

GENERALCONFEDERATION OF LABOR OF VIETNAM

**TON DUC THANG UNIVERSITY FACULTY OF
INFORMATION TECHNOLOGY**



SOFTWARE ENGINEERING

HOTEL MANAGEMENT SOFTWARE

Instructing Lecturer: **Mr. DANG MINH THANG**

Student's name: **NGUYEN QUANG HUY - 518H0511**

TO THI BICH TUYEN – 518H0585

Class : 18H50205 – 18H50204

Course : 22

HO CHI MINH City, 2020.

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ACKNOWLEDGEMENT

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With deep affection, sincerity, we express deep gratitude to all individuals and agencies who have helped us in our study and research.

First of all, I would like to express a special appreciation to Ton Duc Thang University's teachers for their conscientious guidance and advices throughout the last semester by gave me their modern outlook and meticulous supervision to carry out the job perfectly.

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With limited time and experience, this report can not avoid mistakes. We are looking forward to receiving advice and comments from teachers so that we can improve our awareness, better serve the practical work later.

We sincerely thank you!

THE PROJECT WAS COMPLETED AT TON DUC THANG UNIVERSITY

I pledge that this is a product of our own project and is under the guidance of Mr Dang Minh Thang. The content of research, results in this subject is honest and not published in any form before.

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(Sign and write your full name)

Signed

Nguyen Quang Huy

Signed

To Thi Bich Tuyen

EVALUATION OF INSTRUCTING LECTURER

Confirmation of the instructor

Ho Chi Minh, day...month...year 2020

(Sign and write your full name)

The assessment of the teacher marked

Ho Chi Minh, day...month...year 2020

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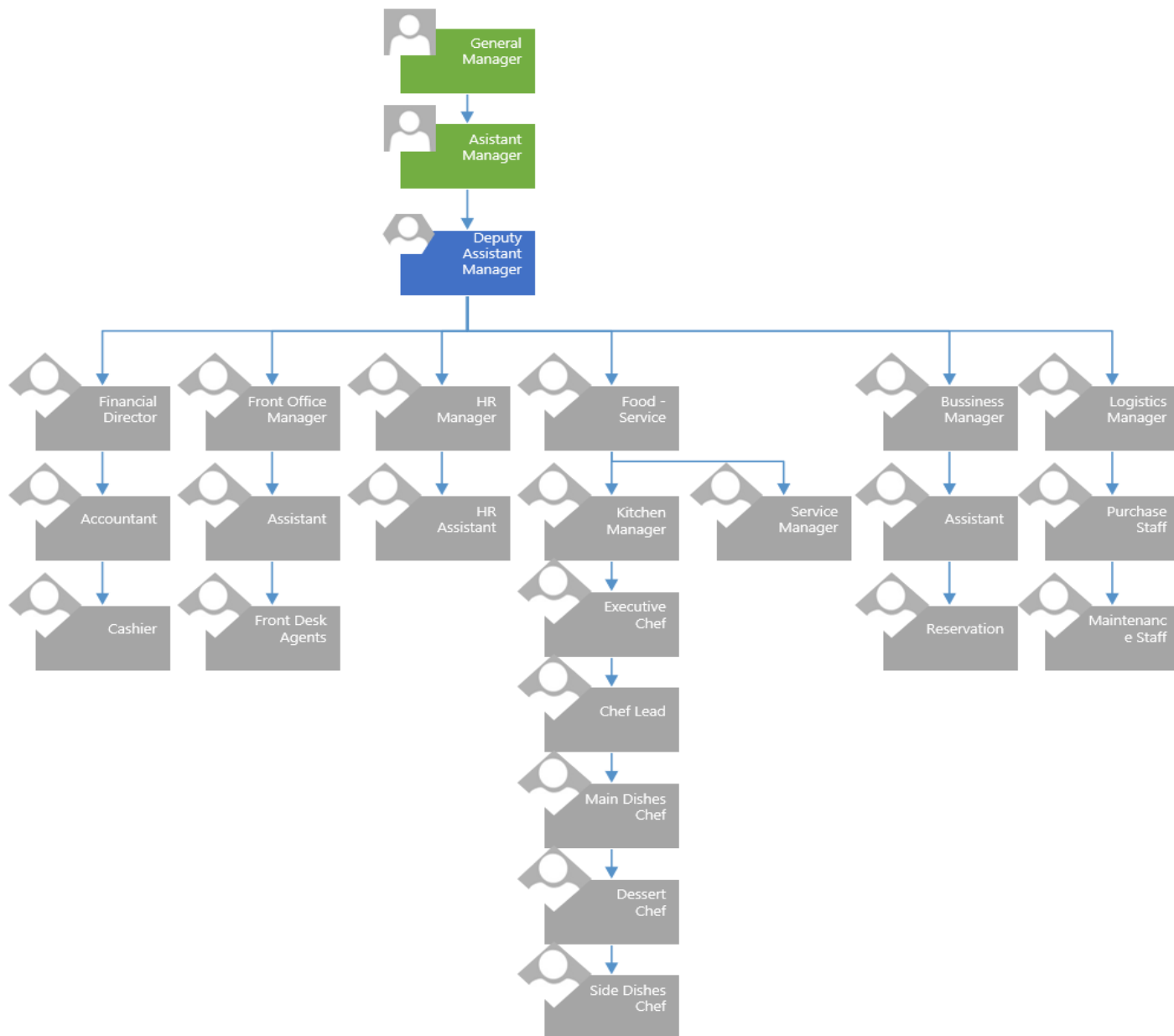
I. SURVEY – EXECUTIVE SUMMARY – INTRODUCTION SOFTWARE.

1. Introduce Hotel.

The hotel chosen for the survey is a small hotel in the coastal Vung Tau. With not too large hotel area, there are many types of rooms for customer.

The rooms are equipped with 5 star service. Due to the good quality, the number of visitors to the hotel is increasing, but the hotel does not have an effective management system, most of the staff only take notes in paper.

2. Organizational chart – U&T Hotel.



Picture 1.2.1: Organization chart of the department of Hotel Management.

3. The Scope of the system.

Provide software or hotel solutions with the following requirements:

- Customer information management.
- Support customers to use hotel service.
- Support employee of admin managing the hotel room and service.
- Full reporting system detailing customer's invoices

4. Problem of Hotel.

- Employees only use paper to record customer information.
- Customer information security is low.
- Difficult to update customer information.
- Generating time-consuming reports.
- Hotel management is not complete.

➔ Hotel owners require a software that helps them manage hotels more effectively and easily.

5. Introduction Hotel Management System.

This hotel management software system was created to replace hotel management systems with sketchy papers.

- The main purpose of this project is to computerize all processes in the hotel . It is a database system to create a selective retrieval of information, for subsequent analysis, manipulation and application.
- System design will be released under the "Hotel Management System" heading and will be updated if requested by the hotel owner.

Hotel Management System:

- Employee information storage system. Employee details: Name, Email, ID, Phone, Birth, Password.
- Admin information storage system. Details: ID, Password.
- Storage system of customer information. Customer details: Name customer, ID number, Room number, Other costs
- Room information storage system: room details: Room number, Room costs, Room NumPeople, Room status.
- Food - Service information storage system. Details: Food – Service name, Food – Service costs.
- Order Food information. Details: Order ID, Oder food name.

II. SRS DOCUMENT.

1. Actor

Customer: Not the person who interacts with the system, but the object provides information and requirements to execute the system.

Management: People can interact directly with the system, can see all information of employees and customers. Have the right to add, delete, update employee information. Can see details of the costs and profits of the hotel.

Reception: People who interact directly with the software and customers, can add guests and access information about hotel rooms and services.

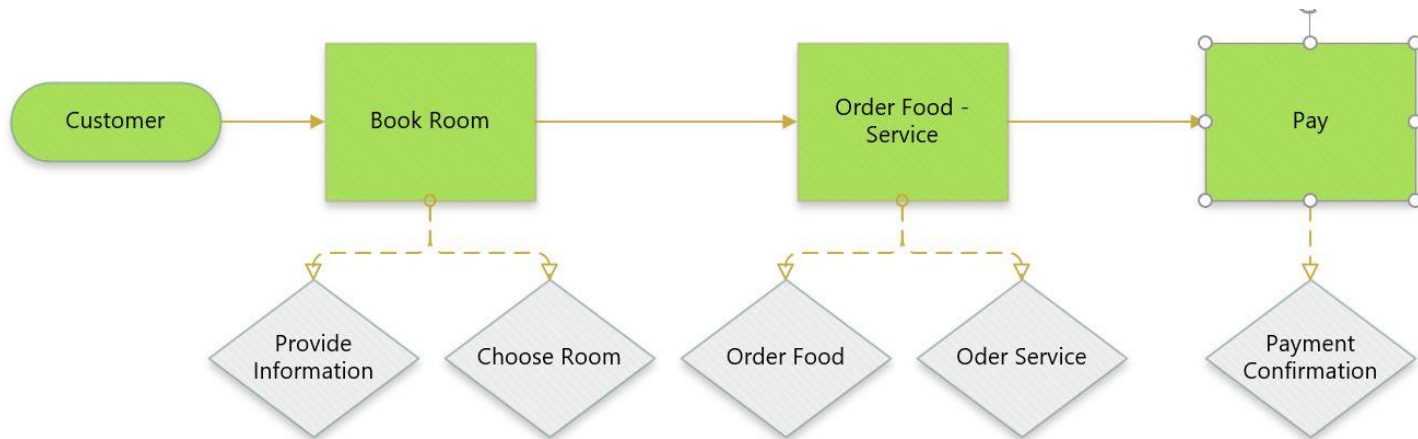
Accounting: who can interact with the software, can access the reservation information of the customer to get the cost of the customer reservation. Dominate shelf profits and monthly spending. Can add the details of the hotel spending.

Purchasing: Not a person who directly interacts with the software, but the object provides a detailed table of expenditures for accounting.

Engineering: Not a person who directly interacts with the software. The object is the hotel supporter when having problems.

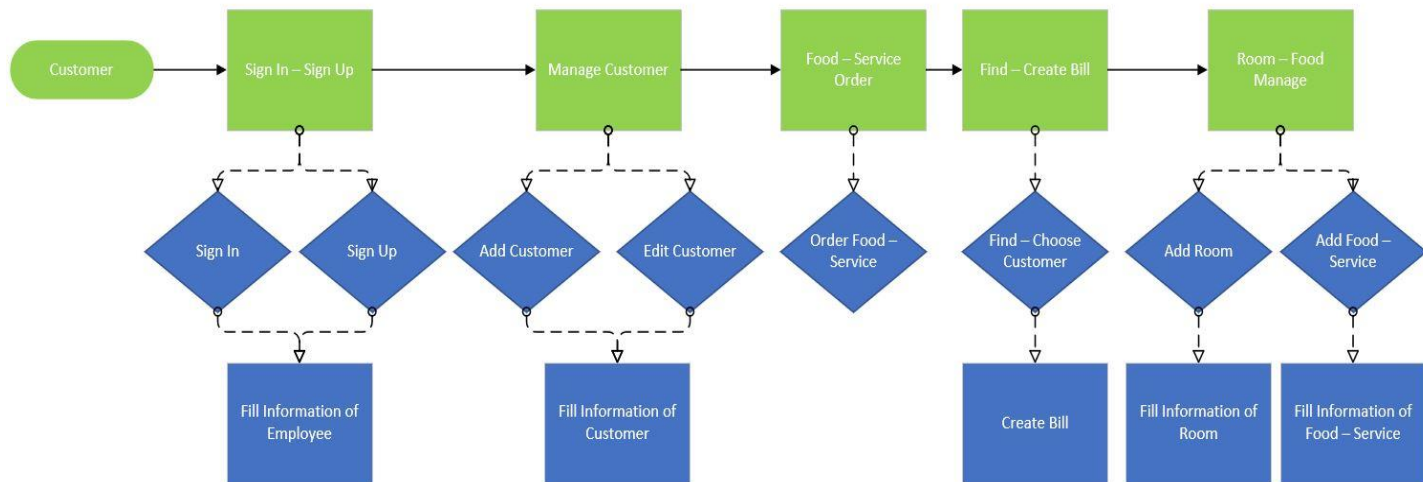
2. Flow chart

- With Customer:



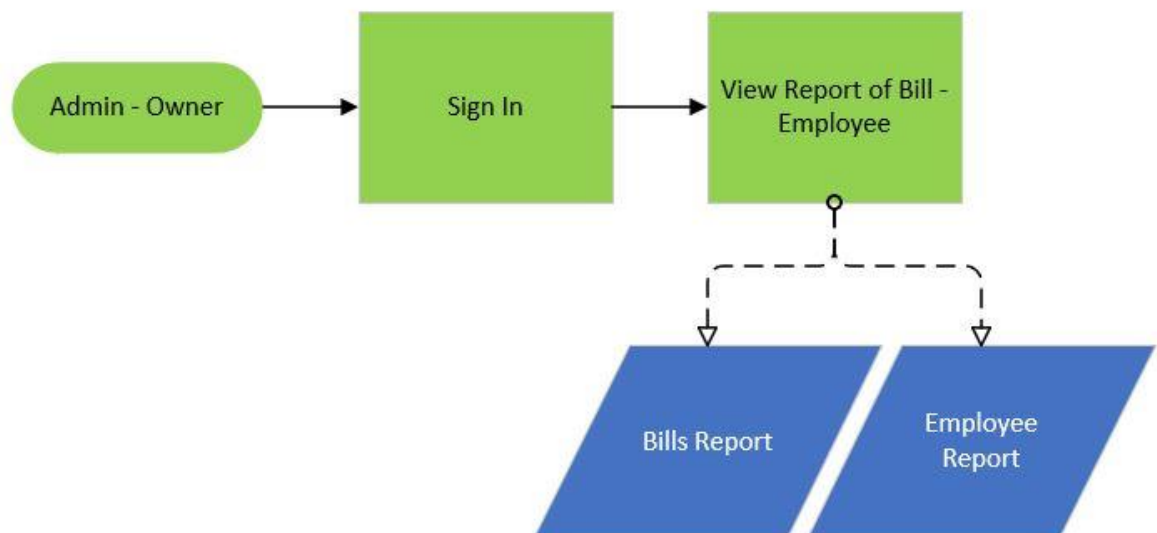
Picture 2.2.1: Flowchart the customer steps to the hotel.

- With Employee:



Picture 2.2.2: Flowchart the Employee steps to the hotel.

- **With Admin or Owner:**



Picture 2.2.3: Flowchart the Admin - Owner steps to the hotel.

3. Question Of Author And Customer Answer :

Section/ Screen	Comment/ Question	Answer
Form Login	Question: Regarding the login entered the system, here I don't see mention of decentralization for user when logged in at all. Here covers which positions and rights?	We totally agree.

	<p>Offer: Here, there are 2 main positions that are employees and admin. Employee can create accounts, log into the system and manage customers and hotel services. The admin can log in to view the expense management report and see the current number of hotel employee.</p>	
Amount of money people come to rent.	<p>Question: Whether the number of people coming into a room needs to be controlled or not.</p> <p>Offer: Employee will see room empty or not, and select the right room for the customer.</p>	We totally agree.
Service	<p>Offer: We will ask the staff to add current hotel services, as well as staff who will help customers order the above services.</p>	We totally agree.
Bills Pay	<p>Offer: The staff selects the customer ID to pay, the system will automatically calculate the total charges that the customer has used at the hotel. And the report pay will be sent to the admin.</p>	We totally agree.
Helps	<p>Offer: When the staff have any problem can contact with the author a link.</p>	We totally agree.

4. Functional Requirement

- The system shall record reservations.
- The system shall record the customer's information.
- The system shall record the number of occupants.
- The system shall display the default room status.
- The system will support staff to order food - service for customers.
- The system records the Service - Food name and its cost.
- The system records the income and expenditure of the hotel.
- The system allow managers to assign user passwords.
- The system shall display an customers information current at the hotel.

5. Non-Functional Requirement

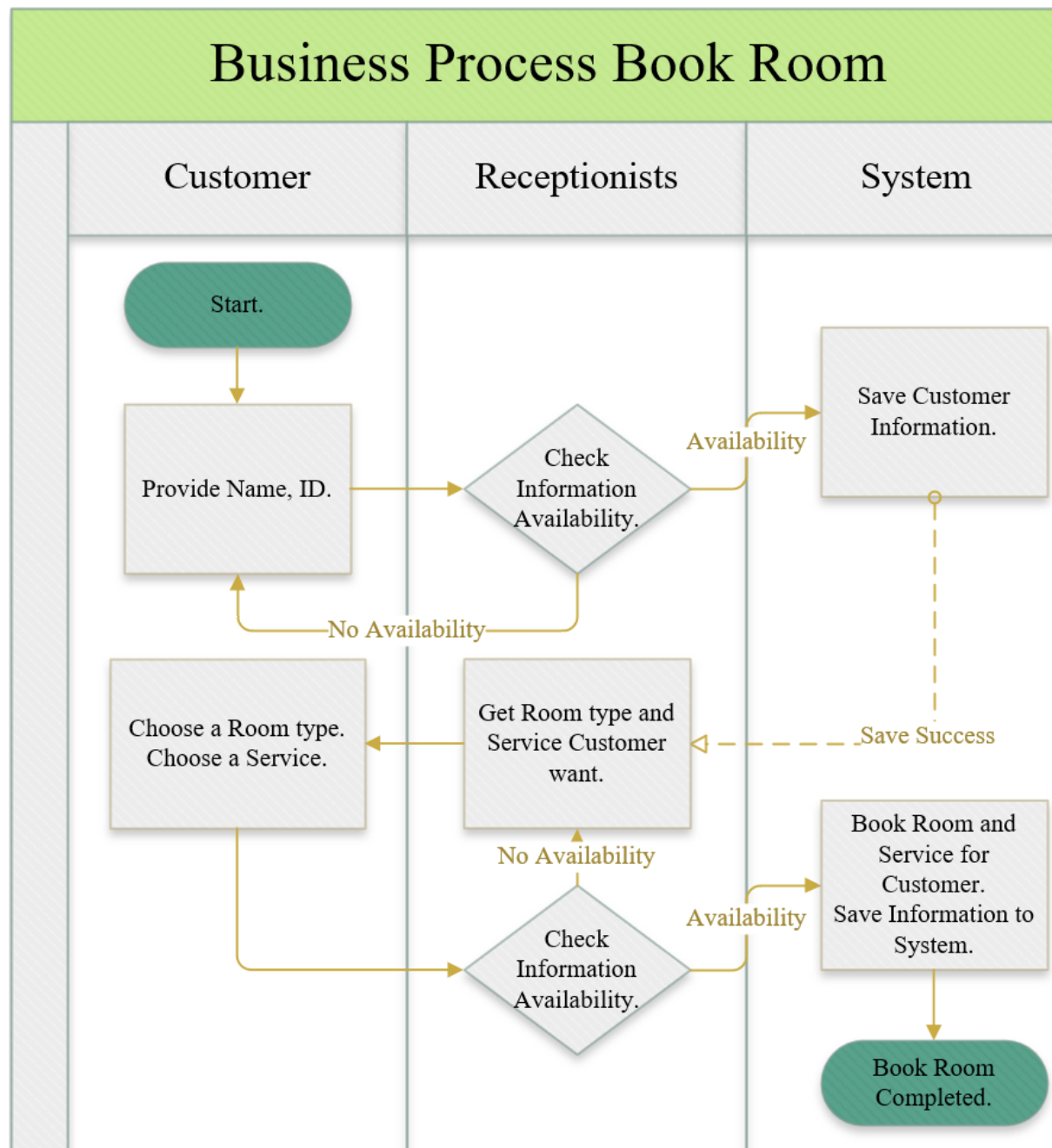
- The needs in terms of performance, logical database requirements, design constraints, standards compliance, reliability, availability, security, maintainability and portability.
- The load time for user interface screens shall take no longer than two seconds.
- The log in information shall be verified within five seconds.
- Queries shall return within five seconds.

6. List of Use Cases

- **Sign In:** This function allows the user to log in to the software with a user name and password
- **Sign Up:** This function allows users to create accounts to access the software
- **Log Out:** This function allows users to exit the software
- **Customer Manage:** This function allows users to access all information of employees and customers, users can add delete and update information.
- **Food – Service Order:** This function allows people to order food and services
- **Find – Create Bill:** This function allows people request payment. The actor chooses the customer ID and press Pay.
- **Room – Food Manager:**
 - o For "Room Manager": Actors need to provide complete information to "Add Room" or select Room to "Update Room".
 - o With "Food - Service Manager": Actors need to provide Food Name, Costs to add to the system. With the update function, fixing costs is based on name only.
- **Help – About Author:** During use there are errors or do not know how to use. Click on the link on the screen.

7. Use Case Diagram And Specification

- Process Book Room:

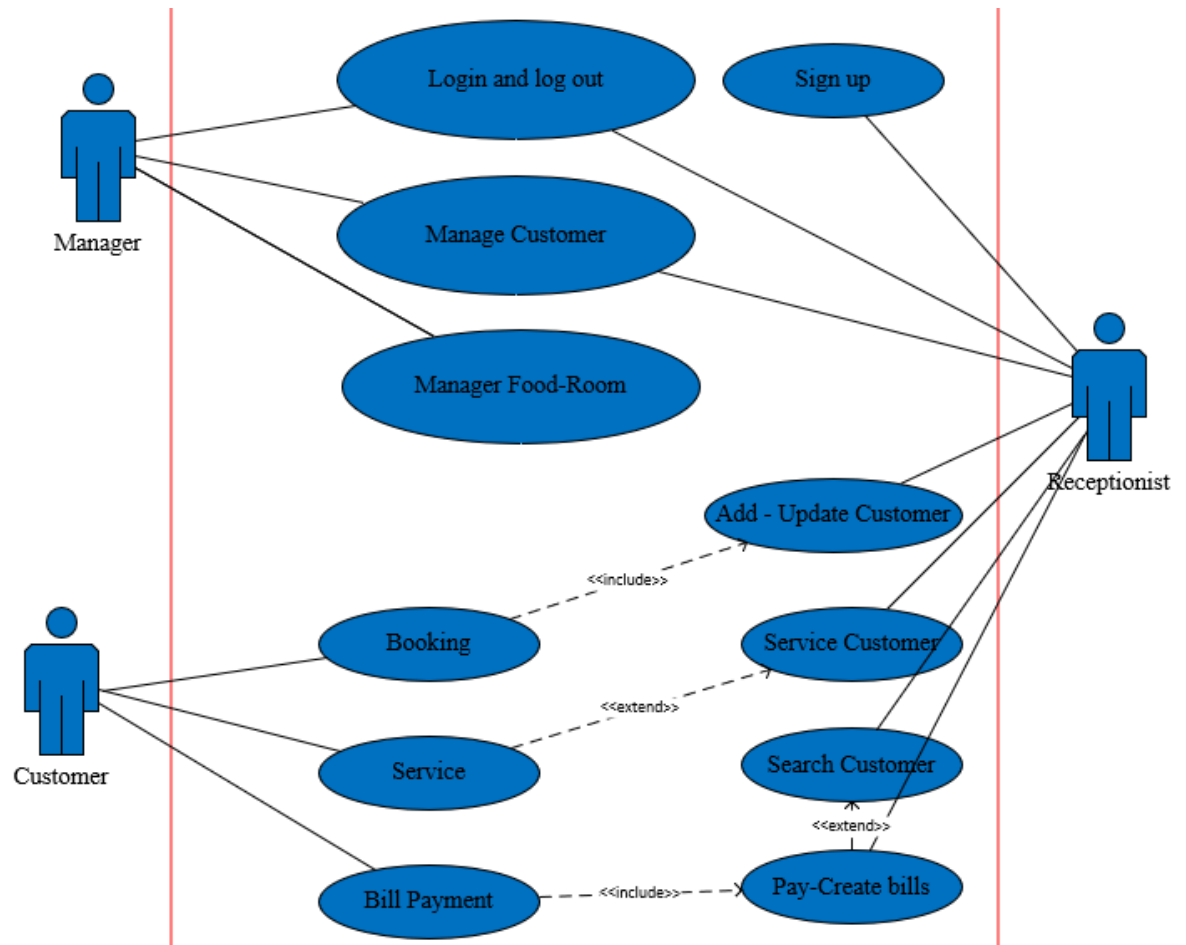


Picture 2.7.1: Process Book Room.

- Use case diagram:



Picture 2.7.2: Schema use case diagram about customer with receptionist.



Picture 2.7.3: Schema use case diagram about system.

- Use case specification:
 - Use Case Manage Sign In:

Actor	<ul style="list-style-type: none"> • Admin • Employee
Describe	<ul style="list-style-type: none"> • System ask Actor provide login information, Actor input User name and Password. • When Employee of Hotel don't have account of System, please click button "Sign Up" for create new account • If Admin input User name and Password, please click button "Sign In". • If Employee input User name and Password, please click button "Sign In".

	<ul style="list-style-type: none"> • System will check information is correct? And system show notification login success or fail. <ul style="list-style-type: none"> - If Employee login success, system will open form “Hotel Management”. - If Admin login success, system will open form “Bills Report”.
Illegal	<ul style="list-style-type: none"> • User name and Password uncorrect.
Script	<ul style="list-style-type: none"> • Actor input correct user name and password open form system. • Actor input user name and password uncorrect and “Sign In” system show notification ask Actor input user name and password again.

○ Use Case Manage Sign Up:

Actor	<ul style="list-style-type: none"> • Employee.
Describe	<ul style="list-style-type: none"> • Employee don’t have account for login. • After Actor click button “Sign Up” on form “Hotel Management” system open form “SignUp”. • Actor input Employee Information have: “Name, Email, ID, Phone, Birth, Password” . Actor input information done after that click button “Create” for add new account to Database. • System check all information Employee : <ul style="list-style-type: none"> - If created account, System will close form “Sign Up” and come back form “Hotel Management” for Actor login. - If don’t create account, System will show notification error and ask Actor input information of them again.
Illegal	<ul style="list-style-type: none"> • Actor fill information uncorrect or password time 1 and password time 2 not same.
Script	<ul style="list-style-type: none"> • Actor create account success, come back form “Hotel Management” for sign in.

	<ul style="list-style-type: none"> • Actor create account fail, aks actor filling form again.
--	--

○ Use Case Log Out:

Actor	<ul style="list-style-type: none"> • Admin or Employee.
Describe	<ul style="list-style-type: none"> • Admin or Employee was sign in system. • Actor click button “Log Out” for log out system or [X] for close system.
Illegal	<ul style="list-style-type: none"> • System Sutdown.
Script	<ul style="list-style-type: none"> • Actor log out system and come to form sign in or desktop.

○ Use Case Customer Manage

Actor	<ul style="list-style-type: none"> • Employee.
Describe	<ul style="list-style-type: none"> • Steps taken program: <ul style="list-style-type: none"> - Actor sign in success to system. - The actor takes customer information including: full name, ID. Then the actor chooses the room and the arrival date, other cost for the customer. - The actor must check how many customer, how mane people in a room and the availability of rooms before making a reservation. - After get customer information and checking room status. The actor clicks the "Add Customer" button to add data to the system. - If customer information is changed: the actor needs to click on the customer ID to change the information on the "Table Customer Information" table and edit the customer information in the "Customer Information" group. After the actor has finished editing, he needs to click the "Edit

	Customer" button to save the information to the system.
Illegal	<ul style="list-style-type: none"> • ID customer was contain in system. • Any Textbox are empty. • Log Out when input information.
Script	<ul style="list-style-type: none"> • Actor choose The actor gets all the customer information. • The actor checks the room availability and arranges guests. • The actor clicked the button adds customer information to the system.

○ Use Case Food – Service Order:

Actor	<ul style="list-style-type: none"> • Employee.
Describe	<ul style="list-style-type: none"> • When customer want Food or Service of Hotel. Actor need choose and order Food or Service for Customer. • Steps taken: <ul style="list-style-type: none"> - Actor give for customer Food or Service information of Hotel. - Actor click ID of customer on “Customer Table”. After that actor click Food Name customer want order on “Food – Service Table” and click button “Order Food”.
Illegal	<ul style="list-style-type: none"> • Customer want service not contain in system.
Script	<ul style="list-style-type: none"> • Customer choose Food or Service of Hotel. • Actor order Food or Service for Customer.

○ Use Case Find – Create Bill:

Actor	<ul style="list-style-type: none"> • Employee.
Describe	<ul style="list-style-type: none"> • When the customer wants to pay, the actor follows these steps: <ul style="list-style-type: none"> - Choose the Customer ID want to pay on table " Customer Information” or input ID customer on textbox and input Room customer click button “Find”.

	<ul style="list-style-type: none"> - Actor press the button “Pay” and follow the instructions. - After actor create bill for customer, System will auto write report about customer and costs.
Illegal	<ul style="list-style-type: none"> • Actor don’t choose ID customer. • Actor don’t choose Room customer live.
Script	<ul style="list-style-type: none"> • Customer request payment. • The actor chooses the customer ID and press Pay.

○ Use Case Room – Food Manager:

Actor	<ul style="list-style-type: none"> • Employee.
Describe	<ul style="list-style-type: none"> • With Room Manager: <ul style="list-style-type: none"> - With Add Room: The actor needs to provide room information including: Room Number, Room Costs, Num People, Status Empty. After provide information actor need click button “Add Room”. If actor add room success, a new room will appear on “Room Manager”. - With Update Room: The actor needs to select the room to edit on the "Room Manager" table and edit details under the textboxes. Or actor input all information again and click button “Update Room”. Only edit information except Room Number. - With Delete Room: The actor needs to select the room to delete on the “Room Manager” table and click button “Delete Room”. • With Food – Service Manager: <ul style="list-style-type: none"> - With Add Food – Service: The actor needs to provide food – service information including: Food

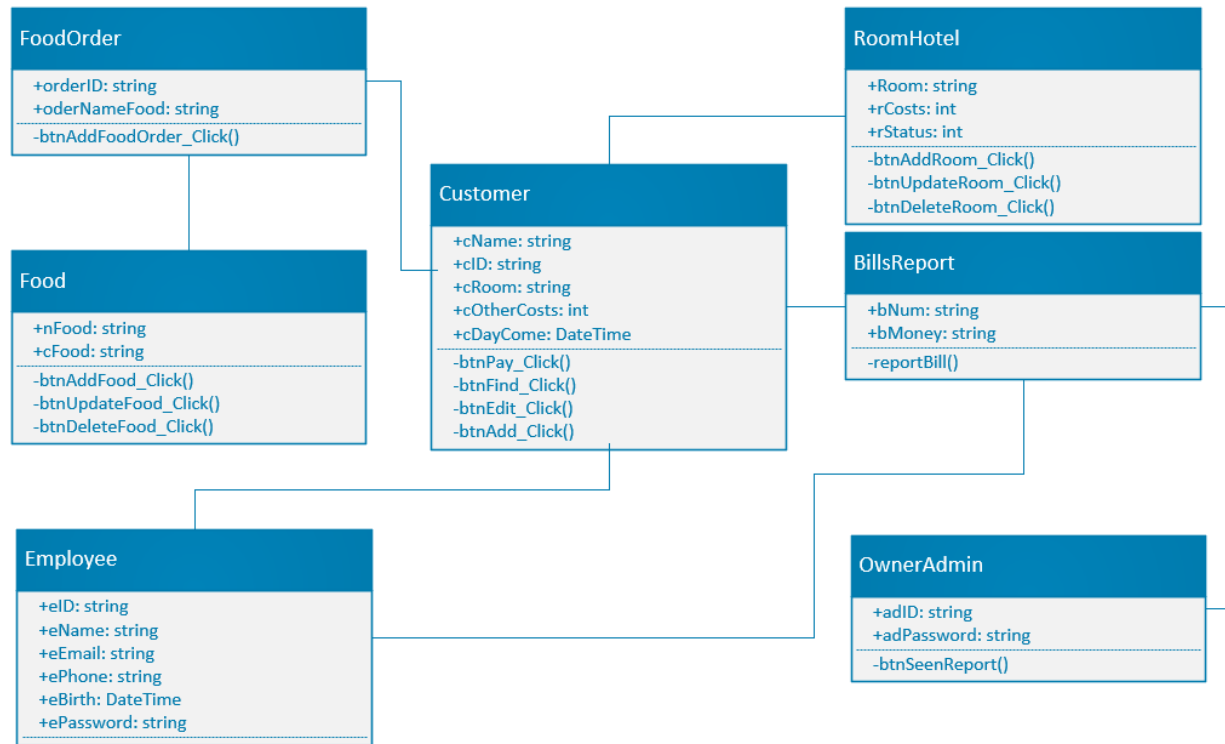
	<p>Name, Food Costs. After provide information actor need click button “Add Food – Service”. If actor add food -service success, a new food – service will appear on “Food – Service Manager”.</p> <ul style="list-style-type: none"> - With Update Food – Service: The actor needs to select the food – service to edit on the "Food – Service Manager" table and edit details under the textboxes. Or actor input all information again and click button “Update Food – Service”. Only edit information except Food Name. - With Delete Food -Service: the actor needs to select the food – service to delete on the “ Food – Service Manager” table and click button “Delete Food – Service”.
Illegal	<ul style="list-style-type: none"> • Room number already exists on the system. • Food Name already exists on the system. • Input incomplete information.
Script	<ul style="list-style-type: none"> • For "Room Manager": Actors need to provide complete information to "Add Room" or select Room to "Update Room". • With "Food - Service Manager": Actors need to provide Food Name, Costs to add to the system. With the update function, fixing costs is based on name only.

○ Use Case Help – About Author

Actor	<ul style="list-style-type: none"> • Employee
Describe	<ul style="list-style-type: none"> • If the actor has an error during use please contact us.
Script	<ul style="list-style-type: none"> • During use there are errors or do not know how to use. Click on the link on the screen.

III. DESIGN DOCUMENT.

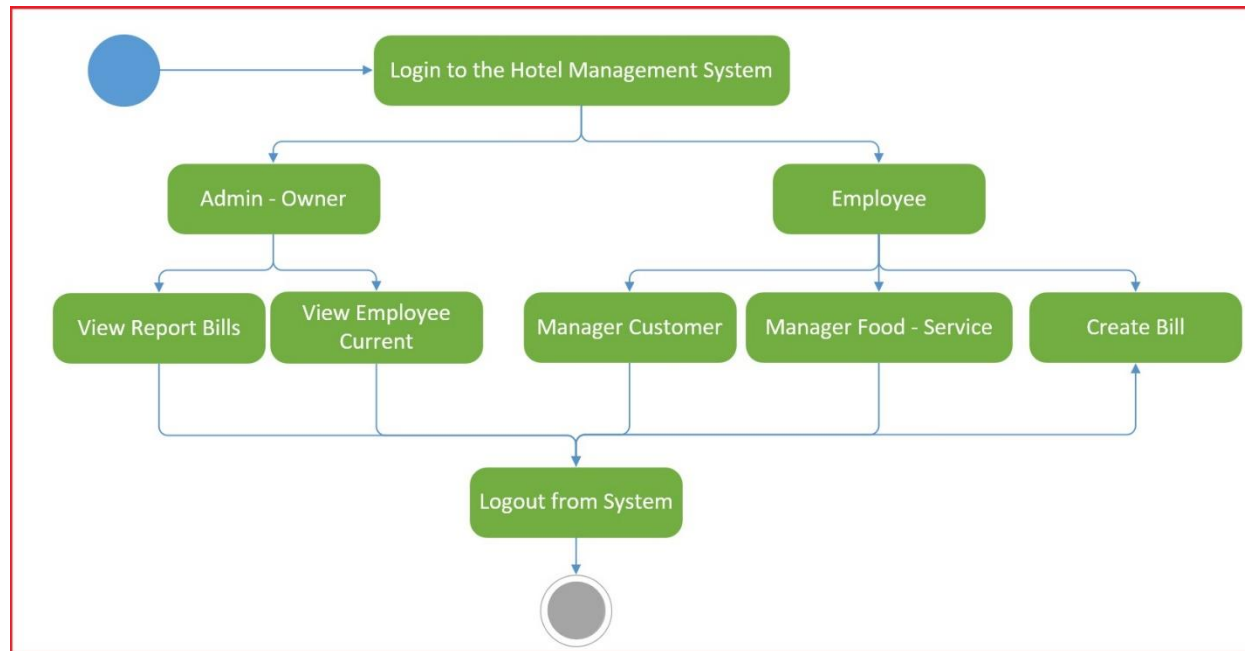
1. Class Diagram:



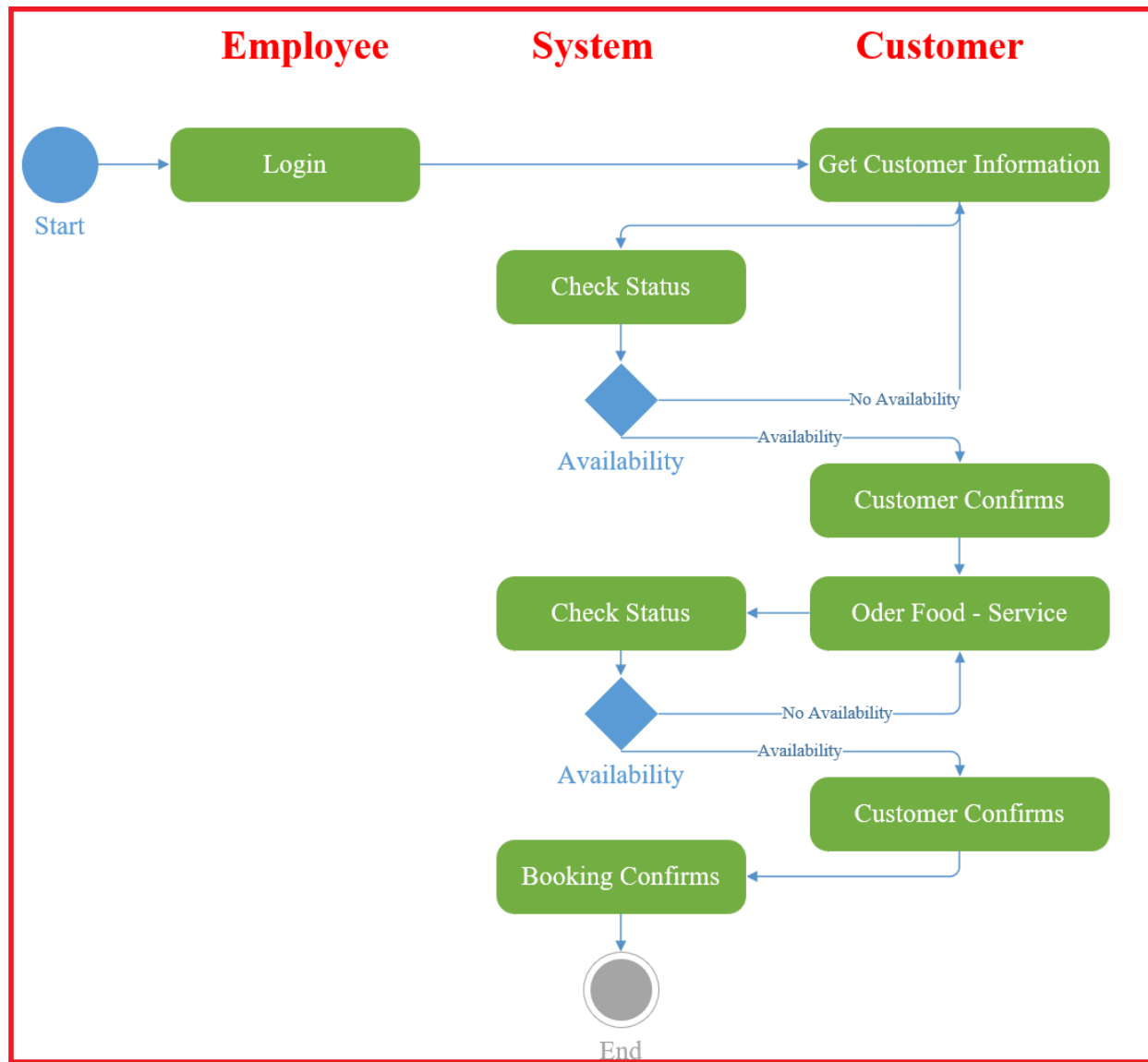
Picture 3.1.1: Class diagram about hotel management system.

- **With class FoodOrder:** with FoodOrder table, used to store customer information but hotel services and food. Help manage and pay more effectively.
- **With class Food:** with Food table, this is where food or service are stored. Including Food – Service name and costs.
- **With class Customer:** with Customer table, this is place save name, id, room, day come of customer.
- **With class Employee:** with Employee table, this is place save id, name, email, phone, birth, password of employee.
- **With class BillsReport:** with BillsReport table, this is place save information of Pay Bills including id customers paid and total money customer paid.
- **With class RoomHotel:** with RoomHotel table, place save room information current at the hotel. And have information including: number room, costs room, number people for a room.
- **With class OwnerAdmin:** with OwnerAdmin table, place save account and password for process sign in with admin, owner rule.

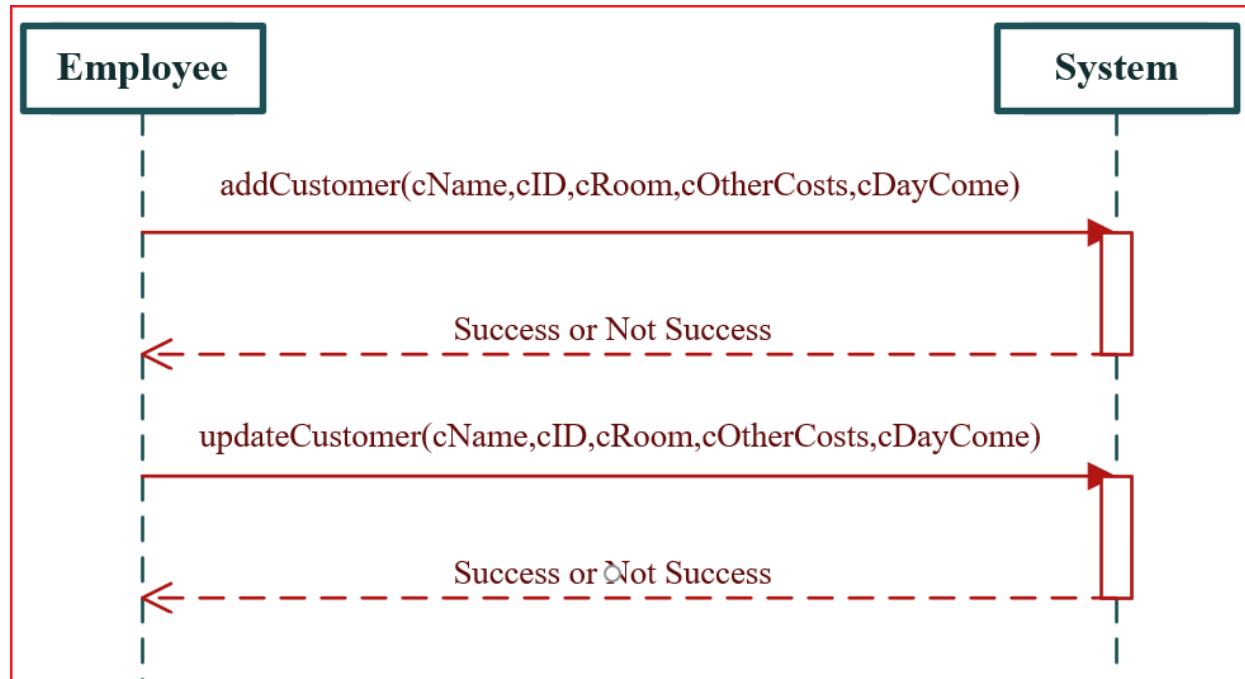
2. Activity And Sequence Diagrams:



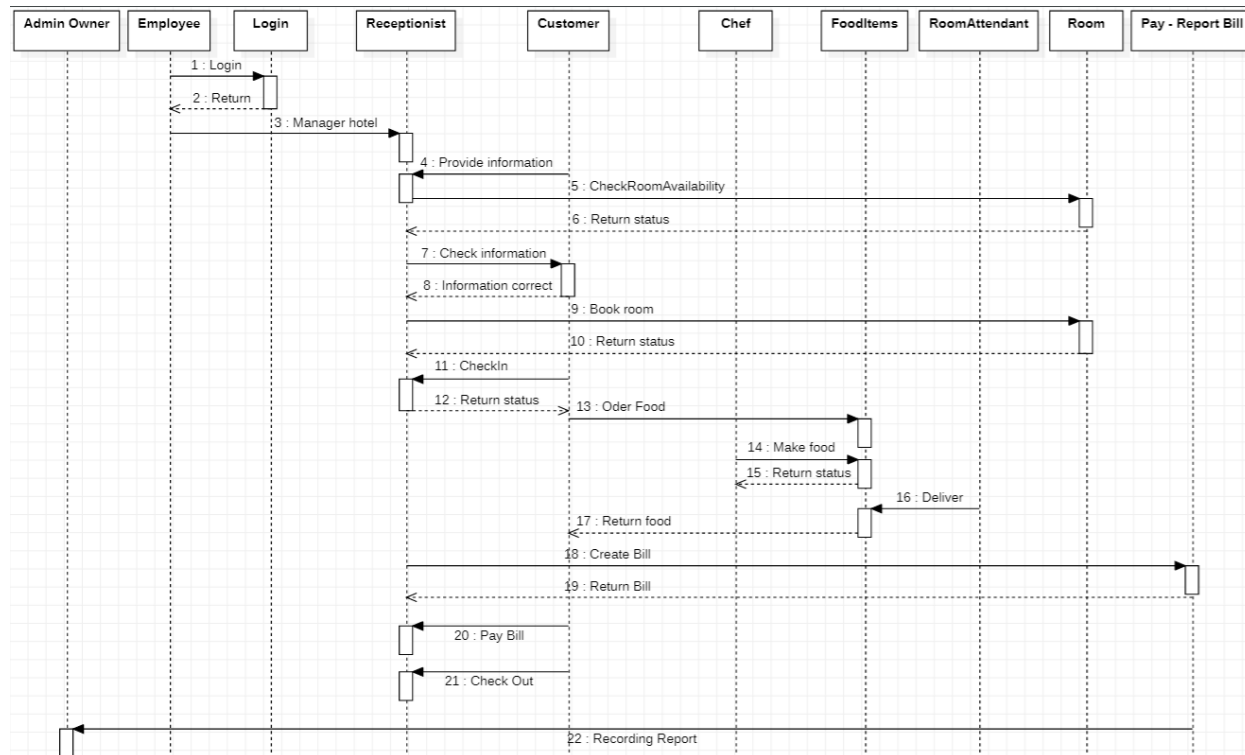
Picture 3.2.1: Activity diagram about Login hotel management system.



Picture 3.2.2: Activity diagram about process booking.

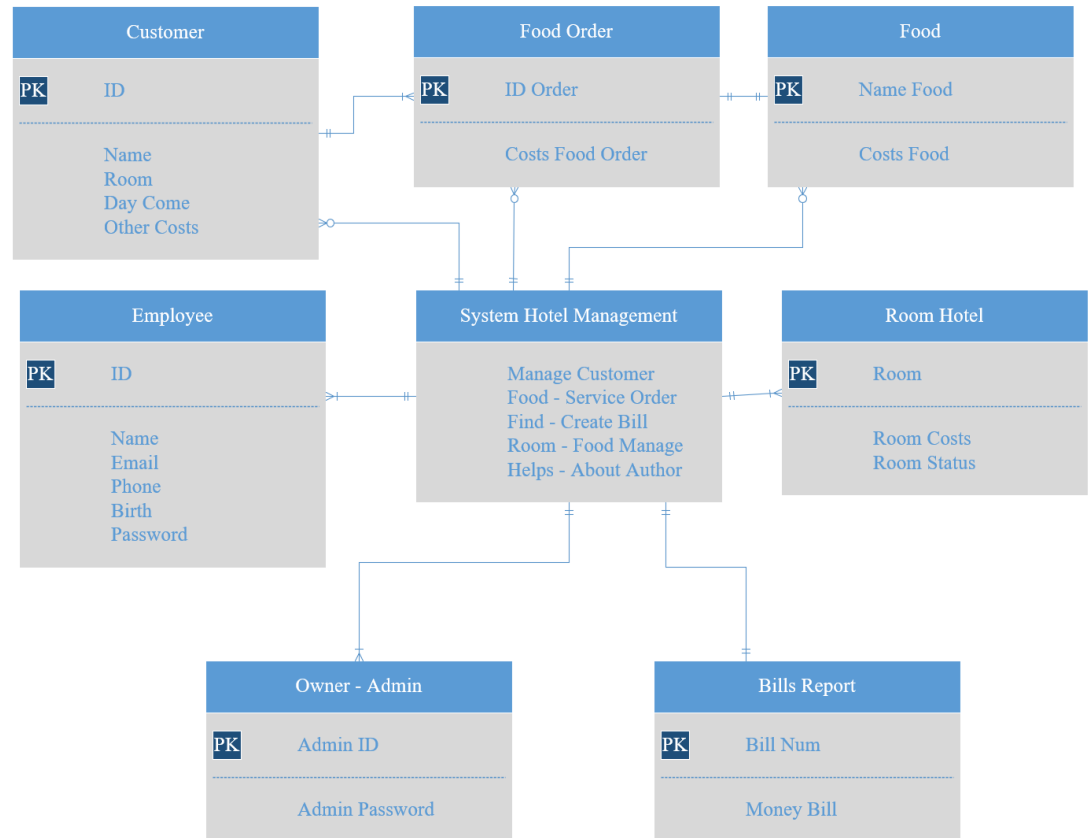


Picture 3.2.4: Sequence diagram about Employee with System.



Picture 3.2.4: Sequence diagram about book hotel management system.

3. Entity Relationship Diagram:

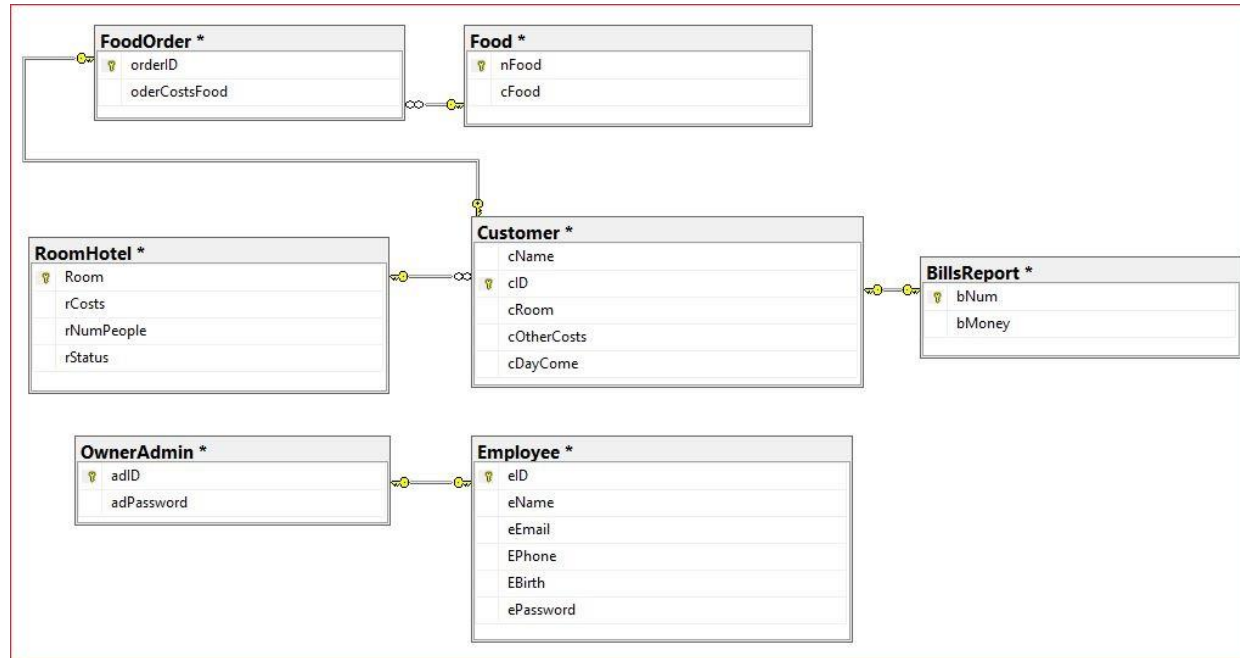


Picture 3.3.1: Entity relationship diagram about hotel management system.

IV. REALIZE SOFTWARE.

1. Database.

Data Diagram:



Picture 3.4.1: Relation data model about hotel management system.

Details of the tables:

- Table Employee:

Num	Variable name	Data type and size	Binding
1	eID	nvarchar(30)	primary key
2	eName	nvarchar(30)	not null
3	eEmail	nvarchar(25)	null
4	EPhone	nvarchar(15)	null
5	EBirth	DateTime	not null
6	ePassword	nvarchar(32)	not null

- Table Customer:

Num	Variable name	Data type and size	Binding
1	cName	nvarchar(30)	not null
2	cID	nvarchar(30)	primary key
3	cOtherCosts	int	null
4	cDayCome	nvarchar(15)	not null

- Table RoomHotel:

Num	Variable name	Data type and size	Binding
1	Room	nvarchar(30)	primary key
2	rCosts	int	not null

3	rNumPeople	nvarchar(30)	not null
4	rStatus	bit	0 or 1

- Table OwnerAdmin:

Num	Variable name	Data type and size	Binding
1	adID	nvarchar(30)	primary key
2	adPassword	nvarchar(30)	not null

- Table BillsReport:

Num	Variable name	Data type and size	Binding
1	bNum	nvarchar(30)	primary key
2	bMoney	nvarchar(30)	null

- Table Food:

Num	Variable name	Data type and size	Binding
1	nFood	nvarchar(30)	primary key
2	cFood	nvarchar(30)	not null

- Table FoodOrder:

Num	Variable name	Data type and size	Binding
1	orderID	nvarchar(30)	primary key
2	oderCostsFood	nvarchar(30)	not null

2. Interface design and manipulation.

- Form "Sign In": This is the main login interface of the application and users are required to log in to get into the system.

- Case 1: Admin or Owner Sign In.

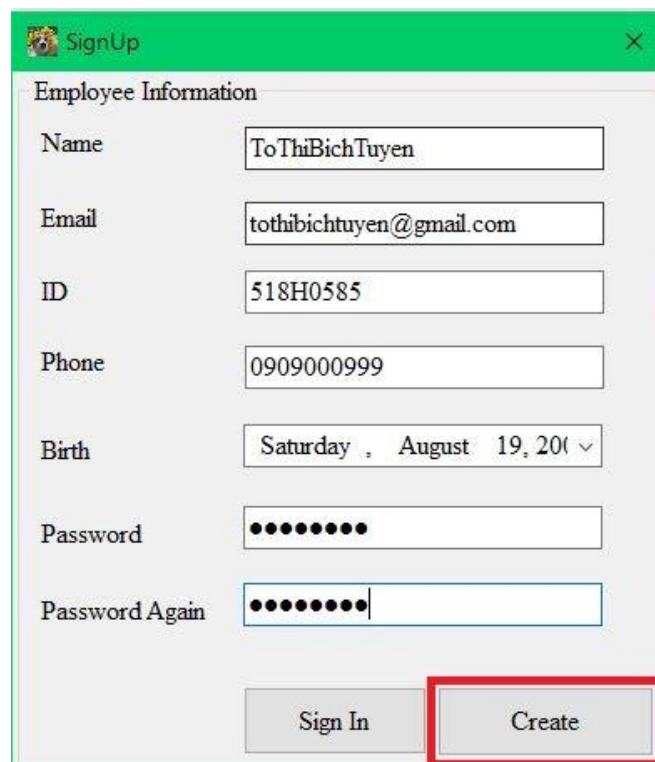
Picture 4.2.1: Sign in with Admin.

- After admin input User and Password on textbox, admin need click button “Admin” to login the system.
- Exam:
 - User: admin
 - Password: admin123
- Case 2: New User Login to system.



Picture 4.2.2: Move to form “SignUp”.

- Staff need click button “Sign Up” for create new account. And form “SignUp” will auto open.



Picture 4.2.3: Input information on form “Sign Up”.

- Employees need to fill in the correct information. Then press the "Create" button on form "SignUp".

The screenshot shows a 'SignUp' window with the title bar 'SignUp'. Inside, there's a section titled 'Employee Information' with several input fields: Name (ToThiBichTuyen), Email (tothibichtuyen@gmail.com), ID (518H0585), Phone, Birth (19, 20), Password, and Password Again (masked with dots). A green dialog box is overlaid on the form, containing the text 'Create success! Please sign in. Enjoy!' and an 'OK' button. The 'Create' button at the bottom right of the main window is highlighted with a red rectangle.

Picture 4.2.4: Create account success.

- If employee create account successful, System will show notification " Create success! Please sign in. Enjoy!". After that employee click "OK" for return to the login screen.
- Case 3: The employee already has an account to log in to the system.

The screenshot shows a 'Sign In' window with a green title bar. The main text says 'Please Sign In To Continue!'. There are two input fields: 'User' (518H0511) and 'Password' (masked with dots). At the bottom, there are two buttons: 'Sign In' (highlighted with a red rectangle) and 'Sign Up'.

Picture 4.2.5: Input user name, password and login to system.

- Employees need to enter full and correct user and password then click the "Sign In" button to log into the system.

b. *Form “Hotel Management”*: This is a form for the customer service manager as well as hotel services.

Hotel Management

Manage Customer Food - Service Order Find - Create Bill Room - Food Manager Helps - About Author

Customer Information

Name Customer Day Come

ID Number

Room number Other Costs

Add Customer Edit Customer Refresh Log Out

Table Customer Information

	cName	cID	cRoom	cOtherCosts	cDayCome
*					

Table Room Status

	Room	rCosts	rNumPeople	rStatus
*				<input type="checkbox"/>

Picture 4.2.6: System functions.

- After logging in, staff can manipulate functions is: Manage Customer, Food – Service Order, Find – Create Bill, Room Manager, Helps – About Author.
- Case 1: Manage Customer.
 - This is a form for employees to add or edit customer information.

Hotel Management

Manage Customer Food - Service Order Find - Create Bill Room - Food Manager Help - About Author

Customer Information

Name Customer Day Come Monday , April 13, 2020

ID Number 1

Room number Other Costs

Add Customer Edit Customer 2 Refresh Log Out

Table Customer Information

	cName	cID	cRoom	cOtherCosts	cDayCome
*					

3

Table Room Status

	Room	rCosts	rNumPeople	rStatus
*				<input type="checkbox"/>

4

Picture 4.2.7: Details of function “Manage Customer”.

- With :
 - (1): Employee records customer information into the textbox.
 - (2): The functions can manipulate with customer information.
 - (3): The table shows the current customer information at the hotel.
 - (4): The table shows the current room information at the hotel.
- Detail:

Hotel Management

Manage Customer | Food - Service Order | Find - Create Bill | Room - Food Manager | Helps - About Author

Customer Information

Name Customer: Day Come:

ID Number:

Room number: Other Costs:

Add Customer Edit Customer Refresh Log Out

Table Customer Information

	cName	cID	cRoom	cOtherCosts	cDayCome
*					

Table Room Status

	Room	rCosts	rNumPeople	rStatus
▶	A01	100	1	<input type="checkbox"/>
	A02	200	1	<input type="checkbox"/>
*				<input type="checkbox"/>

click here

Picture 4.2.8: An example of adding a customer.

Hotel Management

Manage Customer | Food - Service Order | Find - Create Bill | Room - Food Manager | Helps - About Author

Customer Information

Name Customer: Day Come:

ID Number:

Room number: Other Costs:

Add Customer Edit Customer Refresh Log Out

Table Customer Information

	cName	cID	cRoom	cOtherCosts	cDayCome
▶	NguyenQuangHuy	518H0511	A01	0	4/13/2020 ...
*					

Table Room Status

	Room	rCosts	rNumPeople	rStatus
▶	A01	100	1	<input checked="" type="checkbox"/>
	A02	200	1	<input type="checkbox"/>
*				<input type="checkbox"/>

Picture 4.2.9: An example of adding a customer success.

- After the employee has filled in the information and selected the guest room, click "Add Customer" to add customer information to the system.

The screenshot shows the 'Hotel Management' application window. The 'Customer Information' form is highlighted with a red box. The form contains the following fields:

- Name Customer: ToThiBichTuyenDeThuong
- ID Number: 518H0585
- Room number: A02
- Day Come: Monday, April 13, 2020
- Other Costs: 0

Below the form, there are three buttons: 'Add Customer', 'Edit Customer', and 'Refresh'. The 'Edit Customer' button is highlighted with a red box, and a red arrow points to it with the text 'click here'.

Below the buttons, there are two tables:

Table Customer Information

	cName	cID	cRoom	cOtherCosts	cDayCome
	NguyenQuangHuy	518H0511	A01	0	4/13/2020
▶	ToThiBichTuyen	518H0585	A02	0	4/13/2020
*					

Table Room Status

	Room	rCosts	rNumPeople	rStatus
▶	A01	100	1	<input checked="" type="checkbox"/>
	A02	200	1	<input checked="" type="checkbox"/>
*				<input type="checkbox"/>

Picture 4.2.10: An example of Update a customer.

Hotel Management

Manage Customer | Food - Service Order | Find - Create Bill | Room - Food Manager | Help - About Author

Customer Information

Name Customer: Day Come:

ID Number:

Room number: Other Costs:

Table Customer Information

	cName	cID	cRoom	cOtherCosts	cDayCome
	NguyenQuangHuy	518H0511	A01	0	4/13/2020
>	ToThiBichTuyen	518H0585	A02	0	4/13/2020
*					

Table Room Status

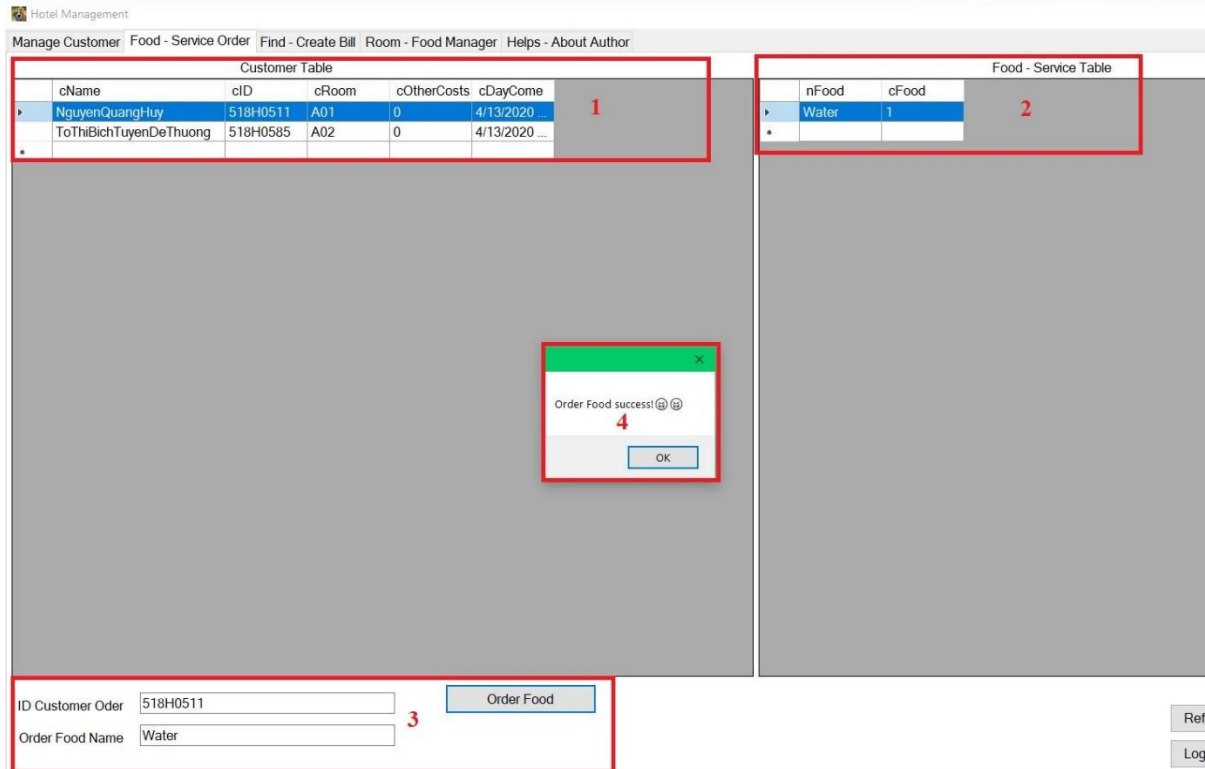
	Room	rCosts	rNumPeople	rStatus
>	A01	100	1	<input checked="" type="checkbox"/>
	A02	200	1	<input checked="" type="checkbox"/>
*				<input type="checkbox"/>

Edit success! @@

OK

Picture 4.2.11: An example of Update a customer success.

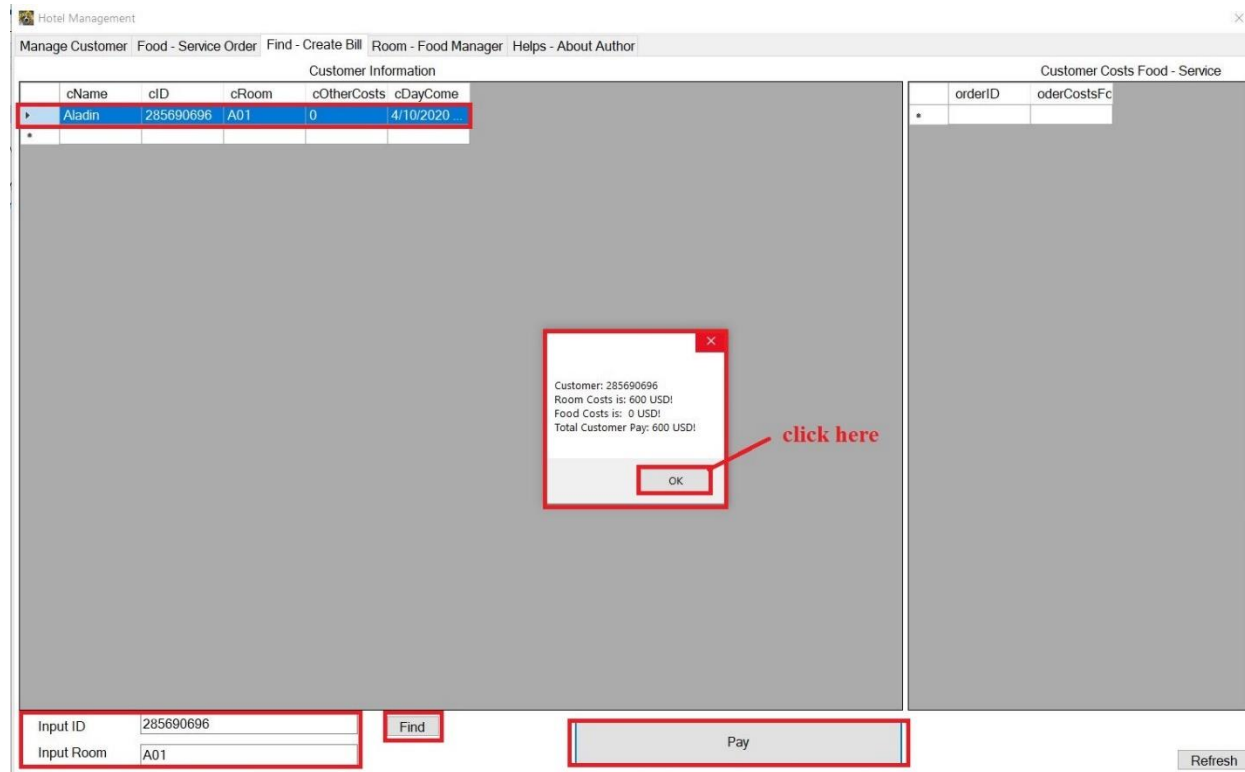
- If need edit customer information. Click on customers who need to edit, then edit customer information on the corresponding textbox. and click "Edit Customer" to edit the data into the system.
- Case 2: Food – Service Order.



Picture 4.2.12: An example of Oder Food success.

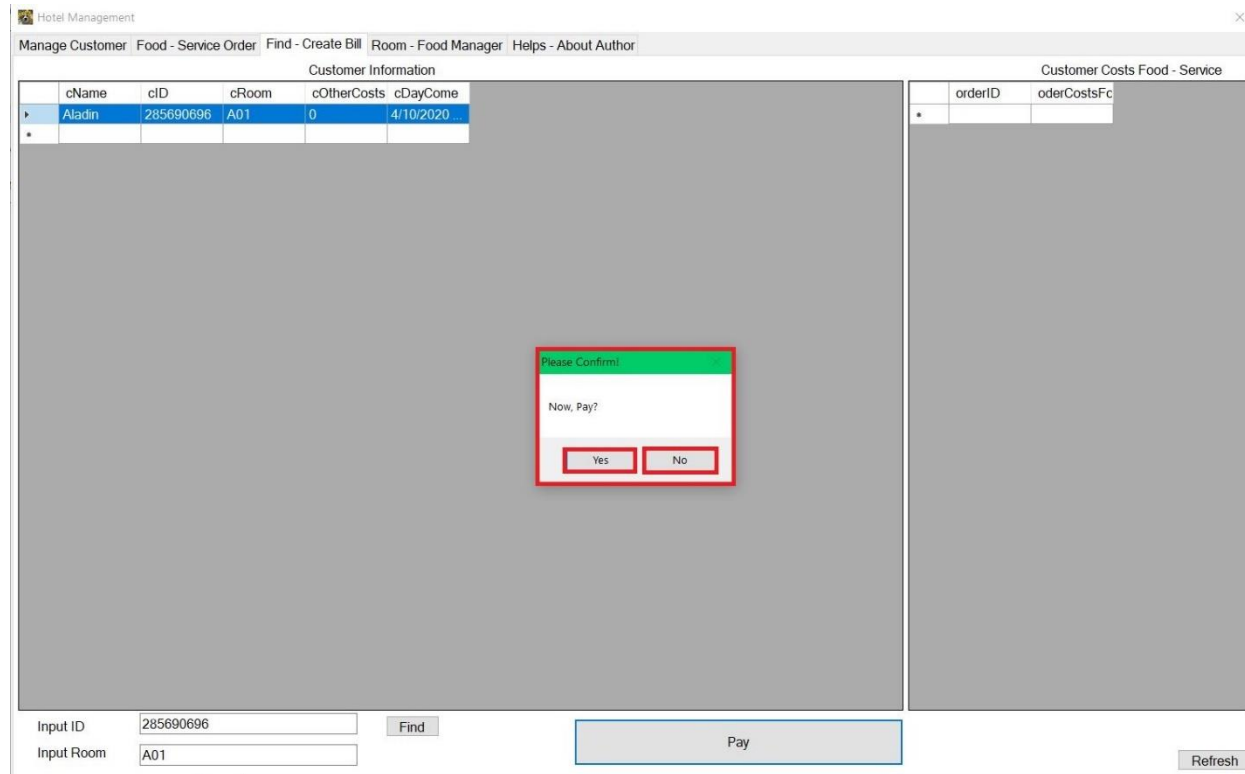
- When Customer want order Food – Service. Employee need choose ID Customer (1) and choose nFood (2). After employee click button Order Food (3). If employee order success, system will show notification “Order Food success! (👍👍)” (4), if not system will show notification “Order Food non success! (👎👎)”.

- Case 3: Find – Create Bill.



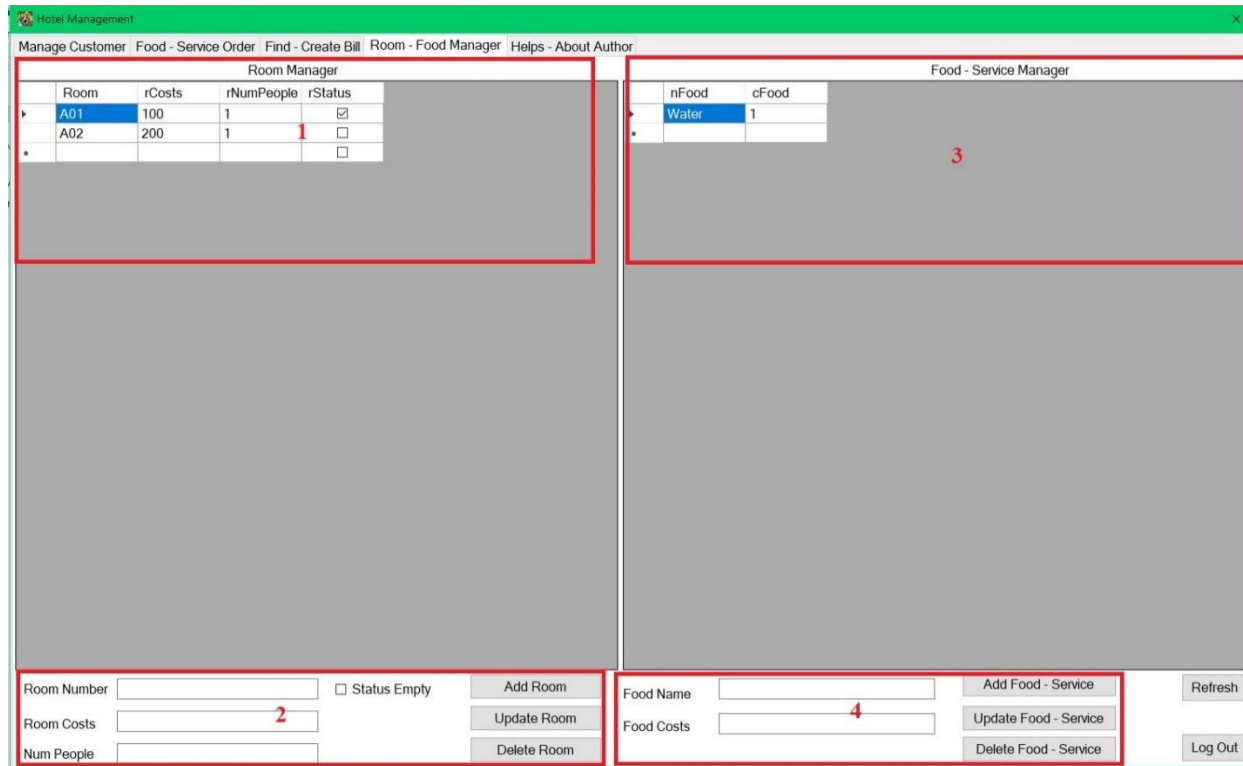
Picture 4.2.13: An example employee create for customer.

- When the customer want to pay for room and related expenses. The employee needs to select the payment customer ID on the “Customer Information” table or enter the customer ID in the textbox and click the "Find" button. After selecting customers to pay, the staff please click "Pay" button to create bill for customers.
- After click “Pay” button, tell the customer the total cost and click "OK".



Picture 4.2.14: An exam Employee need Confirm.

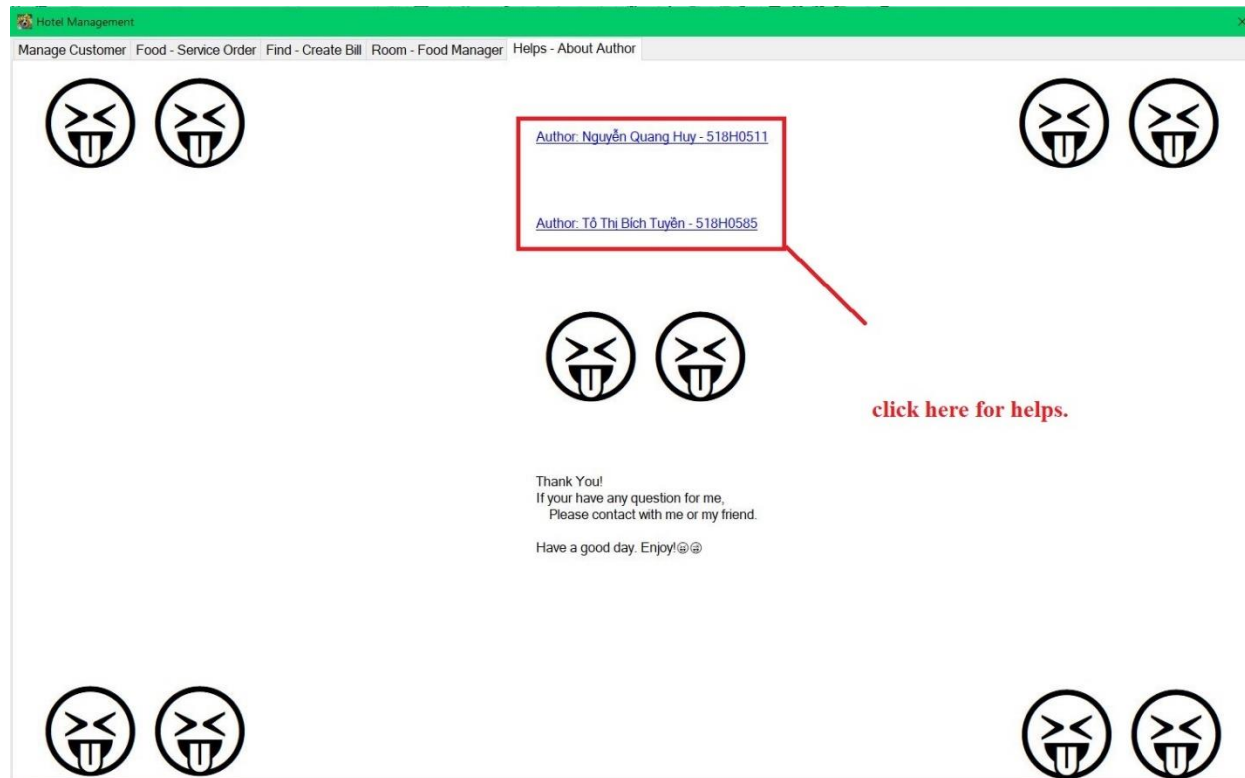
- Employees need to confirm the operation. Employee need choose “Yes” or “No” for operation create bill.
- Case 4: Room – Food Manager.



Picture 4.2.15: An exam Employee manage Food – Service.

- In picture 4.2.15. where (1) is the "Room Manager" table with information such as room cost for 1 day, number of people per room and room status. in (2) are functions the staff can operate with rooms such as adding, modifying and deleting rooms. (3) is the table "Food - Service Manager" here shows the name of food - service and their costs. (4) are the operations we can do with the "Food - Service Manager" table including the functions of adding, editing and deleting.

- Case 5: Helps – About Author.



Picture 4.2.14: An exam from Helps and how to contact?.

- If the user has any difficulties contact the support team.

- Case 6: Bills Report.

	bNum	bMoney
▶	518H0511	100
	518H0585	209
*		

	eID	eName	eEmail	EPhone	EBirth
▶	518H0511	NguyenQua...	nguyenquang...	039000999	11/30/200
	518H0585	ToThiBichTu...	tothibichtuye...	0909000999	8/19/2000
*					

Log Out

Picture 4.2.14: An exam Bills Report.

- When admin log in, they can view Bills Report and Employee Information current in Hotel Management system.

V. TEST CASE – UNIT TEST – SVN/GIT

1. Test case.

Sign In

Please Sign In To Continue!

User:

Password:

User or Password uncorrect! Please try again!

Picture 5.1.1: An exam don't have account sign system.

The screenshot shows a 'SignUp' window titled 'Employee Information'. It contains several input fields: Name, Email, ID, Phone, Birth (a date picker set to Thursday, April 23, 2010), Password, and Password Again. A red rectangular box highlights the Name, Email, ID, and Password fields. Below the fields are two buttons: 'Sign In' and 'Create'. The 'Create' button is also highlighted with a red box. Below the main window, a smaller error dialog box is displayed with the text 'Information not fill ! Please try again!' and an 'OK' button.

Picture 5.1.1: An exam don't fill information when create account.

The screenshot shows the same 'SignUp' window, but now the fields are filled with data: Name is 'NQHuy', Email is 'nqhuy30112000@gmail.com', ID is '518H0511', and Phone is '123411'. The Birth date remains 'Thursday, April 23, 2010'. The Password and Password Again fields are masked with dots. The 'Create' button is highlighted with a red box. Below the main window, a smaller error dialog box is displayed with the text 'Create Fail! Please try again!' and an 'OK' button.

Picture 5.1.3: An exam create account was contain ID in database system.

Hotel Management

Manage Customer | Food - Service Order | Find - Create Bill | Room - Food Manager | Helps - About Author

Customer Information

Name Customer: Aladin

ID Number: 285690696

Room number: A01

Day Come: Friday, April 10, 2020

Other Costs: 0

Add Customer | Edit Customer | Refresh | Log Out

Table Customer Information

cName	cID	cRoom	cOtherCosts	cDayCome
Aladin	285690696	A01	0	4/10/2020

Add customer non success!

Table Room Status

Room	rCosts	rNumPeople	rStatus
A01	100	1	<input checked="" type="checkbox"/>
A02	200	1	<input type="checkbox"/>

Picture 5.1.5: An exam when employee add a customer already exists in system.

Hotel Management

Manage Customer | Food - Service Order | Find - Create Bill | Room - Food Manager | Helps - About Author

Customer Information

Name Customer:

ID Number:

Room number:

Day Come: Friday, April 10, 2020

Other Costs:

Add Customer | Edit Customer | Refresh | Log Out

Table Customer Information

cName	cID	cRoom	cOtherCosts	cDayCome
Aladin	285690696	A01	0	4/10/2020

Please fill all information!

Table Room Status

Room	rCosts	rNumPeople	rStatus
A01	100	1	<input checked="" type="checkbox"/>
A02	200	1	<input type="checkbox"/>

Picture 5.1.6: An exam when employee add a customer but don't have information.

Hotel Management

Manage Customer | Food - Service Order | Find - Create Bill | Room - Food Manager | Helps - About Author

Customer Information

Name Customer: Aladin Day Come: Friday, April 10, 2020

ID Number: 28569000

Room number: A01 Other Costs: 0

Add Customer Edit Customer Refresh Log Out

Table Customer Information

cName	cID	cRoom	cOtherCosts	cDayCome
Aladin	28569000	A01	0	4/10/2020

Table Room Status

Room	rCosts	rNumPeople	rStatus
A01	100	1	<input checked="" type="checkbox"/>
A02	200	1	<input type="checkbox"/>

Edit non success! @ @

OK

Picture 5.1.7: An exam when employee update customer information but edit ID.

Hotel Management

Manage Customer | Food - Service Order | Find - Create Bill | Room - Food Manager | Helps - About Author

Customer Table

cName	cID	cRoom	cOtherCosts	cDayCome
Aladin	285690696	A01	0	4/10/2020

Food - Service Table

nFood	cFood
Water	1

Order Food non success! @ @

OK

ID Customer Order: 285690696 Order Food Name: 2

Order Food Refresh Log Out

Picture 5.1.8: An example when employee ordering food is not in the hotel.

Hotel Management

Manage Customer Food - Service Order Find - Create Bill Room - Food Manager Helps - About Author

Customer Information

cName	cID	cRoom	cOtherCosts	cDayCome
Aladin	285690696	A01	0	4/10/2020 ...

Customer Costs Food - Service

orderID	oderCostsFc
285690696	1

Customer: 285690696
Room Costs is: 1400 USD!
Food Costs is: 1 USD!
Total Customer Pay: 1401 USD!

OK

Input ID: 285690696 Find

Input Room: A01

Pay

Refresh

Picture 5.1.9: An example when employee create bill for customer.

Hotel Management

Manage Customer Food - Service Order Find - Create Bill Room - Food Manager Helps - About Author

Room Manager

Room	rCosts	rNumPeople	rStatus
A01	100	1	<input checked="" type="checkbox"/>
A02	200	1	<input type="checkbox"/>

Food - Service Manager

nFood	cFood
Water	1

Add room non success! (u) (u)

OK

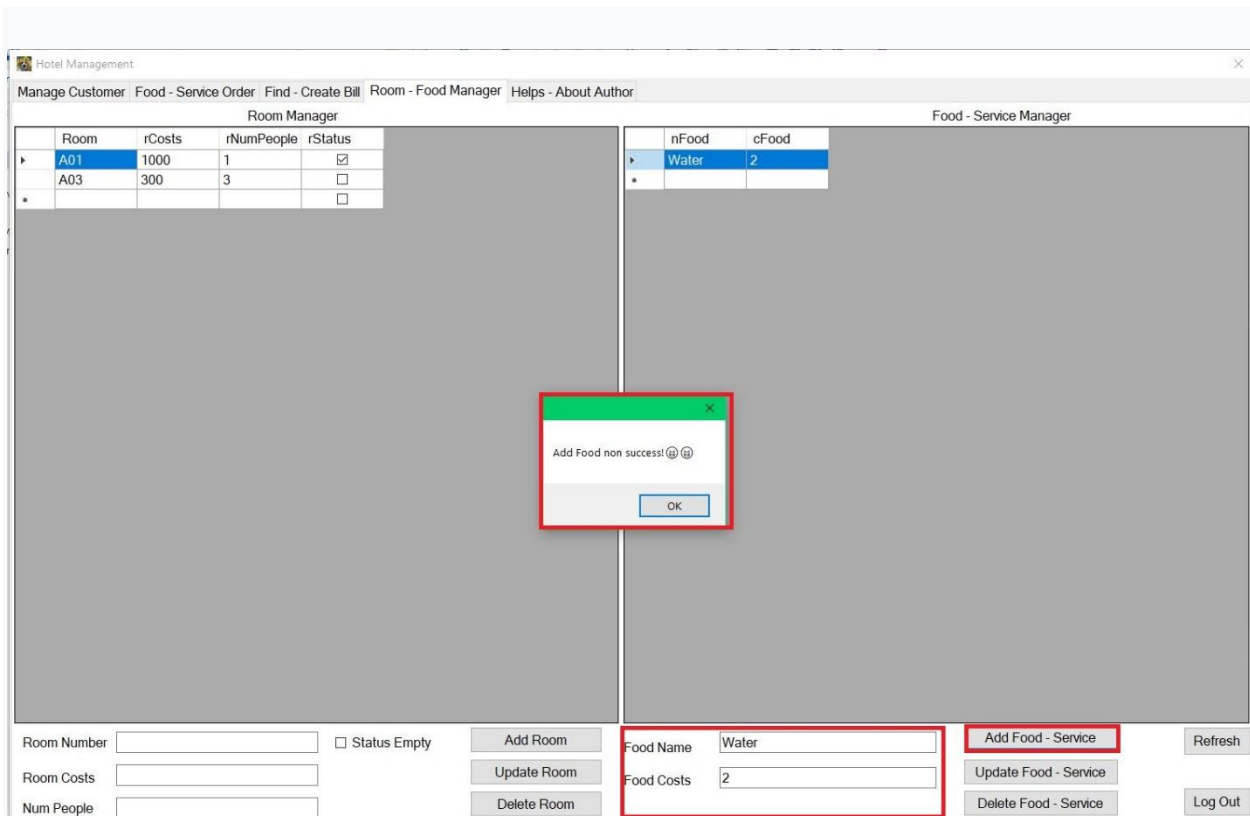
Room Number: A01 ☐ Status Empty Add Room

Room Costs: 100 Update Room

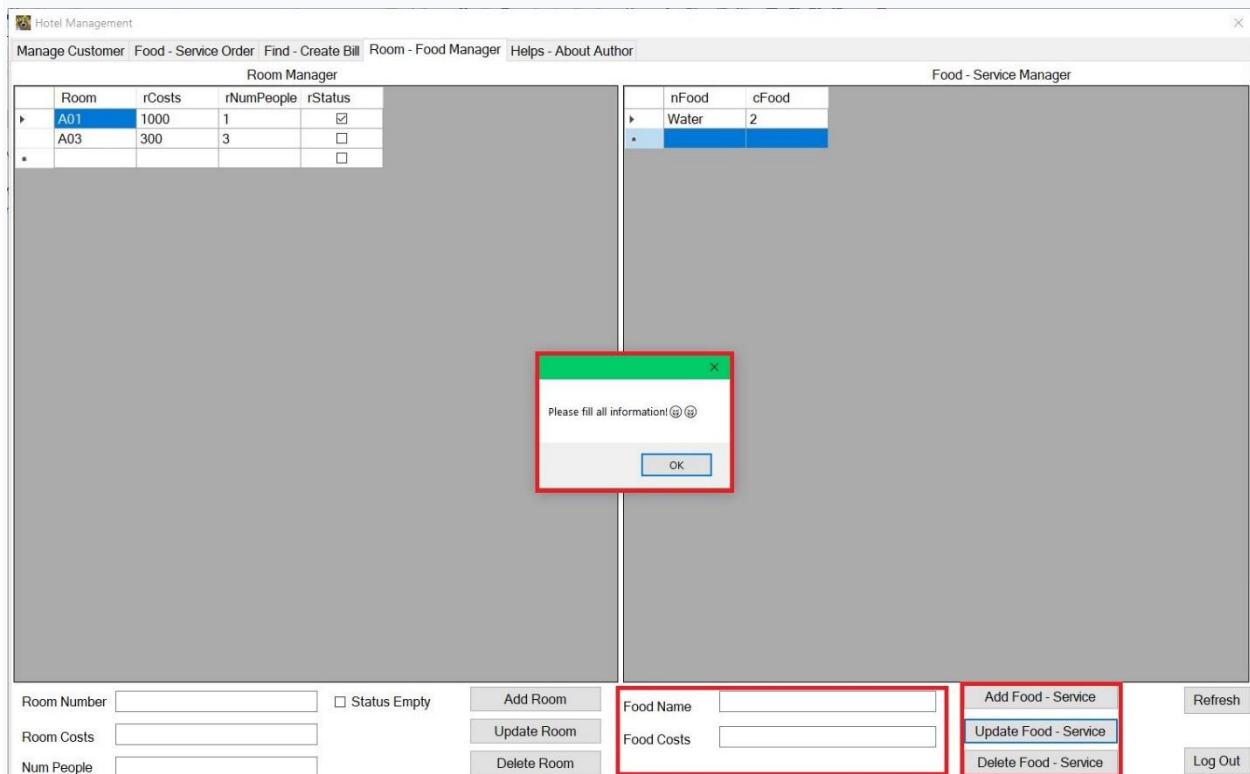
Num People: 1 Delete Room

Food Name: Food Costs: Add Food - Service Update Food - Service Delete Food - Service Refresh Log Out

Picture 5.1.10: An example when employee Add Room already exists.



Picture 5.1.11: An example when employee Add Food already exists.



Picture 5.1.12: Example when employees do not fill out information but click button.

2. Unit test.

Test plan:

Enter a customer information system:

- If the identity card number is different but the name is different, it will say "Add Failed" and no information will be added.
- If the Information is not duplicated then "Successfully add" and the information is saved to the data.

Test Case:

```

18     }
19     [TestMethod()]
20     public void LoginAdminTest()
21     {
22         bool result = dal_thanhvien.LoginAdmin("admin", "admin123");
23         Assert.AreEqual(true, result);
24     }
25
26     [TestMethod()]
27     public void LoginEmployeeTest()
28     {
29         bool result = dal_thanhvien.LoginAdmin("Bich Tuyen Dang Yeu", "1234");
30         Assert.AreEqual(false, result);
31     }
32
33     [TestMethod()]
34     public void AddTest_1()
35     {
36         DateTime date = new DateTime(2020, 1, 1);
37         DTO_ThanhVien tv = new DTO_ThanhVien("Quang Huy", "1234", " ", "10000", date);
38         bool result = dal_thanhvien.Add(tv);
39         Assert.AreEqual(false, result);
40     }
41
42     [TestMethod()]
43     public void AddTest_2()
44     {
45         DateTime date = new DateTime(2020, 1, 1);
46         DTO_ThanhVien tv = new DTO_ThanhVien("Quang Huy", "518H0511", "A01", "10000", date);
47         bool result = dal_thanhvien.Add(tv);
48         Assert.AreEqual(true, result);
49     }
50
51     [TestMethod()]
52     public void PayTest_1()
53     {
54         bool result = dal_thanhvien.Pay("518H0511");
55         Assert.AreEqual(true, result);
56     }
57

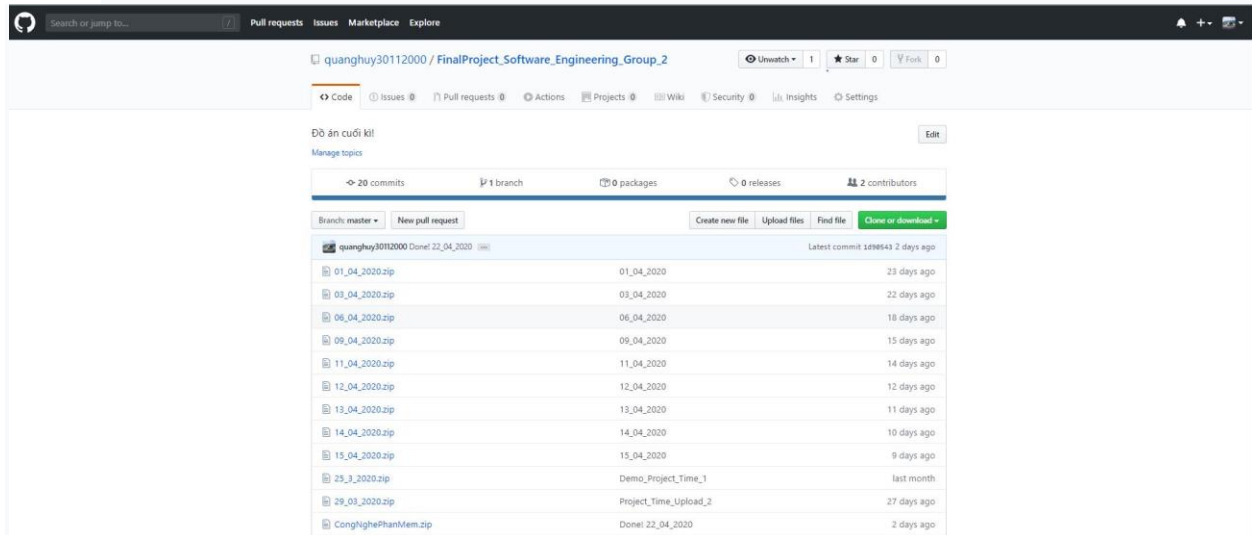
```

3. Picture 6.3.1: Demo code TestCase.

No	TestCase	Input	Function	Output	Result
1	Login screen	("admin", "admin123")	LoginAdmin	T	Pass
2	Login screen	("Bich Tuyen Dang Yeu", "1234")	LoginEmployee	F	Pass
3	Add Customer	("Quang Huy", "1234", " ", "10000", date)	AddCustomer	F	Pass

4	Add Customer	("Quang Huy", "518H0511", "A01", "10000", date)	AddCustomer	T	Pass
5	Pay	("518H0511")	Pay	T	Pass
6	Pay	("1234")	Pay	F	Pass

4. SVN/GIT.



Picture 5.3.1: Proof of github usage.

5. Hardware and software requirements:

- The hotel management system must have support for IT infrastructure.
- Installed on a hosting server. Hotel owners can log in and manage.
- Added to the component register that allows hotel managers to access.
- Create a file to store registration information and access information.

VI. REFERENCES

1. Sile Software Engineering.
2. Wikipedia.
3. Stackoverflow.

END!