

UNIVERSITY OF INFORMATION TECHNOLOGY

SOFTWARE ENGINEERING

COURSE PROJECT REPORT



Restaurant manager

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Course: software engineering

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NHẬN XÉT CỦA GIẢNG VIÊN HƯỚNG DẪN

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Tp.HCM, ngày ... tháng 6 năm 2023

GVHD

1. “Cook cook” restaurant management software introduction.

1.1 introduction

-Every day, the restaurant service department will give detailed information about the dishes to introduce to guests, the menu of the corresponding dishes. After viewing and selecting the restaurant's dishes, customers can order and the order will be recorded in the management system by the staff. On that basis, the service department will forward that request to the kitchen for implementation. At the end of the customer's meal process, a detailed invoice must be given to the guest (if there is a promotional discount, it must be specified).

-Restaurant owners will need to have management information about the number of tables currently available, the number of foods and categories, information and number of employees, statistics over time (day, week, month) to can understand the current situation of the restaurant, thereby making more effective financial plans in the future.

1.2 Technology

-Using Winform technology, Guna UI Framework and SQL Server database

1.3 Tool

-Microsoft Visual Studio 2022

-SQL Server Management Studio 2019 Tool

1.4 Design

-Diagram: draw.io.

-Interface: Figma.

2. List of requirements:

ID	Name of requirements	Priority	Diagram	Test case
1. Account				
1.1	Login into account	high		
1.2	Create account	high		
1.3	Delete account	high		
1.4	Edit account	high		
2. Food				

2.1	View foods	Critical		
2.2	Add foods	Critical		
2.3	Delete foods	Critical		
2.4	Edit foods	Critical		
2.5	Find food	Critical		
3. Order				
3.1	View order	Critical		
3.2	Place order	Critical		
3.3	Delete order	Critical		
3.4	Edit order	Critical		
3.5	Pay order	Critical		
4. Table				
4.1	View tables and status	Critical		
4.3	Delete tables	Critical		
4.4	Edit tables	Critical		
4.5	View table order	high		
4.6	Add Table	high		
5. Employee				
5.1	View employees	High		
5.2	Add employees	High		
5.3	Delete employees	High		
6. Report				
6.1	View Report	Critical		

1. Account

1.1 Login into account

-User fills her/his username into the Username box and password of that username in the password box

-User presses the log in button

-If the username and password valid, user log in the system or else notify that the account is not valid

1.2 Create account.

-Choose “Nhân viên” from the menu.

-User press “Thêm” button, a username input window appears.

- User enters username.
- User checks the checkbox “Tài khoản quản lý/admin” if they want create an admin account.
- Choose “Hoàn thành” to create account and default password is “1” or choose “Hủy” to cancel.

1.3 Delete account.

- Choose “Nhân viên” from the menu.
- chose account to be deleted.
- press “Xóa” button.
- A Confirmation message box appear and user choose “Ok” or “Hủy”.
- A message pops up informing that if success or not.

1.4 Edit account.

- Choose “Tài khoản” from the menu.
- Chose account to be edited (by input username and password of the account).
- Change Display name or password and re-enter password.
- press “edit account” button.
- A Confirmation message box appear, and user choose “ok” or “Hủy bỏ”
- A message pops up informing that if success or not.

2. Food

2.1 View foods

- User Choose “Món Ăn” from the menu.
- User can see all the food of the restaurant. (Except the food that have been already delete)

2.2 Add foods.

- User Choose “Món Ăn” from the menu.

- User chooses “Thêm món ăn”
- User Fill the name of food, price, and choose the food category.
- User chooses “Hủy” to cancel or “Hoàn Tất” and A Confirmation message box appear and user choose “ok” or “Hủy bỏ”
- A message pops up informing that if success or not.

2.3 Delete foods.

- User Choose “Món Ăn” from the menu.
- User chooses the food from the list to delete.
- A Confirmation message box appear, and user choose “ok” or “Hủy bỏ”.
- A message pops up informing that if success or not.

2.4 Edit foods.

- User Choose “Món Ăn” from the menu.
- User chooses the food from the list to delete.
- User chooses “Sửa món ăn”
- User Fill the name of food, price, and choose the food category.
- User chooses “Hủy” to cancel or “Hoàn Tất” and A Confirmation message box appear and user choose “ok” or “Hủy bỏ”
- A message pops up informing that if success or not.

2.5 Find food.

- User Choose “Món Ăn” from the menu.
- User types in the search bar the food they want and the foods with that name appear

3. Order

3.1 View order.

- User Choose “Gọi món” from the menu and the table of the order in Form-GoiMon and the (unpaid) order in that table will appear

3.2 Place order

- User chooses “Gọi món” from the menu and an empty table
- User chooses the food they want and quantity.
- User choose “Tạo đơn” and an order will be placed.

3.3 Delete order.

- User Choose “Gọi món” from the menu and the table of the order they want to delete in FormGoiMon.
- User chooses “Hủy đơn” and a confirmation message box appear and user choose “ok” or “Hủy bỏ”

3.4 Edit order.

- User Choose “Gọi món” from the menu and the table of the order in Form-GoiMon that thay want to edit.
- User can add or delete food from the order or change table combobox.
- User chooses “Chỉnh đơn” and the order will be saved.

3.5 Pay order.

- User Choose “Gọi món” from the menu and the table of the order in Form-GoiMon that thay want to pay.
- Choose “Thanh toán” and a confirmation message box appear, and user choose “ok” or “Hủy bỏ” for ok or cancel.
- If the user chooses “ok” a Bill will appear for the user to see and choose “Đóng” to close.

4. Table

4.1 View tables and status.

- User Choose “Gọi món” from the menu.
- All the tables appear in the FlowLayoutPanel and display their status (“Trống” or “Có người”).

4.3 Delete tables.

- User Choose “Gọi món” from the menu.
- User Chooses “Xóa bàn” to enter Delete mode.
- User chooses table to delete.
- A Confirmation message box appear and user choose “ok” or “ Hủy bỏ”

4.4 Edit tables.

- User choose “Gọi món” from the menu.
- User chooses “Đổi tên” to enter Delete mode.
- User chooses table to change name.

4.5 View table order.

- User Choose “Gọi món” from the menu and the table of the order in Form-GoiMon and the (unpaid) order in that table will appear

4.6 Add Table.

- User chooses “Gọi món” from the menu.
- User chooses “Thêm bàn” button.
- A Confirmation message box appear and user choose “ok” or “Hủy bỏ”

5. Employee

5.1 View employees

- User Chooses “Nhân viên” from the menu.
- User can see the employee’s account in the list.

5.2 Add employees.

- User chooses “Nhân viên” from the menu.
- User press “Thêm” button, a username input window appears.
- User enters username.
- User checks the checkbox “Tài khoản quản lý/admin” if they want to create an admin account.

-Choose “Hoàn thành” to create account and default password is “1” or choose “Hủy” to cancel.

5.3 Delete employees.

-User chooses “Nhân viên” from the menu.

-choose employee’s account to be deleted.

-press “Xóa” button.

-A Confirmation message box appear and user choose “Ok” or “Hủy”.

-A message pops up informing that if success or not.

6. Report

6.1 View Report

-User chooses “Thống kê” from the menu.

-User chooses to see reports from a date to date by change the DateTimePickers and choose “Xem thống kê” to see the reports.

3. Use case diagram

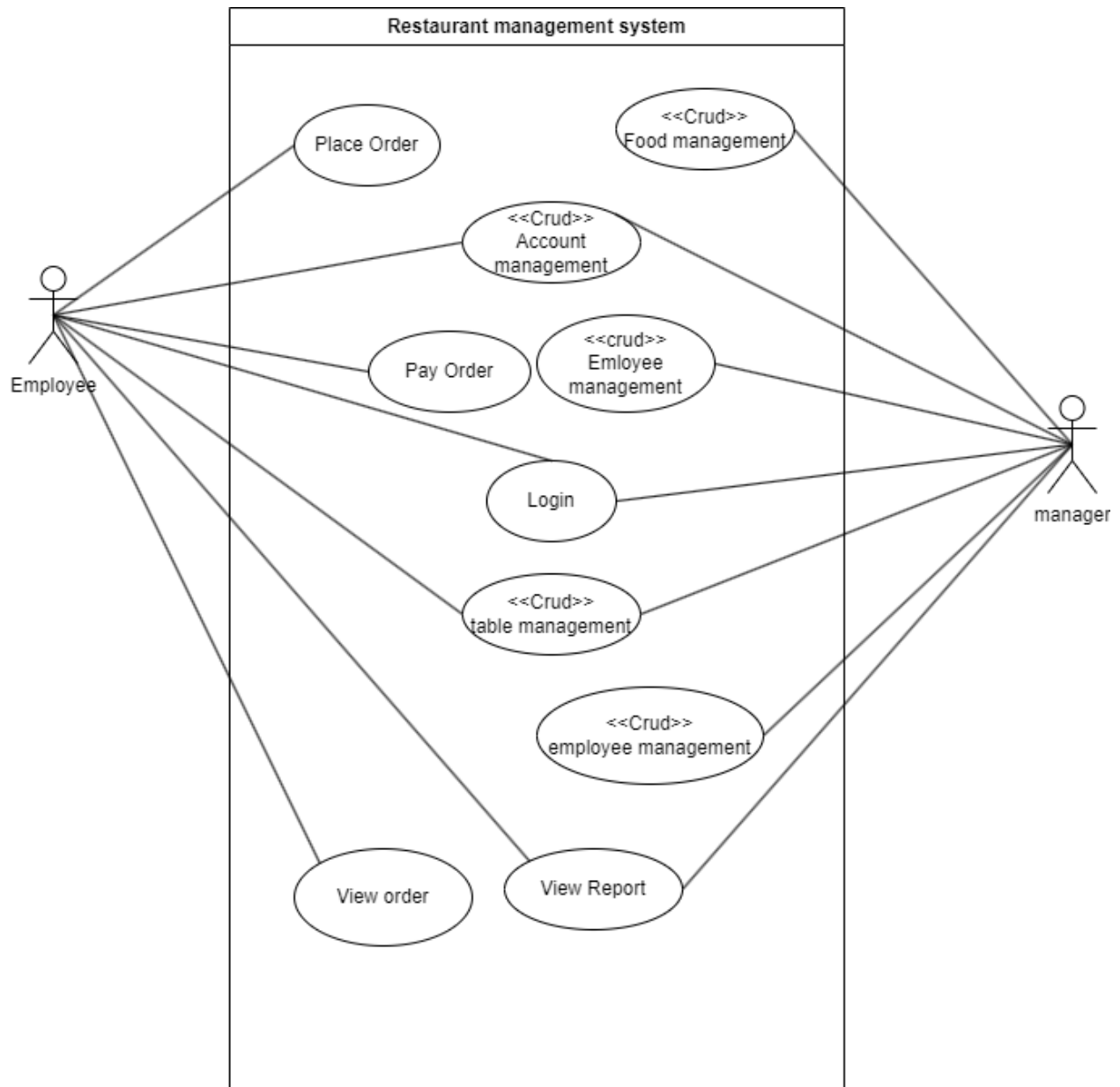


Figure 3.1 Restaurant management's general use case diagram.

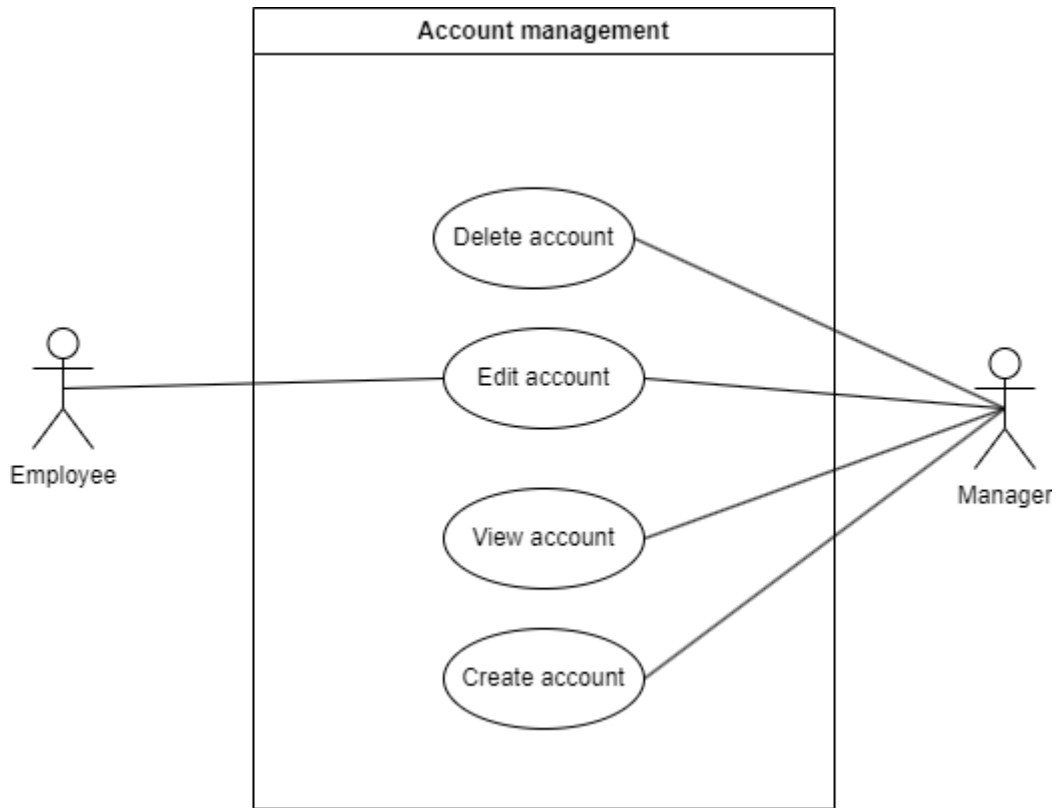


Figure 3.1 Restaurant management’s Account management use case diagram.

4. Use Case Description

Nr.	Section	Content/Explanation
1	Name	Place order
2	Authors	Nguyễn Quốc Thái Dương
3	Priority	Critical
4	Person responsible	Nguyễn Quốc Thái Dương
5	Description	The employee makes an order in Restaurant management system. The system saves the order into database.
6	Actors	Employee, Restaurant management system.
7	Pre-conditions	Employee has logged into the system. Restaurant management system is working properly.
8	Post conditions	The order has been placed successfully
9	Main scenario	<ol style="list-style-type: none"> 1. The employee use place order function. 2. The system display order screen and create a bill. 3. The employee chooses foods and quantity then press “Thêm món”. 4. The system creates a bill info for each food the employ chooses. 5. The employee press “Tạo đơn” 6. The system save the bill and bill info into database.

10	Exception scenarios	Trigger event: connect to database fail. Inform user that fail to connect to database and go back to main screen
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Nr.	Section	Content/Explanation
1	Name	Edit food
2	Authors	Nguyễn Quốc Thái Dương
3	Priority	Critical
4	Person responsible	Nguyễn Quốc Thái Dương
5	Description	The employee edits the information of a food that already exist in database
6	Actors	Employee, Restaurant management system.
7	Pre-conditions	Employee has logged into the system. Restaurant management system is working properly.
8	Post conditions	Food's information edited
9	Main scenario	<ol style="list-style-type: none"> 1. The employee chooses the food to be edited in “Món ăn”. 2. The employee uses edit food function. 3. The system display edits food screen. 4. The employee enters new food name, price, category and press “Hoàn tất”. 5. The system asks staff to confirm the operation. 6. The System save the new information of the food into database.
10	Exception scenarios	Trigger event: connect to database fail. Inform user that fail to connect to database and go back to main screen

Nr.	Section	Content/Explanation
1	Name	Find food
2	Authors	Nguyễn Quốc Thái Dương
3	Priority	Critical
4	Person responsible	Nguyễn Quốc Thái Dương
5	Description	The employee find foods by enter the their name in search bar
6	Actors	Employee, Restaurant management system.
7	Pre-conditions	Employee has logged into the system. Restaurant management system is working properly.
8	Post conditions	The food whose name matches the search bar appears
9	Main scenario	<ol style="list-style-type: none"> 1. The employee enters food's names in the search bar in “Món ăn”. 2. The system finds in database if any foods have name match the text in the search bar. 3. The system displays the foods have name match the text in the search bar.
10	Exception scenarios	No exception scenario

Nr.	Section	Content/Explanation
1	Name	View report
2	Authors	Nguyễn Quốc Thái Dương
3	Priority	Critical
4	Person responsible	Nguyễn Quốc Thái Dương
5	Description	The employee can see the report by date
6	Actors	Employee, Restaurant management system.
7	Pre-conditions	Restaurant management system is working properly.
8	Post conditions	The employee can see the report
9	Main scenario	<ol style="list-style-type: none"> 1. The employee uses the View report function. 2. Employee selects time from date to date with two time pickers. 3. The system finds in database the bills have date check out in the range of date the user selected. 4. The system displays the report of the bill on the screen.
10	Exception scenarios	Trigger event: connect to database fail. Inform user that fail to connect to database and go back to main screen

5. Class Diagram

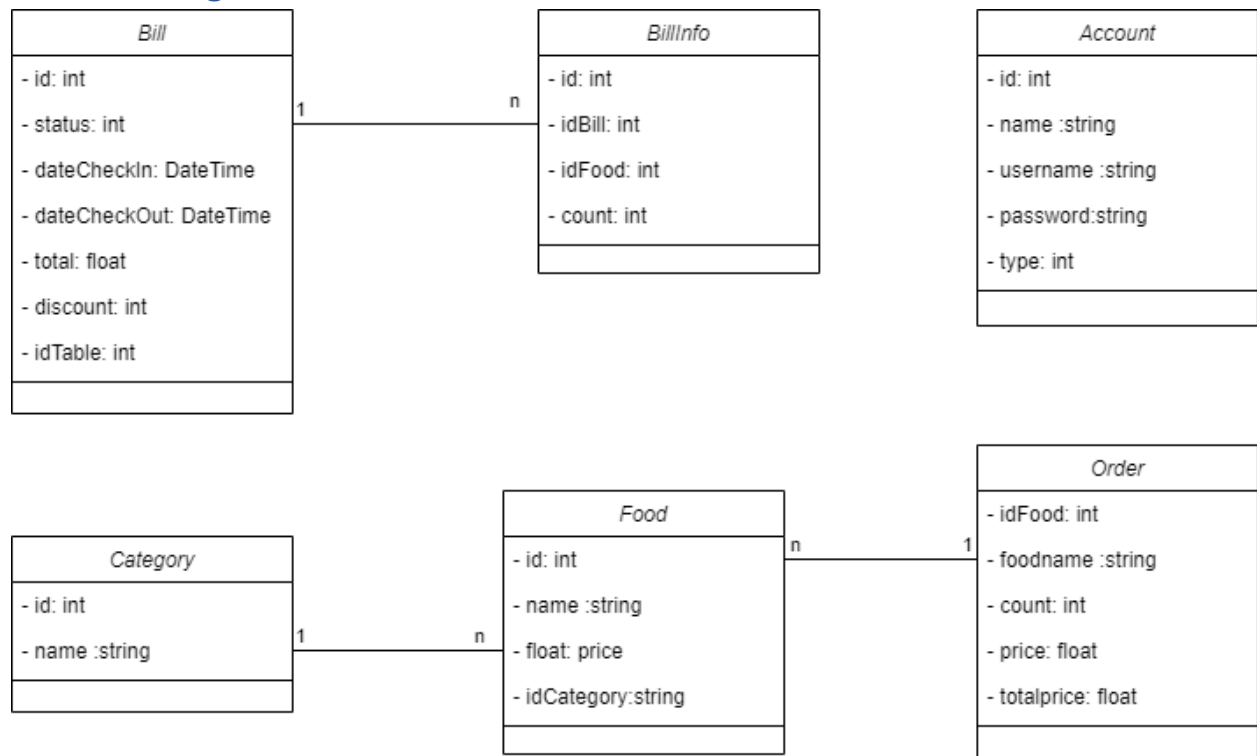


Figure 5.1 Class diagram

6. Activity Diagram

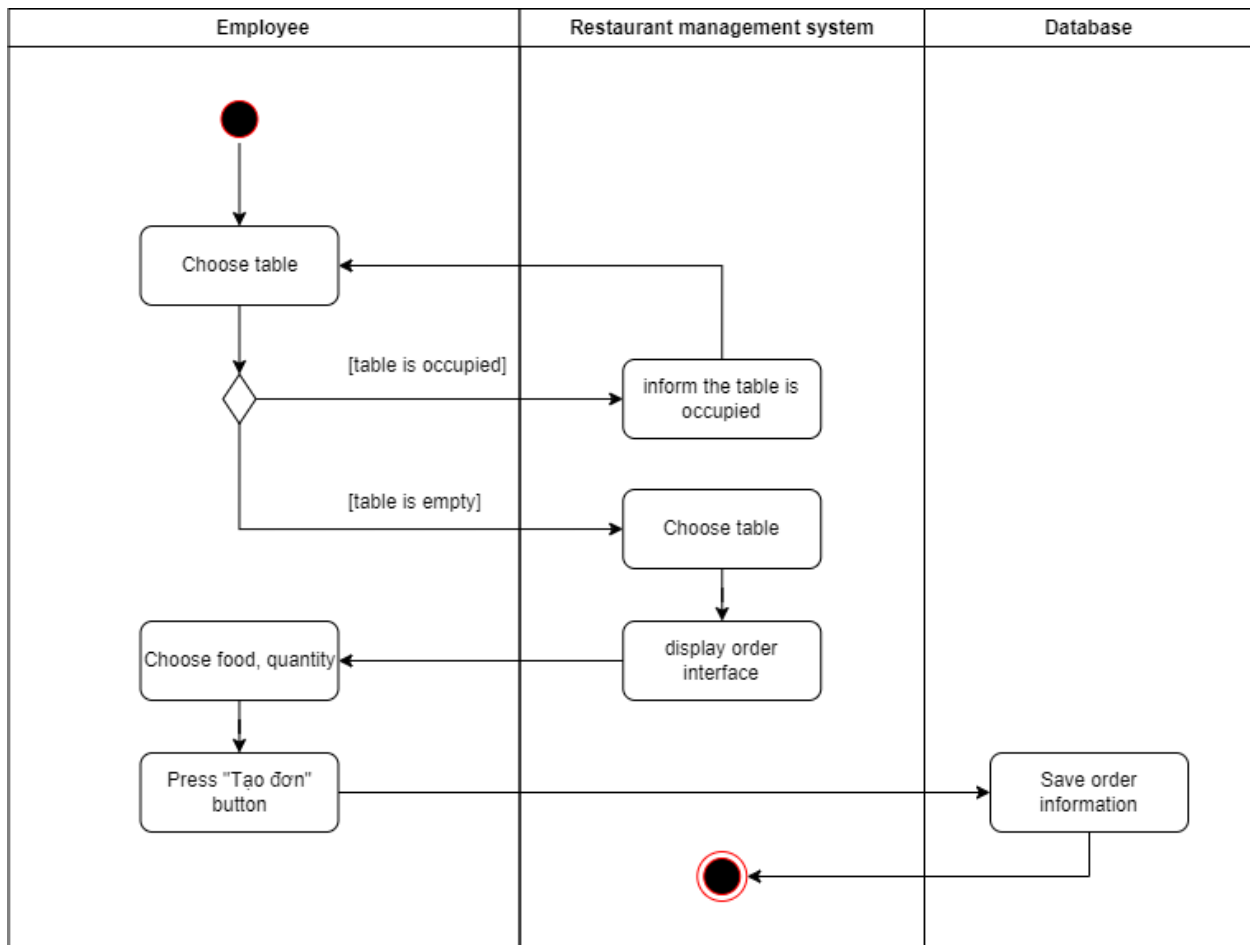


Figure 6.1 Create Order activity diagram

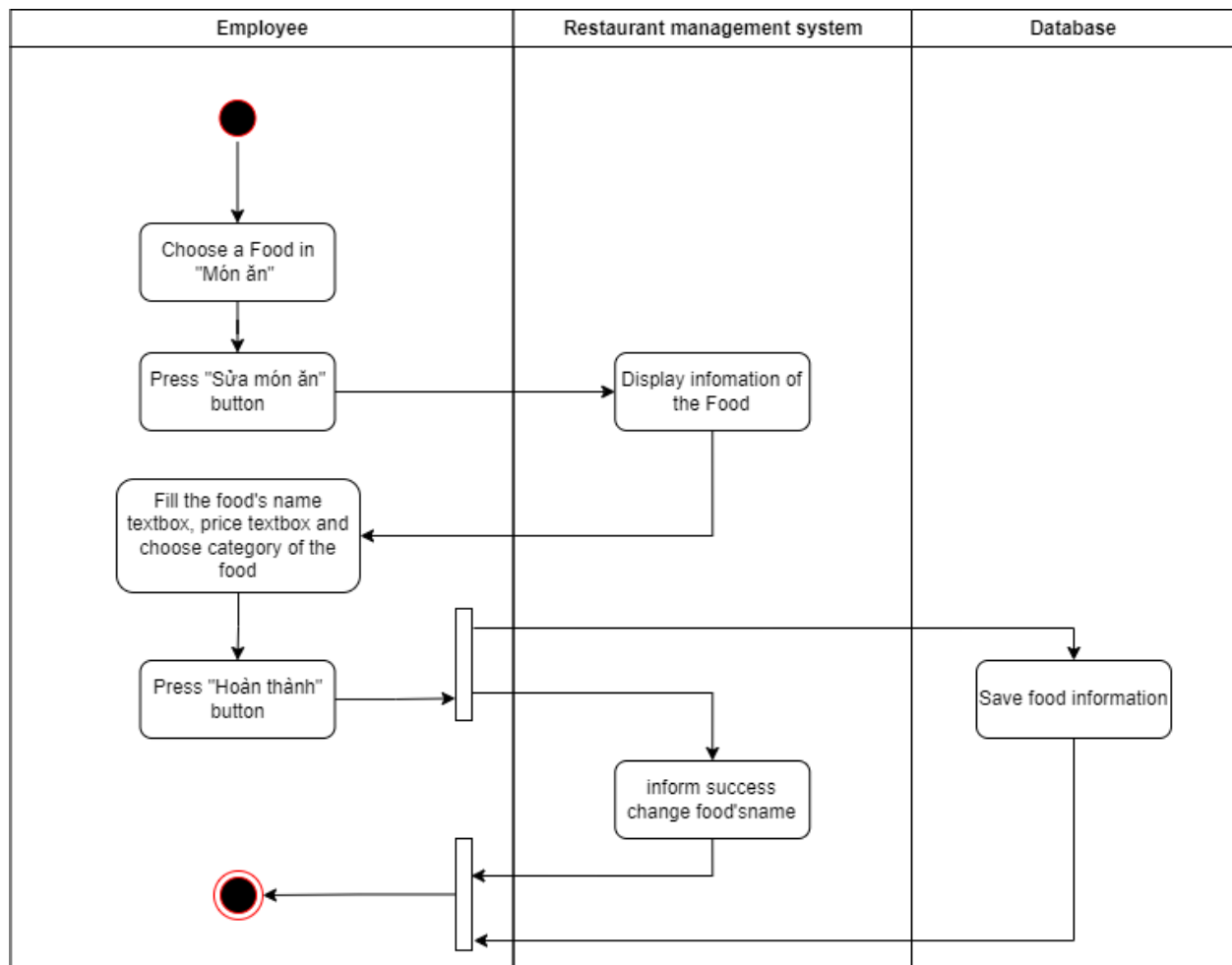


Figure 6.2 Edit Food activity diagram

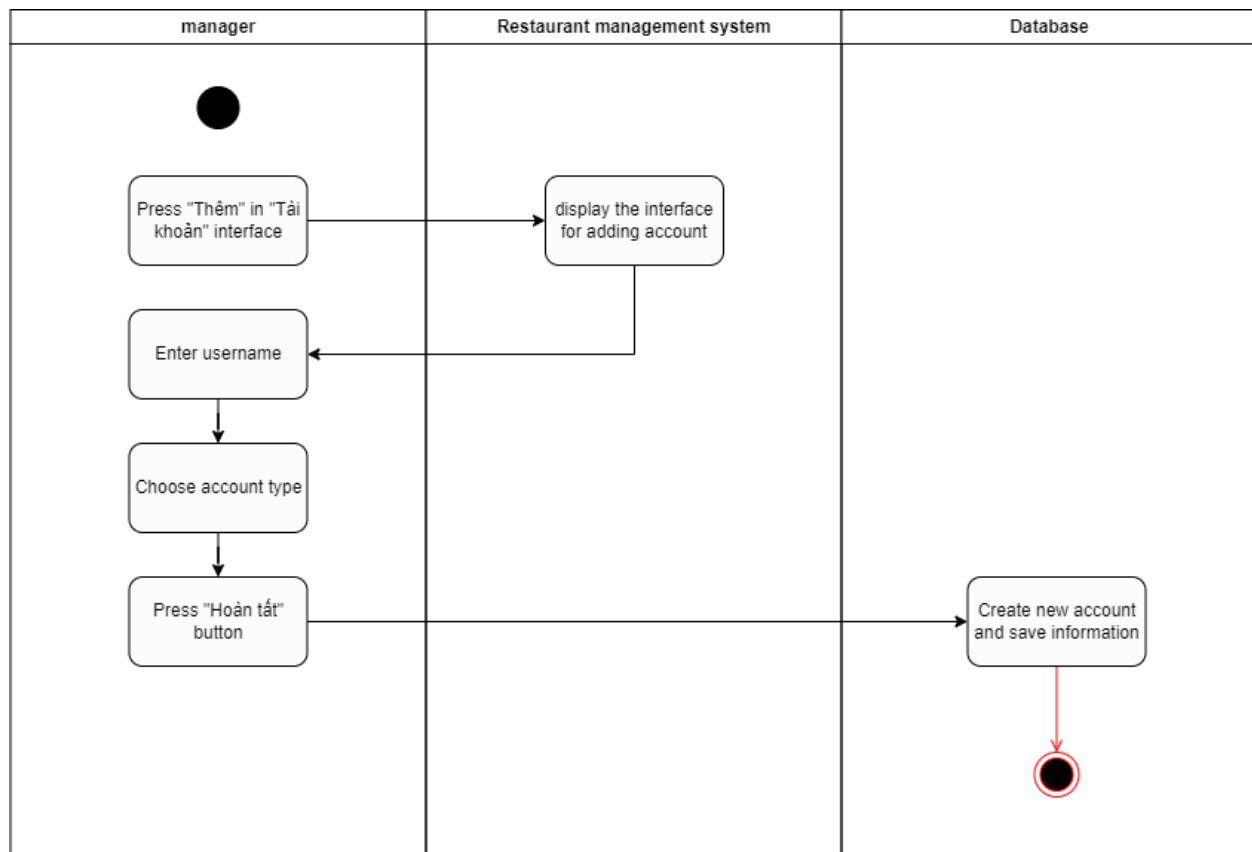


Figure 6.3 Create Account activity diagram

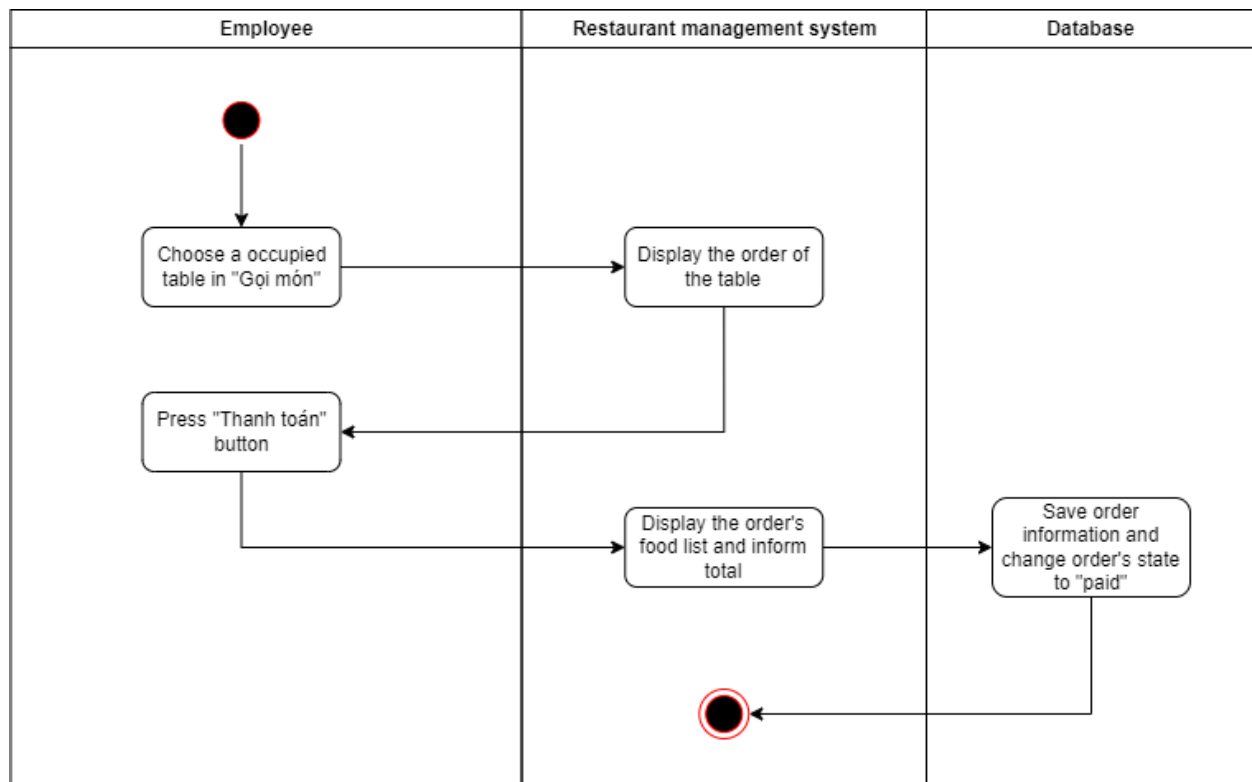


Figure 6.4 Pay Order activity diagram

7. Database

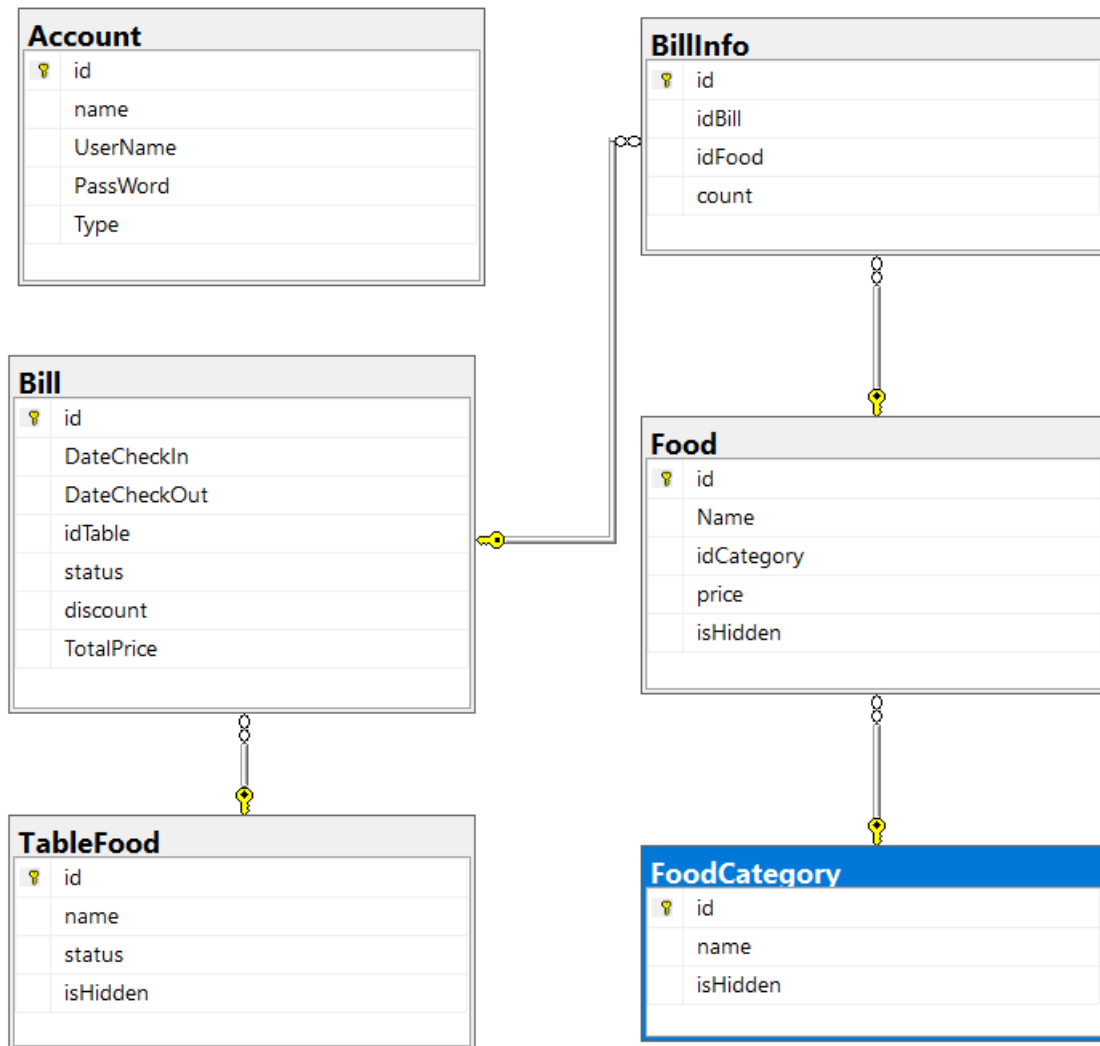


Figure 7.1 Database diagram of Restaurant management application

8. Interface

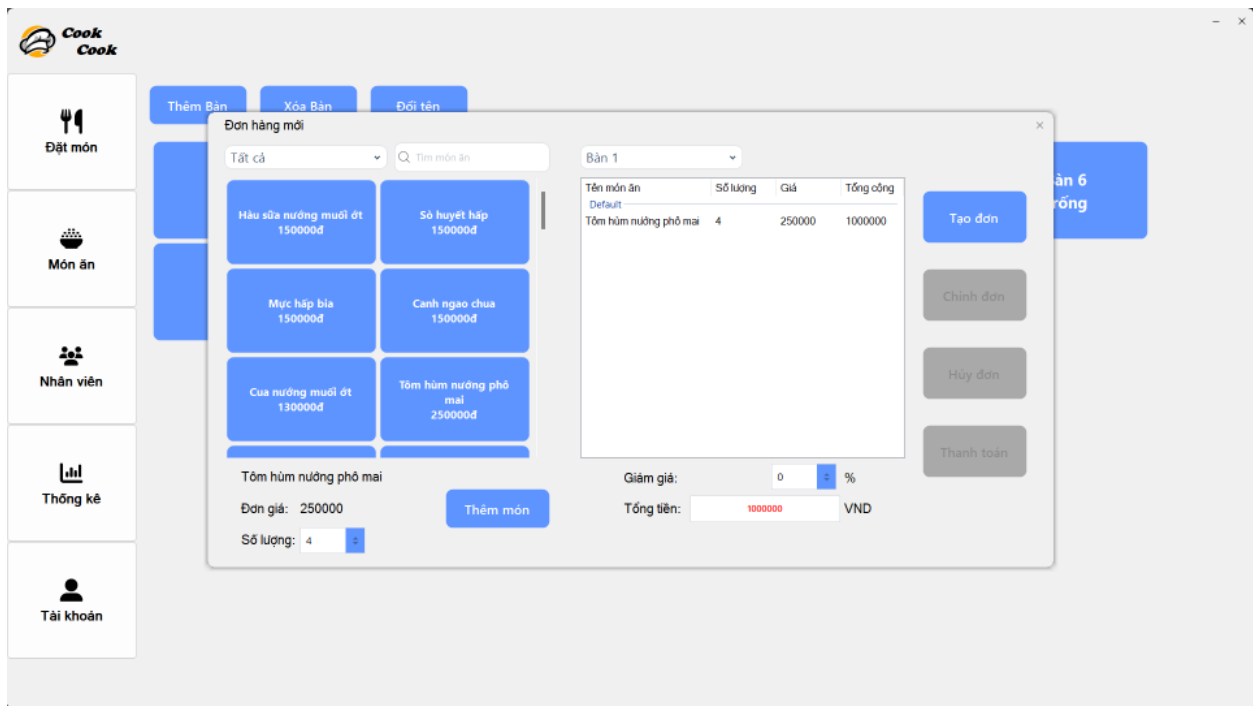


Figure 8.1 Restaurant management's order screen



Figure 8.2 Restaurant management's Table screen

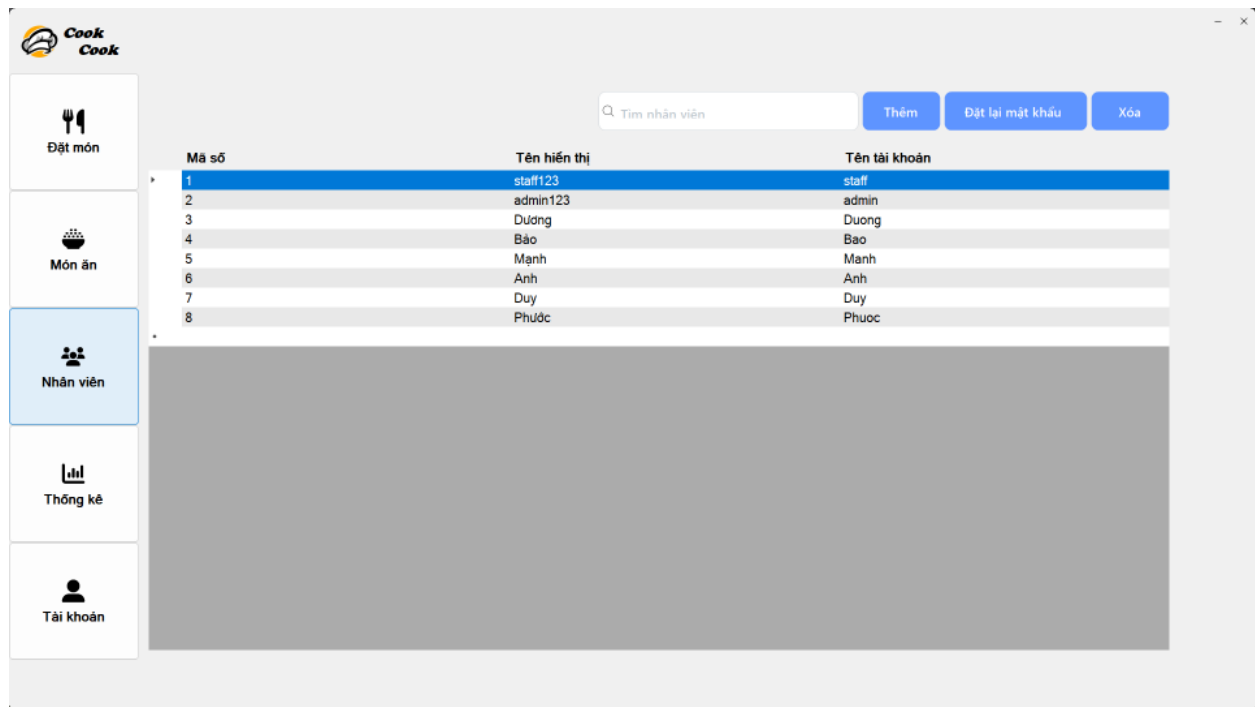


Figure 8.3 Restaurant management's employee screen

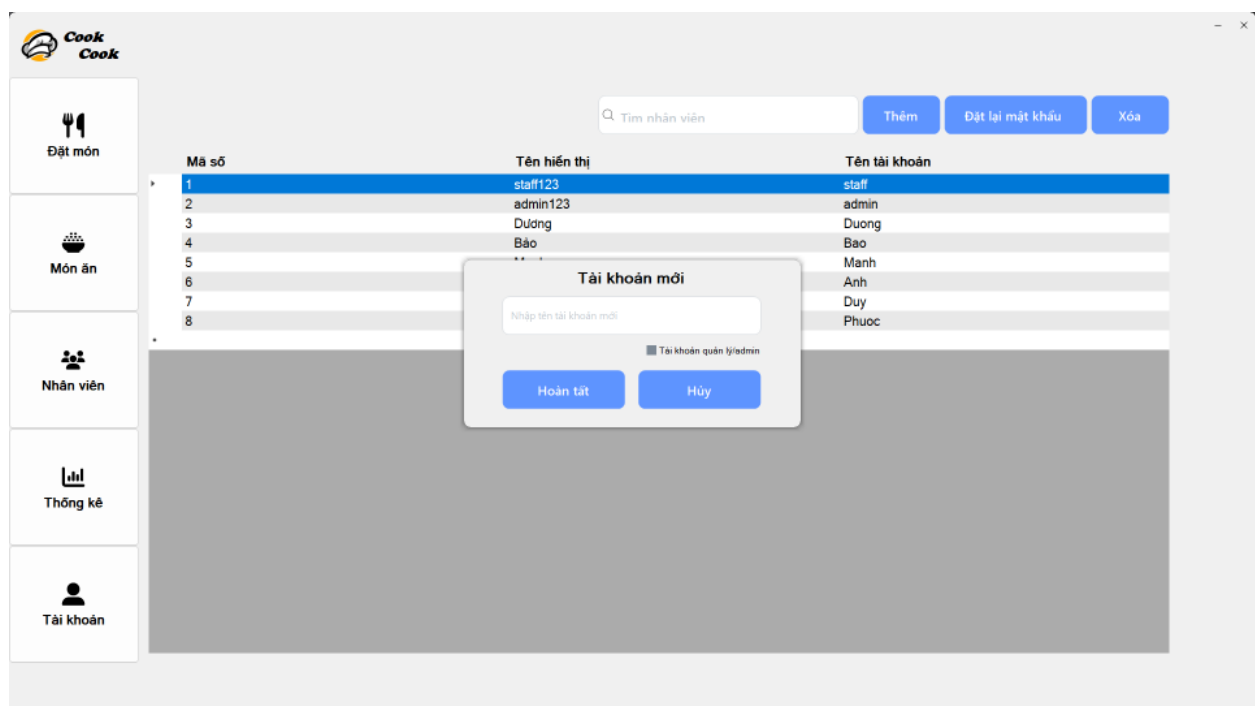


Figure 8.4 Restaurant management's New employee/account screen

id	Tên món ăn	Danh mục	Giá tiền
1	Hàu sữa nướng muối ớt	Hải sản/Seafood	150000
2	Sò huyết hấp	Hải sản/Seafood	150000
3	Mực hấp bia	Hải sản/Seafood	150000
4	Canh ngao chua	Hải sản/Seafood	150000
5	Cua nướng muối ớt	Hải sản/Seafood	130000
6	Tôm hùm nướng phô mai	Hải sản/Seafood	250000
7	Canh cá chua	Hải sản/Seafood	150000
8	Cá thu sốt cà chua	Hải sản/Seafood	200000
9	Canh cua cà pháo	Hải sản/Seafood	70000
10	Gỏi xoài tôm khô	Gỏi/Salad	100000
11	Gỏi ngó sen tôm thịt	Gỏi/Salad	100000
12	Gỏi đu đủ trộn tai heo	Gỏi/Salad	100000
13	Gỏi xoài khô mực	Gỏi/Salad	100000
14	Gỏi cá trích	Gỏi/Salad	120000
15	Mì xào bò	Mì/Noodle	75000
16	Mì xào trứng	Mì/Noodle	65000
17	Mì xào tóp mỡ	Mì/Noodle	75000
18	Mì xào hải sản	Mì/Noodle	80000
19	Cơm chiên dương châu	Cơm/Rice	90000
20	Cơm chiên thập cẩm	Cơm/Rice	85000
21	Cơm chiên cua tôm	Cơm/Rice	95000
22	Cơm chiên bọc trứng	Cơm/Rice	85000
23	Cơm trắng	Cơm/Rice	20000
24	Coca Cola	Nước giải khát/Drinks	15000

Figure 8.5 Restaurant management's food screen

Đặt món

Món ăn

Nhân viên

Thống kê

Tài khoản

Tất cả

Sửa món ăn

Thêm món ăn

Xóa

id	Tên món ăn	Danh mục	Giá tiền
1	Hàu sữa nướng muối ớt	Hải sản/Seafood	150000
2	Sò huyết hấp	Hải sản/Seafood	150000
3	Mực hấp bia	Hải sản/Seafood	150000
4	Canh ngao chua	Hải sản/Seafood	150000
5	Cua nướng muối ớt	Hải sản/Seafood	130000
6	Tôm hùm nướng phô mai	Hải sản/Seafood	250000
7	Canh cá chua	Hải sản/Seafood	150000
8	Cá thu sốt cà chua	Hải sản/Seafood	200000
9	Canh cua cà pháo	Hải sản/Seafood	70000
10	Gỏi xoài tôm khô	Gỏi/Salad	100000
11	Gỏi ngó sen tôm thịt	Gỏi/Salad	100000
12	Gỏi đu đủ trộn tai heo	Gỏi/Salad	100000
13	Gỏi xoài khô mực	Gỏi/Salad	100000
14	Gỏi cá trích	Gỏi/Salad	120000
15	Mì xào bò	Mì/Noodle	75000
16	Mì xào trứng	Mì/Noodle	65000
17	Mì xào tóp mỡ	Mì/Noodle	75000
18	Mì xào hải sản	Mì/Noodle	80000
19	Cơm chiên dương châu	Cơm/Rice	90000
20	Cơm chiên thập cẩm	Cơm/Rice	85000
21	Cơm chiên cua tôm	Cơm/Rice	95000
22	Cơm chiên bọc trứng	Cơm/Rice	85000
23	Cơm trắng	Cơm/Rice	20000
24	Coca Cola	Nước giải khát/Drinks	15000

Món ăn mới

Hải sản/Seafood

Hoàn tất

Hủy

Figure 8.6 Restaurant management's new food screen

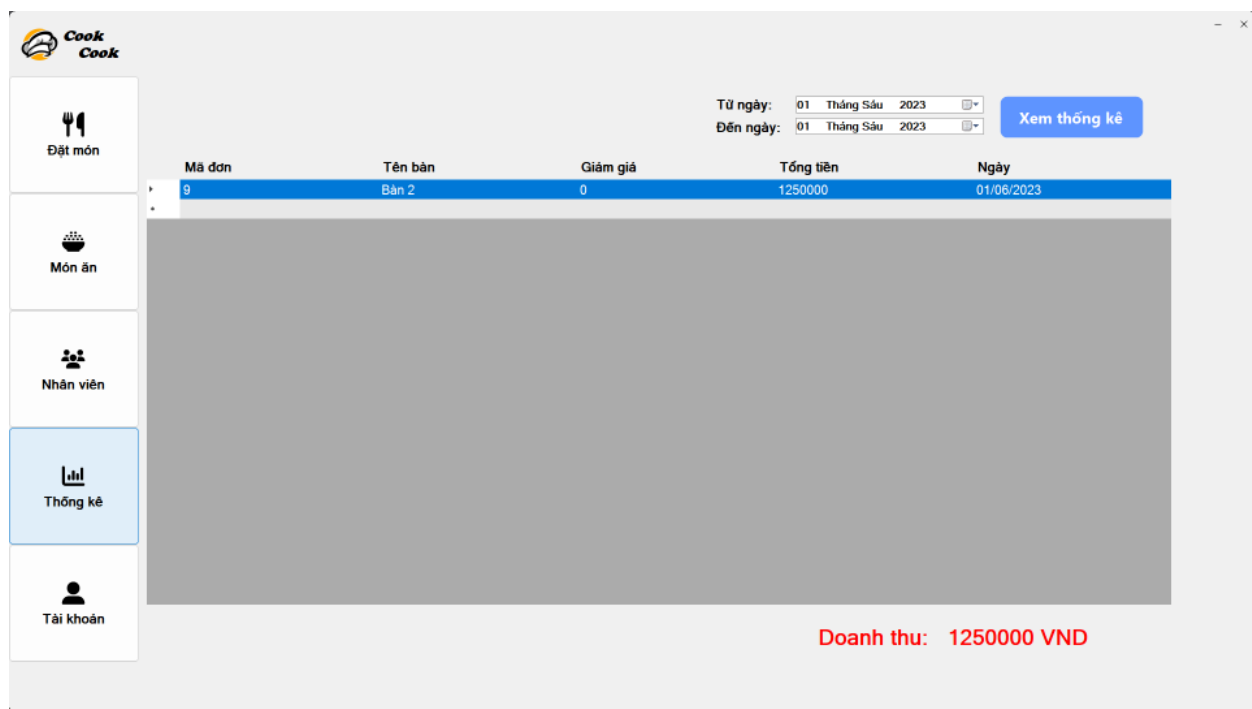


Figure 8.7 Restaurant management's report screen

Cook Cook

admin123

Tên tài khoản: admin
Tên hiển thị: admin123
Mật khẩu:
Mật khẩu mới:
Xác nhận:

[Cập nhật](#)

Figure 8.8 Restaurant management's account/edit account screen