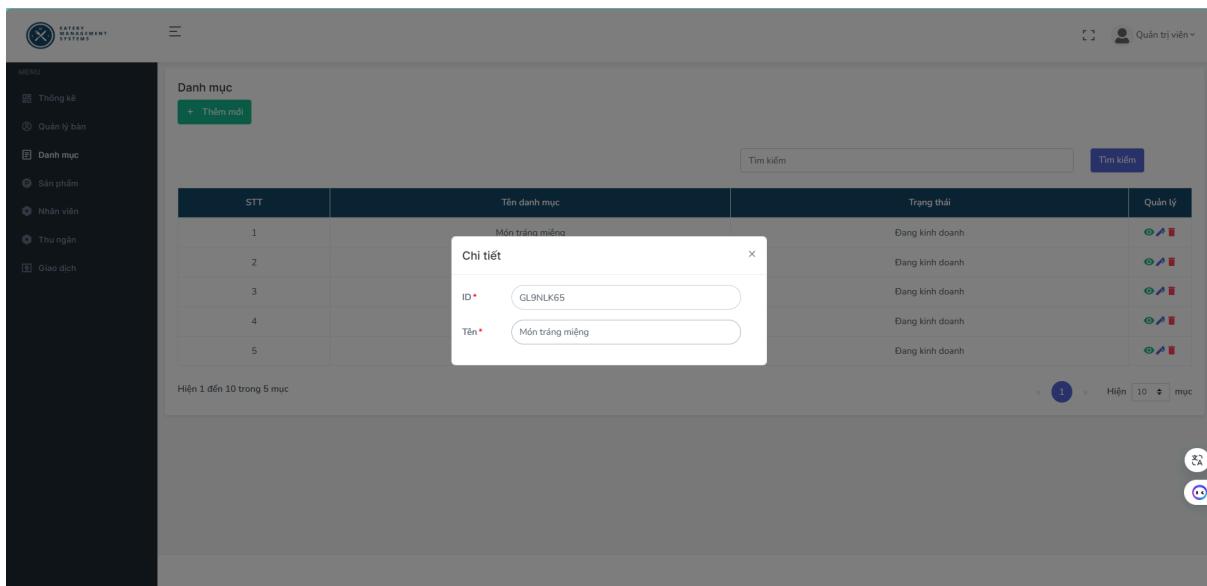
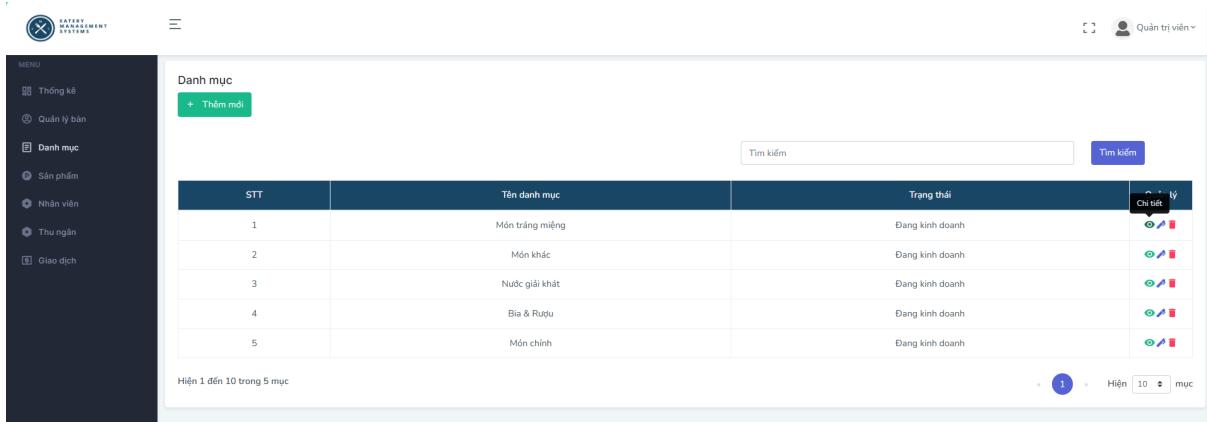
- Step 1: In the homepage of the Eatery Owner , click on the “Danh mục” button on the Left Menu. The list screen will be loaded.



- Step 2: Click the "Thêm mới" button on the user management screen. Enter Category information and Click the "Lưu" button.



- Step 3: Click the detail icon on the category management screen and view category detail



- Step 4: Click the edit icon on the category management screen. The edit category form appears, enter table information and change status .Click the "Lưu" button.

Danh mục

STT	Tên danh mục	Trạng thái	Quản lý
1	Món tráng miệng	Đang kinh doanh	
2	Món khác	Đang kinh doanh	Chỉnh sửa
3	Nước giải khát	Đang kinh doanh	
4	Bia & Rượu	Đang kinh doanh	
5	Món chính	Đang kinh doanh	

Hiện 1 đến 10 trong 5 mục

Danh mục

Chỉnh sửa danh mục

STT	Tên danh mục	Trạng thái	Quản lý
1	Món tráng miệng	Đang kinh doanh	
2		Đang kinh doanh	
3		Đang kinh doanh	
4		Đang kinh doanh	
5		Đang kinh doanh	

Danh mục *

Món tráng miệng

Trạng thái *

Đang kinh doanh

Đóng Lưu

Hiện 1 đến 10 trong 5 mục

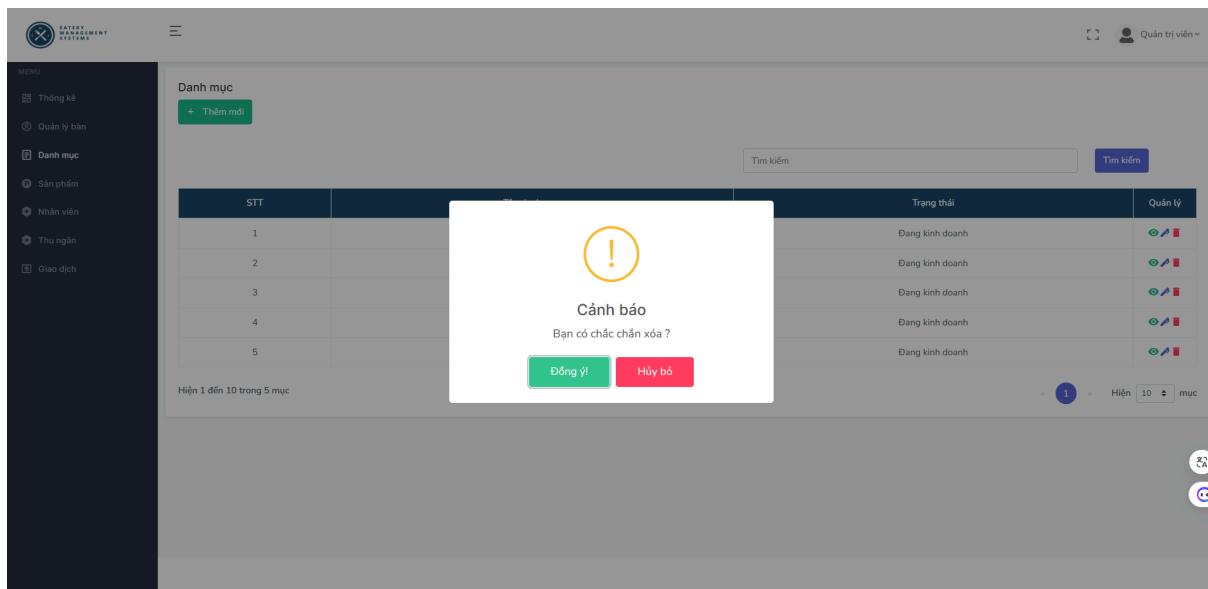
- Step 5: Click the delete icon on the category management screen

Danh mục

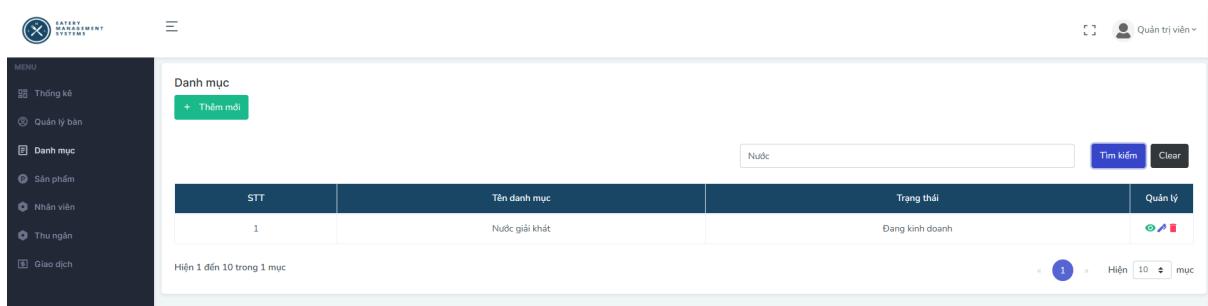
STT	Tên danh mục	Trạng thái	Quản lý
1	Món tráng miệng	Đang kinh doanh	
2	Món khác	Xóa	
3	Nước giải khát	Đang kinh doanh	
4	Bia & Rượu	Đang kinh doanh	
5	Món chính	Đang kinh doanh	

Hiện 1 đến 10 trong 5 mục

- Step 6: Click on the “Đồng ý!” button to confirm delete Category



- Step 7: Click on the “Search” button to confirm search Category



3.6.4. View List Product, View Product Details, Create Product, Edit Product, Delete Product, Search Product, Change Status Product

- Step 1: In the homepage of the Eatery Owner , click on the “Sản phẩm” button on the Left Menu. The list screen will be loaded.

STT	Ảnh	Tên sản phẩm	Giá	Danh mục	Trạng thái	Quản lý
1		Nuốc ép nho	25000	Nuốc giải khát	Đang kinh doanh	
2		Nuốc ép táo	60000	Nuốc giải khát	Đang kinh doanh	
3		Nuốc Cam	35000	Món tráng miệng	Đang kinh doanh	
4		Casas Del Toqui C.Sauvignon	750000	Rượu vang	Đang kinh doanh	
5		Bia Tiger Bạc	35000	Bia & Rượu	Đang kinh doanh	

- Step 2: Click the detail icon on the product management screen and view product detail

The screenshot shows a product management interface. On the left is a sidebar with a logo and menu items: Thống kê, Quản lý bàn, Danh mục, Sản phẩm (selected), Nhân viên, Thủ ngân, and Giao dịch. The main area is titled 'Sản Phẩm' with a 'Thêm mới' button. A table lists products with columns: STT, Ảnh, Tên sản phẩm, Giá, Danh mục, Trạng thái, and Quản lý. Row 1 shows 'Nuoc gioi khalt' with details: Danh mục - Nuoc gioi khalt, Tên sản phẩm - Nuoc ep nho, Giá - 25000. A modal window titled 'Chi tiết' is open over the table, displaying the same information. The status bar at the bottom says 'Đang kinh doanh'.

- Step 4: Click the edit icon on the product management screen. The edit product form appears, enter product information and change status .Click the "Lưu" button.

The screenshot shows the same product management interface. The modal window is now titled 'Chỉnh sửa'. It contains fields for Danh mục (selected 'Nuoc gioi khalt'), Tên sản phẩm (selected 'Nuoc ep nho'), Giá (25000), Trạng thái (selected 'Ngừng kinh doanh'), and Ánh (selected 'Đang kinh doanh'). Below these fields are buttons for 'Tải Ánh Lên', 'Đóng', and 'Lưu'. The status bar at the bottom says 'Đang kinh doanh'.

- Step 5: Click the delete icon on the product management screen.Click on the “Đồng ý!” button to confirm delete product

STT	Ảnh	Tên sản phẩm	Giá	Danh mục	Trạng thái	Quản lý
1		Nước ép nho		Món tráng miệng	Đang kinh doanh	
2		Nước ép táo		Món tráng miệng	Đang kinh doanh	
3		Nước Cam		Món tráng miệng	Đang kinh doanh	
4		Casas Del Toqui C.Sauvignon	750000	Rượu vang	Đang kinh doanh	
5		Bia Tiger Bạc	35000	Bia & Rượu	Đang kinh doanh	

- Step 6: Click on the “Search” button to confirm search Category

STT	Ảnh	Tên sản phẩm	Giá	Danh mục	Trạng thái	Quản lý
1		Nước Cam	35000	Món tráng miệng	Đang kinh doanh	
2		Casas Del Toqui C Sauvignon	750000	Rượu vang	Đang kinh doanh	
3		Lẩu cá lăng	435000	Món chính	Đang kinh doanh	
4		Cháo cá lăng	125000	Món chính	Đang kinh doanh	
5		Nem cá lăng	65000	Món chính	Đang kinh doanh	

3.6.5. View List Bill,View Detail Bill

- Step 1: In the homepage of the Eatery Owner, click on the “Thu Ngân” button on the Left Menu. The list bill screen will be loaded.

STT	Tên khách	Tổng món	Tổng tiền	Tên bàn	Quản lý
1	NamLH	4	320000	Bàn 5	
2	nampeo	14	1200000	Bàn 6	
3	Lê Hà Nam 2	12	2210000	Bàn 4	

- Step 2: Click the detail icon on the bill management screen and view bill detail

3.6.6. View Transactions,View Detail Transactions

- Step 1: In the homepage of the Eatery Owner, click on the “Giao dịch” button on the Left Menu. The list transaction screen will be loaded.

The screenshot shows a table with the following data:

STT	Tên khách	Tổng món	Tổng tiền	Tên bàn	Quản lý
1	nampu	8	310000	Bàn 2	
2	NamLH	4	320000	Bàn 5	
3	nampeo	14	1200000	Bàn 6	
4	Lê Hà Nam 2	12	2210000	Bàn 4	
5	Dũng	15	3425000	Bàn 14	

- Step 2: Click icon on the transaction management screen and view transaction details

3.7 Manager Workflow

3.7.1. View List User,View Detail User, Create User, Edit User,Delete User

The workflow is exclusive to the role of Manager. This allows the Manager to manage users of the system.

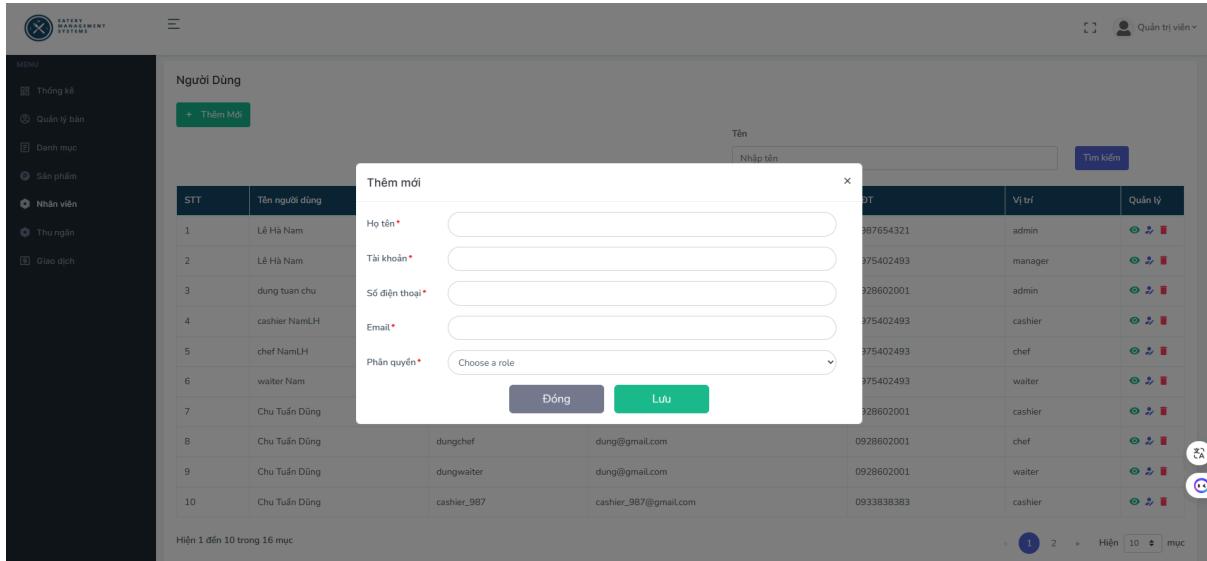
- Step 1: In the homepage of the Manager, click on the “Nhân viên” button on the Left Menu. The user list screen will be loaded.

The screenshot shows a table with the following data:

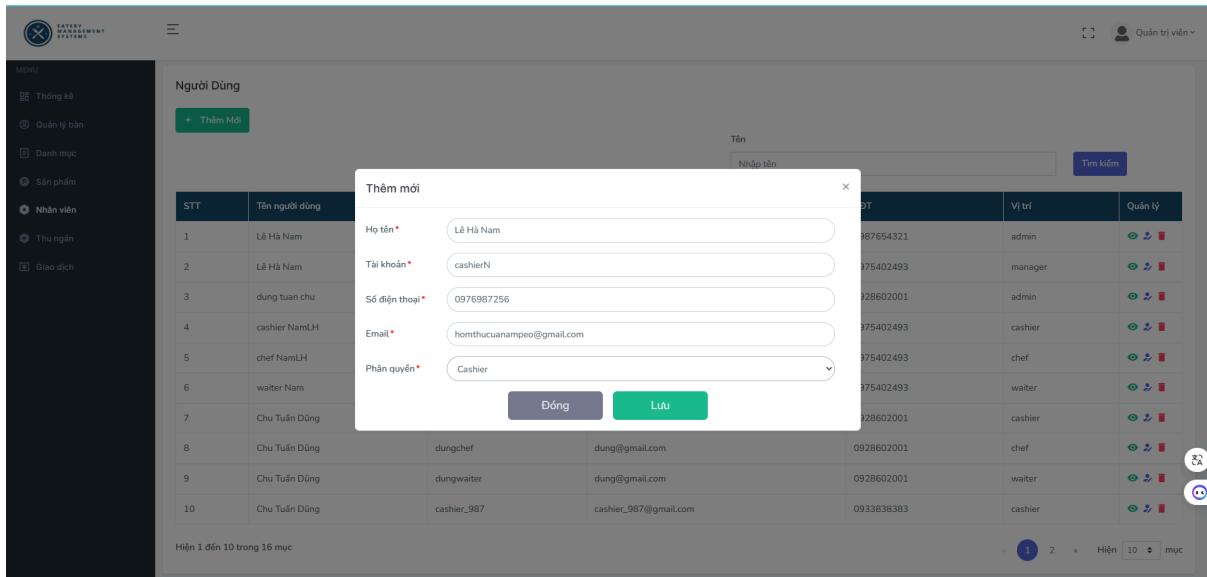
STT	Tên người dùng	Tên tài khoản	Email	SĐT	Vị trí	Quản lý
1	Lê Hà Nam	adminNam	clonedz11@gmail.com	0987654321	admin	
2	Lê Hà Nam	managerNam	clonedz11@gmail.com	0975402493	manager	
3	dung tuan chu	dungadmin	dungct@gmail.com	0928602001	admin	
4	cashier NamLH	cashierNam	clonedz38@gmail.com	0975402493	cashier	
5	chef NamLH	chefNam	clonedz11@gmail.com	0975402493	chef	
6	waiter Nam	waiterNam	namihhe153319@fpt.vn	0975402493	waiter	
7	Chu Tuấn Dũng	dungcashier	dung@gmail.com	0928602001	cashier	
8	Chu Tuấn Dũng	dungchef	dung@gmail.com	0928602001	chef	
9	Chu Tuấn Dũng	dungwaiter	dung@gmail.com	0928602001	waiter	
10	Chu Tuấn Dũng	cashier_987	cashier_987@gmail.com	0933838383	cashier	

Hiện 1 đến 10 trong 16 mục

- Step 2: Click the "Thêm mới" button on the user management screen



- Step 3: The add staff form appears, enter user information and click the "Lưu" button.



- Step 4: Click the edit icon on the user management screen

STT	Tên người dùng	Tên tài khoản	Email	SĐT	Vị trí	Quản lý
1	Lê Hà Nam	adminNam	clonedz11@gmail.com	0987654321	admin	
2	Lê Hà Nam	managerNam	clonedz11@gmail.com	0975402493	manager	
3	dung tuan chu	dungadmin	dungct@gmail.com	0928602001	admin	
4	cashier NamLH	cashierNam	clonedz18@gmail.com	0975402493	cashier	
5	chef NamLH	chefNam	clonedz11@gmail.com	0975402493	chef	
6	waiter Nam	waiterNam	namihhe153319@fpt.vn	0975402493	waiter	
7	Chu Tuấn Dũng	dungcashier	dung@gmail.com	0928602001	cashier	
8	Chu Tuấn Dũng	dungchef	dung@gmail.com	0928602001	chef	
9	Chu Tuấn Dũng	dungwaiter	dung@gmail.com	0928602001	waiter	
10	Chu Tuấn Dũng	cashier_987	cashier_987@gmail.com	0933838383	cashier	

Hiển 1 đến 10 trong 16 mục

- Step 5: The edit user form appears, enter user information and click the "Lưu" button.

STT	Họ tên*	Tài khoản*	Số điện thoại*	Email*	Phân quyền*
1	Lê Hà Nam	adminNam	0987654321	clonedz11@gmail.com	
2					
3					
4					
5					
6					
7					
8	Chu Tuấn Dũng	dungchef	dung@gmail.com	0928602001	
9	Chu Tuấn Dũng	dungwaiter	dung@gmail.com	0928602001	
10	Chu Tuấn Dũng	cashier_987	cashier_987@gmail.com	0933838383	

Hiển 1 đến 10 trong 16 mục

- Step 6: Click the delete icon on the user management screen

Thống kê

Quản lý bàn

Danh mục

Sản phẩm

Nhân viên

Thu ngân

Giao dịch

+ Thêm Mới

Tên

Nhập tên

Tim kiếm

STT

Tên người dùng

Tên tài khoản

Email

SĐT

Vị trí

Quản lý

STT	Tên người dùng	Tên tài khoản	Email	SĐT	Vị trí	Quản lý	
1	Lê Hà Nam	adminNam	clonedz11@gmail.com	0987654321	admin		
2	Lê Hà Nam	managerNam	clonedz11@gmail.com	0975402493	manager		
3	dung tuan chu	dungadmin	dungct@gmail.com	0928602001	admin		
4	cashier NamLH	cashierNam	clonedz38@gmail.com	0975402493	cashier		
5	chef NamLH	chefNam	clonedz11@gmail.com	0975402493	chef		
6	waiter Nam	waiterNam	namlithe153319@fpt.vn	0975402493	waiter		
7	Chu Tuấn Dũng	dungcashier	dung@gmail.com	0928602001	cashier		
8	Chu Tuấn Dũng	dungchef	dung@gmail.com	0928602001	chef		
9	Chu Tuấn Dũng	dungwaiter	dung@gmail.com	0928602001	waiter		
10	Chu Tuấn Dũng	cashier_987	cashier_987@gmail.com	0933838383	cashier		

Hiện 1 đến 10 trong 16 mục

1 2 * Hiện 10 mục

- Step 7: Click on the “Đồng ý” button to confirm delete user

Thống kê

Quản lý bàn

Danh mục

Sản phẩm

Nhân viên

Thu ngân

Giao dịch

+ Thêm Mới

Tên

Nhập tên

Tim kiếm

STT

Tên người dùng

SĐT

Vị trí

Quản lý

STT	Tên người dùng	SĐT	Vị trí	Quản lý	
11	Lê Hà Nam	0928188145	chef		
12	Chu Hồng Long	0928282825	waiter		
13	cashier linh	0912345678	cashier		
14	chef linh linh	0912345678	chef		
15	waiter linh	0912345678	waiter		
16	admin		admin		

Hiện 11 đến 20 trong 16 mục

1 2 * Hiện 10 mục

- Step 8: Click the detail icon on the user management screen and view user details

Thống kê

Quản lý bàn

Danh mục

Sản phẩm

Nhân viên

Thu ngân

Giao dịch

+ Thêm Mới

Tên

Nhập tên

Tim kiếm

STT

Chi tiết

Vị trí

Quản lý

STT	Chi tiết	Vị trí	Quản lý	
1	Họ tên* Lê Hà Nam	admin		
2	Email* clonedz11@gmail.com	manager		
3	Số điện thoại* 0975402493	admin		
4	Tài khoản* managerNam	cashier		
5	Phân quyền*	chef		
6		waiter		
7	Chu Tuấn Dũng dungcashier dung@gmail.com 0928602001	cashier		
8	Chu Tuấn Dũng dungchef dung@gmail.com 0928602001	chef		
9	Chu Tuấn Dũng dungwaiter dung@gmail.com 0928602001	waiter		
10	Chu Tuấn Dũng cashier_987 cashier_987@gmail.com 0933838383	cashier		

Hiện 1 đến 10 trong 16 mục

1 2 * Hiện 10 mục

