

Software Requirements Specification

for

Booking HomeStay, Release 1.0

Version 1.0 approved

Prepared by Group 5

Process Impact

July 19, 2022

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I.Introduction

I.1 Purpose

Currently, the tourism industry is developing at home and abroad, homestays are also thriving for the tourism industry to meet the needs of tourists. The management of a homestay is very difficult for people to manage, some have difficulties in doing business such as managing the number of rooms, vehicles, ... Based on that, we develop a website to manage homestay more conveniently for homestay owners and tourists to easily book homestay to stay according to their needs.

I.2 Project Scope

This application is for everyone, ... Web homestay booking will let administrators manage accounts, homestay, employees will add, edit, deletion and user interaction. The homestay will take booking as well. Customers will be able booking when successfully logging into the system, homestay address, detailed information of homestay, homestay services and rating.

II. Overall Description

Through my web you can book homestay and the administrators can mange the homestay. You can view the detail service that the homestay has and you can choose.

II.1 Product Perspective

It is known globally that, in today's market, it is extremely difficult to start a new small-scale business and live-through the competition from the well-established and settled owners. In fast paced time of today, when everyone is squeezed for time, the majority of people are finicky when it comes to placing a homestay booking. The customers of today are not only attracted because placing an order online is very convenient but also because they have visibility into the service offered, price and extremely simplified navigation for the booking. Web homestay booking system that I am proposing here, greatly simplifies the booking process for both the customer and the host of the homestay. System presents an interactive and up-to-date menu with all available options in an easy-to-use manner. Customer can choose one or more services of the homestay. Customer can view all the booking details in the cart before checking out. At the end, customer gets homestay booking confirmation details. After that the booking is placed it is entered in the database and retrieved in pretty much real time. Thus, allowing the homestay employee to quickly go through the booking when they are received and process all booking be more efficient with minimal delays and confusion.

II.2 User Class and Characteristics

The structure of the system can be divided into 3 main logical components:

- Web booking System- provides the functionality for customers to place their order and supply necessary details.
- Booking Management-allows the homestay to control what can be booking by the customers
- Order Retrieval System-This is a final logical component that allows to keep track of all order. This component takes care of order retrieving and displaying order information.

II.3 Operating environment

Hardware Interface:

- 60 MB of free hard-drive space
- 128 MB of RAM Software Interface:

Software Interface:

- Operating System: Web.
- Drivers: C# Runtime Environment
- Integrated Development Environment: Visual Studio

II.4 Design and Implementation Constraints

When using Web homestay booking, customers need to provide us with their personal information for us to manage on the system, which means that customer information needs to be accurate. We want you to understand that we will be responsible for and guarantee your information on our system. This policy describes the information we collect, why we must collect it and how we use and disclose it on our application. The content of this policy is very important, we hope you will take the time to read and understand it fully. This policy may change from time to time, we recommend that you review this page for the most current information.

II.4.1 Collection information

When Web homestay booking is a function of the membership system, it handles all transactions of each member of the system. In order to distinguish one member from another, we need to collect different personal information from customers. In addition to this personal information, we also collect detailed information about your engagement and the level of engagement you achieve.

Below is an overview of the types of information we collect.

- User account information: Name, phone number and email address.
- Loyalty program account information: Membership code, password, balance and points.
- Transaction information: Display details of transactions. For example: Transaction history, transaction to redeem points from partners, transaction to deduct points...

II.4.2 Using information

We will use the information you provide to us for the purpose of supporting, maintaining, developing and improving the services we provide. We use your information for the following purposes:

- Communicate with customers and inform customers in an easy-to-understand way about the loyalty program.
- Process the transactions you have requested through our system.
- Display transaction information, especially the accumulated history of the transactions that customers have made.
- Improve the quality and performance of the website.
- Manage and administer our system.
- Prevent as well as combat fraudulent acts.
- Meet specified security requirements.

II.4.3 Using Email

Web homestay booking use your correct email address and notifications will be sent to your email in the following processes:

- Register as a new member of the system.
- Update your personal information.
- Submit a question on our help screen.
- Receive information about promotions and offers from brands in the network.
- Get code OTP to submit create new password when customer forgot password.

II.4.4 Saving Data

We will keep your information while your account is active or for as long as we deem necessary to keep our services running. If for some reason you want to stop using our services and cancel your account so that we can no longer use the information you provide

us, please do not hesitate. Contact us via member support information (you can access this information by logging into the system and going to the help screen).

II.4.5 Contact

If you would like to request access to Web homestay booking or delete your information or have any other questions or complaints regarding the handling of information, our policies and practices, please contact us. us (you can access this information by logging into the system and going to the help screen).

III. System feature



Figure 1. Usecase diagram

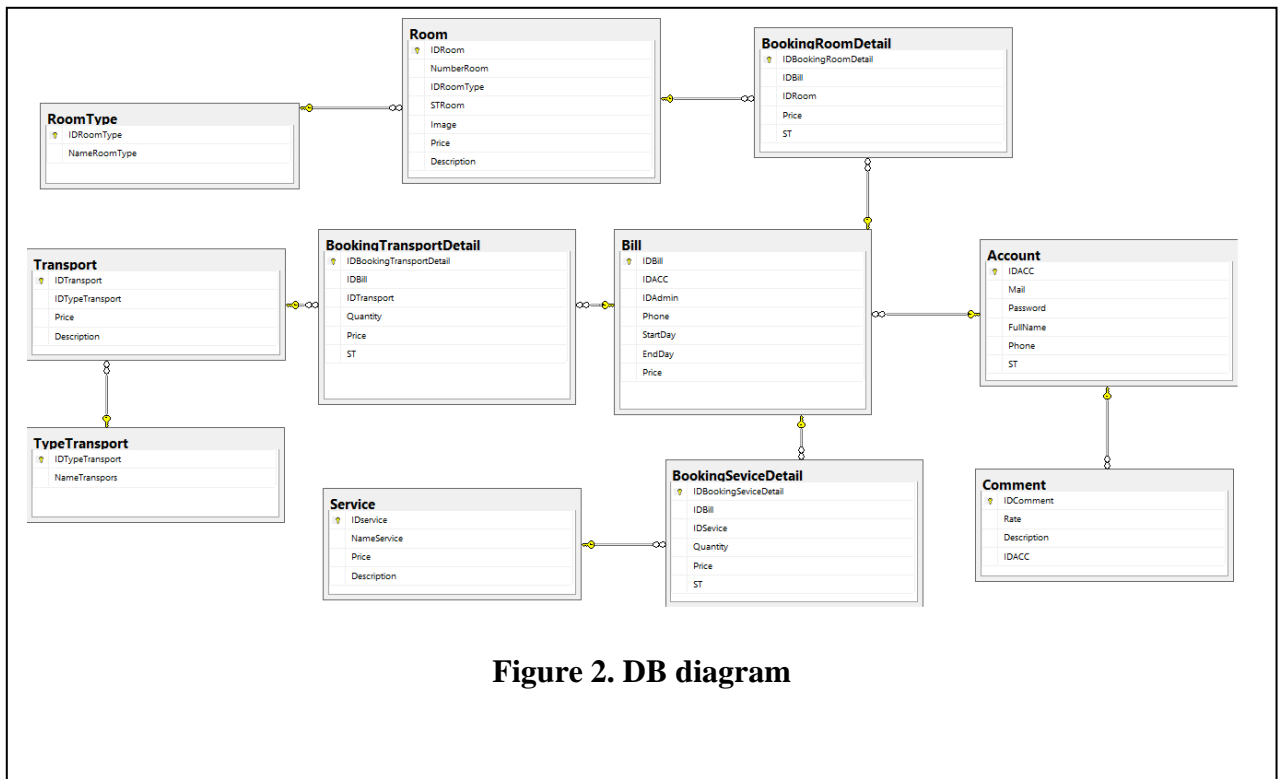


Figure 2. DB diagram

III.1 System Feature Manage Homestay

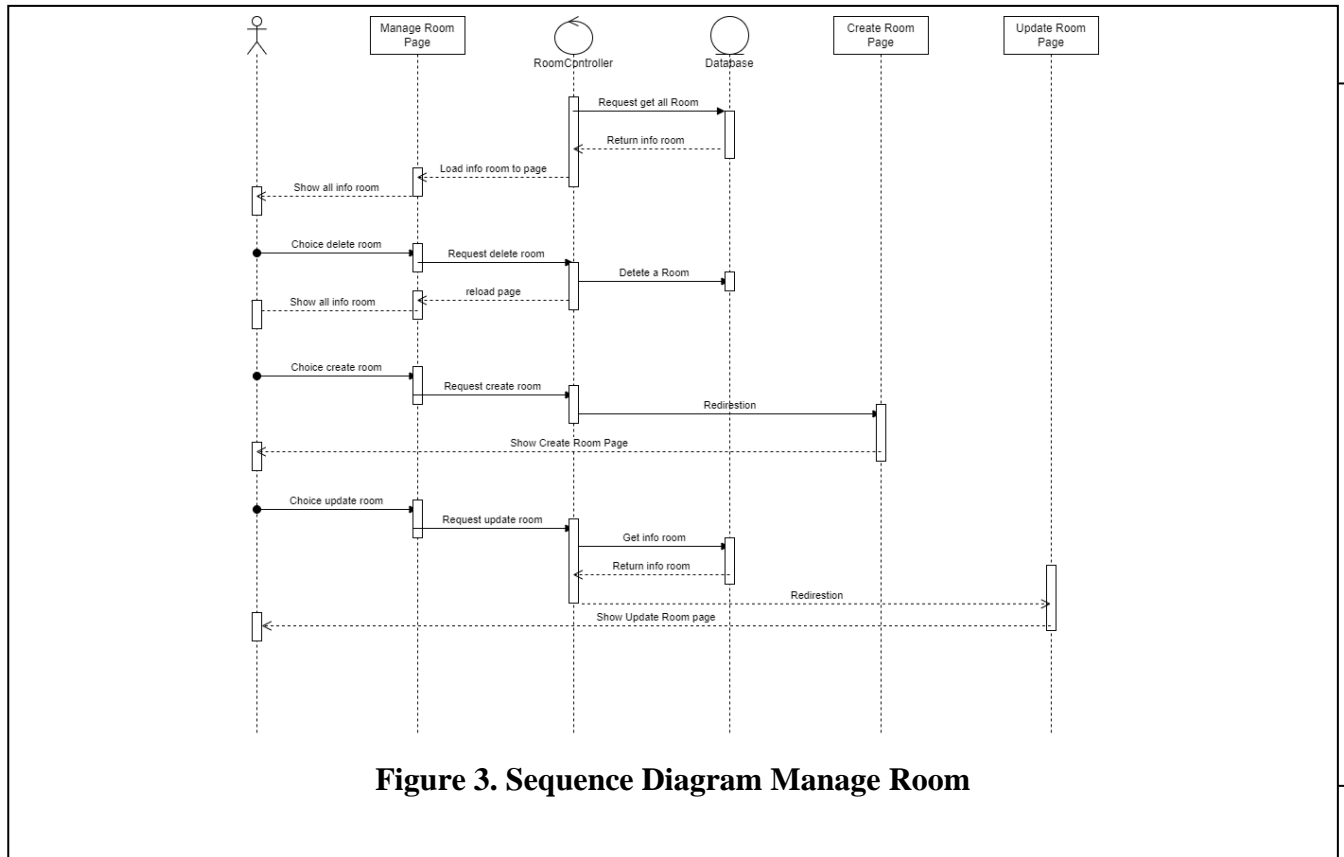
III.1.1 Description

Account is managed by admin, admin can add, edit, delete account.

III.1.2 Stimulus/Response Sequences

All input must be clear such as password have 8-character, email @gmail.com or @fpt.edu.vn...etc, all of input can't empty....

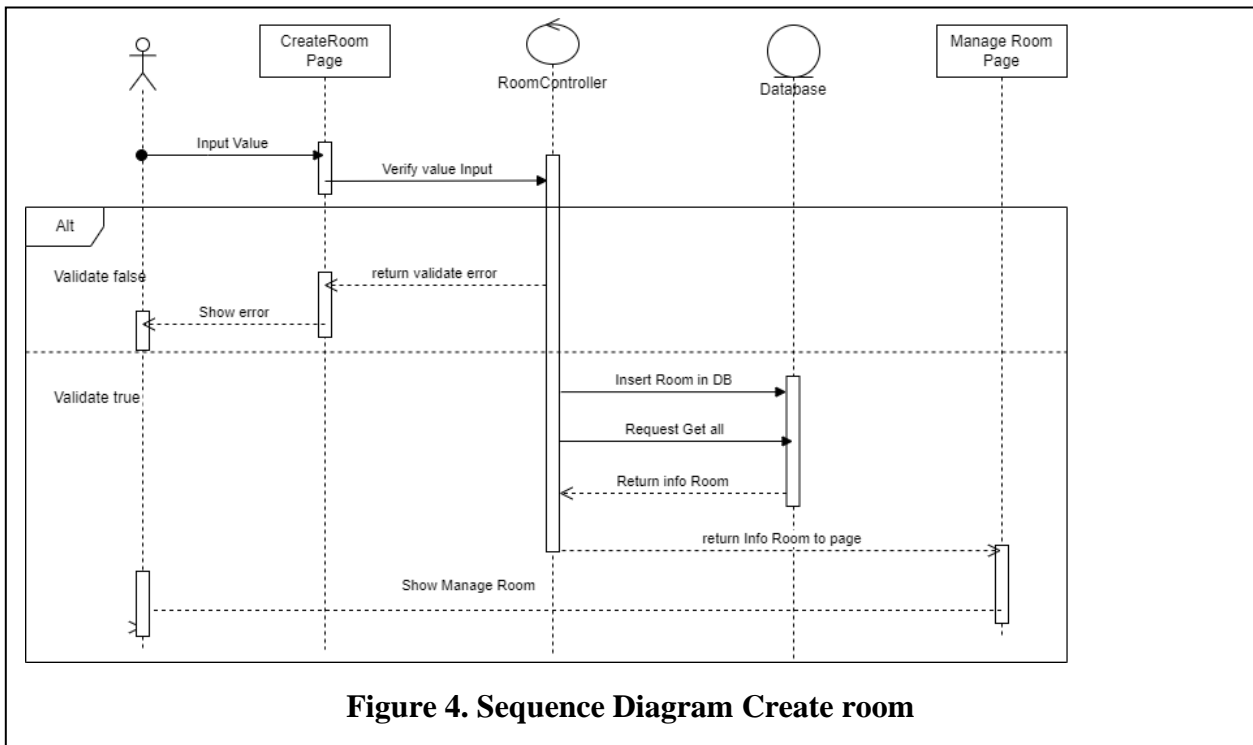
III.1.3 Function Manage Room



UC ID and Name:	Mange Room		
Created By:		Date Created:	
Primary Actor:	Admin	Secondary Actors:	
Trigger:	None		
Description:	None		
Preconditions:	The admin must have login		
Postconditions:	After finish login admin can mange accounts, history booking, can check in and check out of the room, ... manage bill		
Normal Flow:	Admin must access to manage room page		
Alternative Flows:	The admin can create rooms and delete room that they want.		
Exceptions:	None		
Priority:	High		

Frequency of Use:	Always
Business Rules:	Must access the admin, do not for user access to this page.
Other Information:	None
Assumptions:	None

III.1.3.1 Function Create room



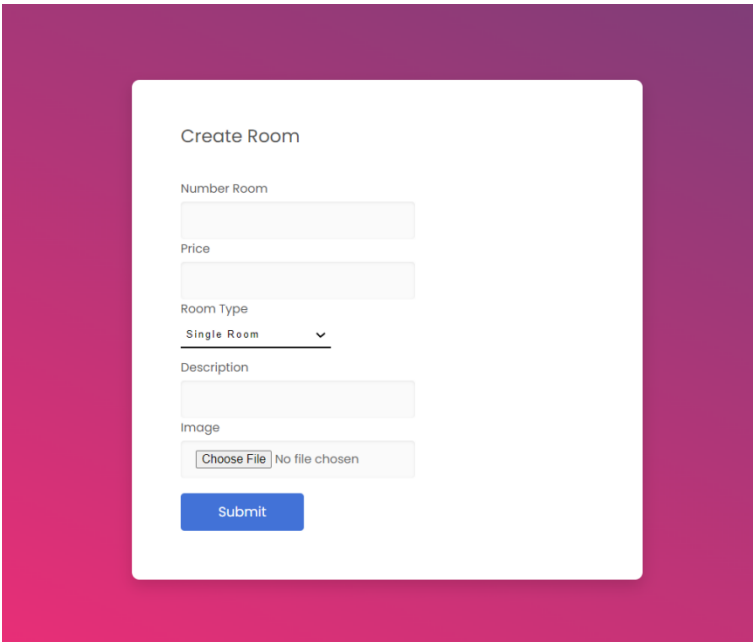


Figure 5. Function Create room

UC ID and Name:	Create Room		
Created By:		Date Created:	
Primary Actor:	Admin	Secondary Actors:	
Trigger:	None		
Description:	None		
Preconditions:	The admin must have login		
Postconditions:	After finished login, admin enter validate number room, price and choice image and room type and submit when done.		
Normal Flow:	Admin must access to manage room page		
Alternative Flows:	The admin can create rooms and delete room that they want.		
Exceptions:	None		
Priority:	High		
Frequency of Use:	Always		
Business Rules:	Must access the admin, do not for user access to this page.		
Other Information:	None		

Assumptions:	None
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III.1.3.2 Function update room

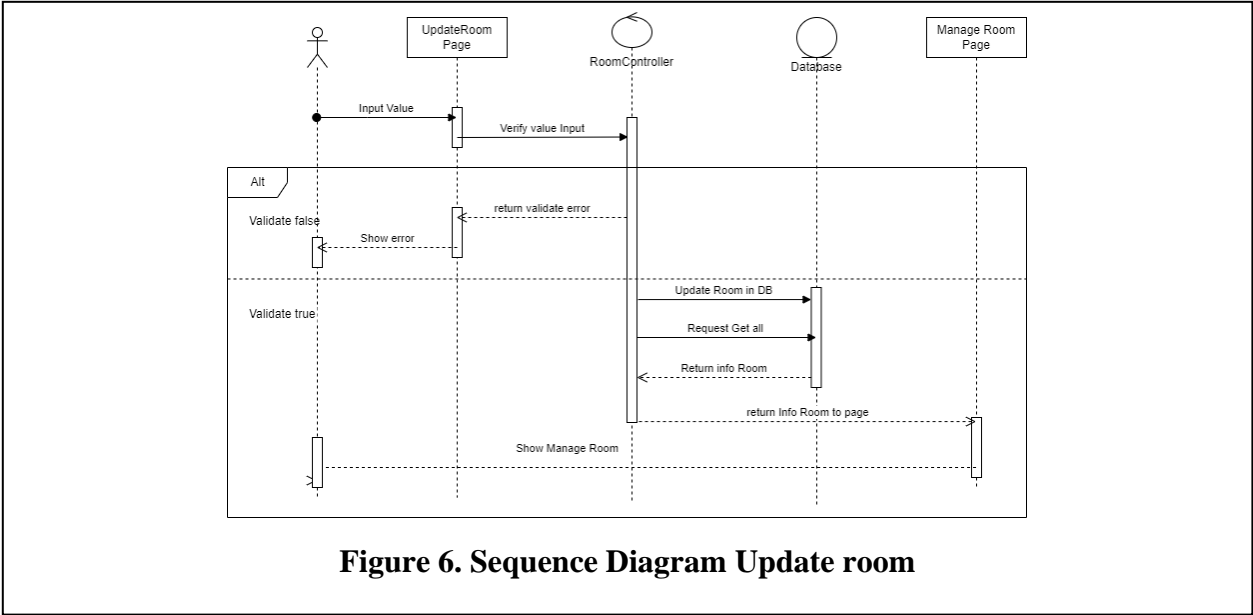


Figure 6. Sequence Diagram Update room

The screenshot shows a web form titled 'Update Room' set against a pink background. The form contains several input fields: 'Number Room' with the value '101', 'Price' with '210000.00', 'Room Type' with a dropdown menu showing 'Double Room', 'Description' with 'dep lam', and 'Image' with a 'Choose File' button and the text 'No file chosen'. A blue 'Submit' button is located at the bottom of the form.

Figure 7. Function update room

UC ID and Name:	Create Room		
Created By:		Date Created:	
Primary Actor:	Admin	Secondary Actors:	
Trigger:	None		
Description:	None		
Preconditions:	The admin must have login		
Postconditions:	After finished login, admin enter validate number room, price and choice image and room type and submit when done.		
Normal Flow:	Admin must access to manage room page		
Alternative Flows:	The admin can create rooms and delete room that they want.		
Exceptions:	None		
Priority:	High		
Frequency of Use:	Always		
Business Rules:	Must access the admin, do not for user access to this page.		
Other Information:	None		
Assumptions:	None		

III.1.4 Function manage message

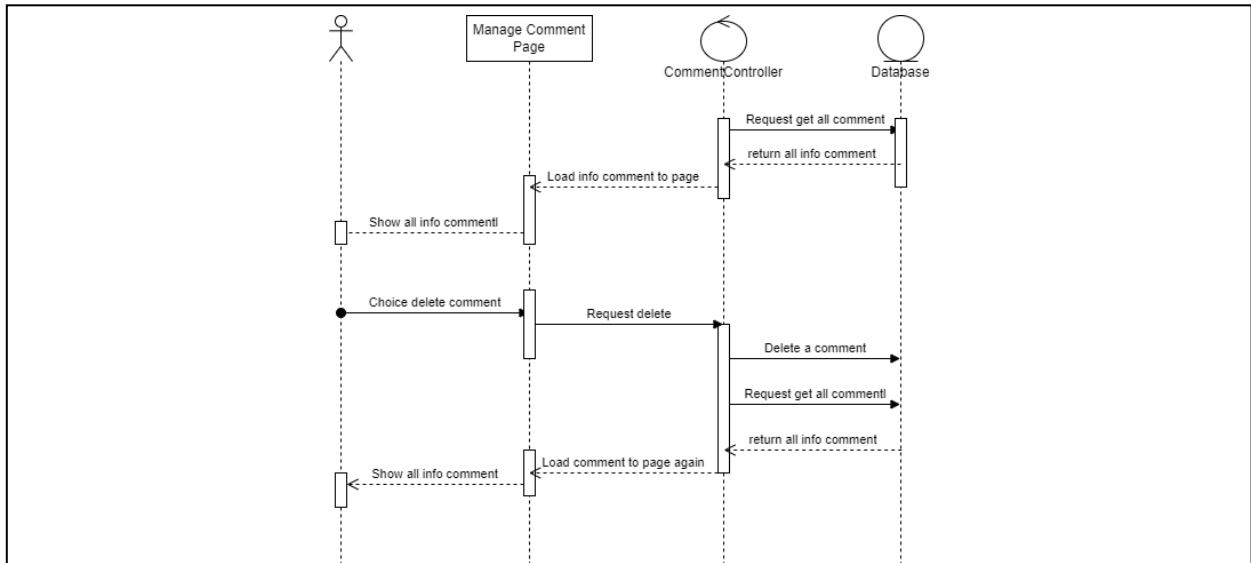


Figure 8. Sequence Diagram Manage message

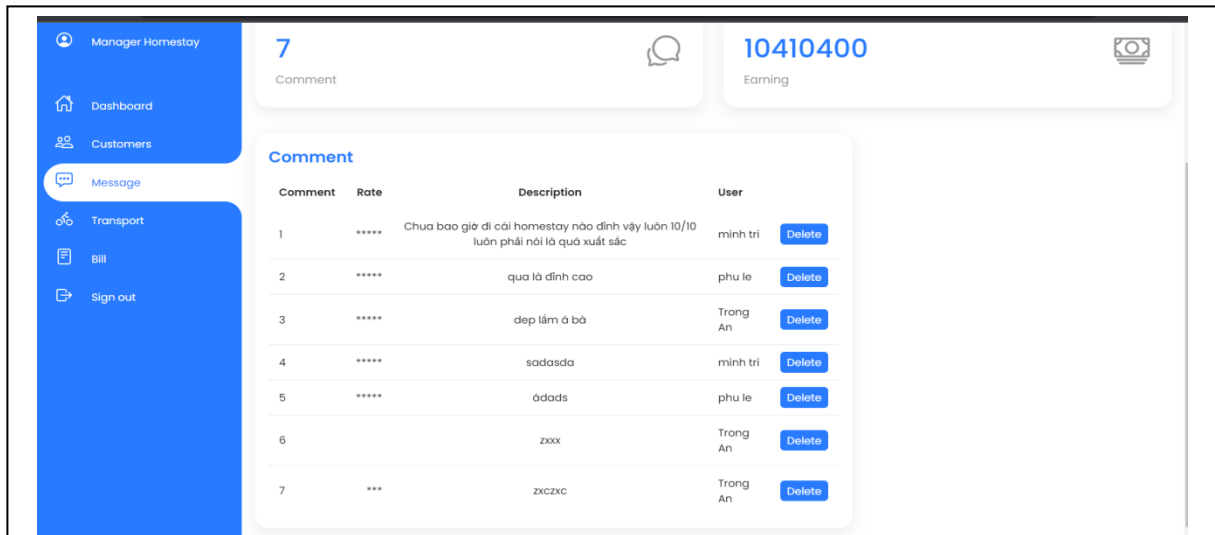
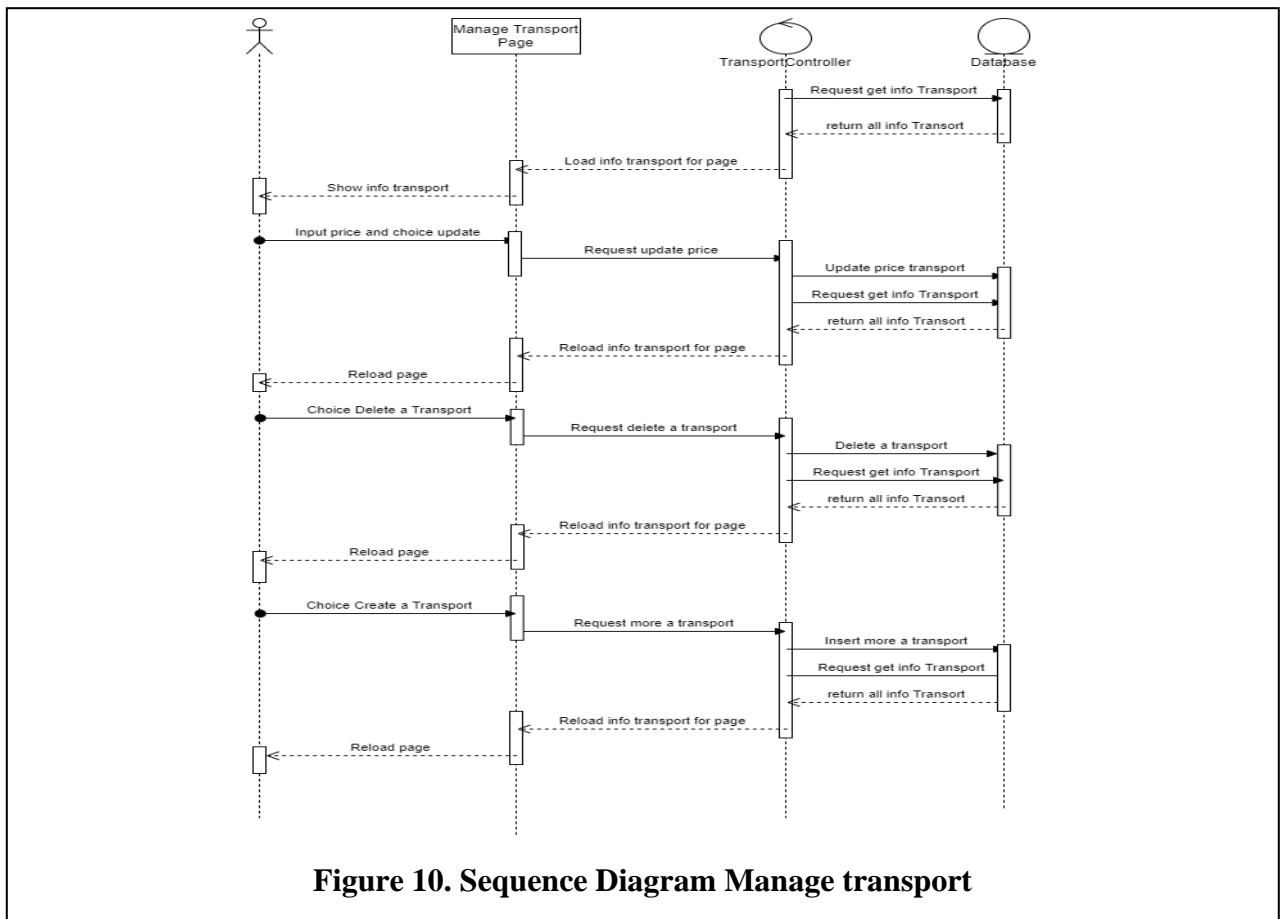


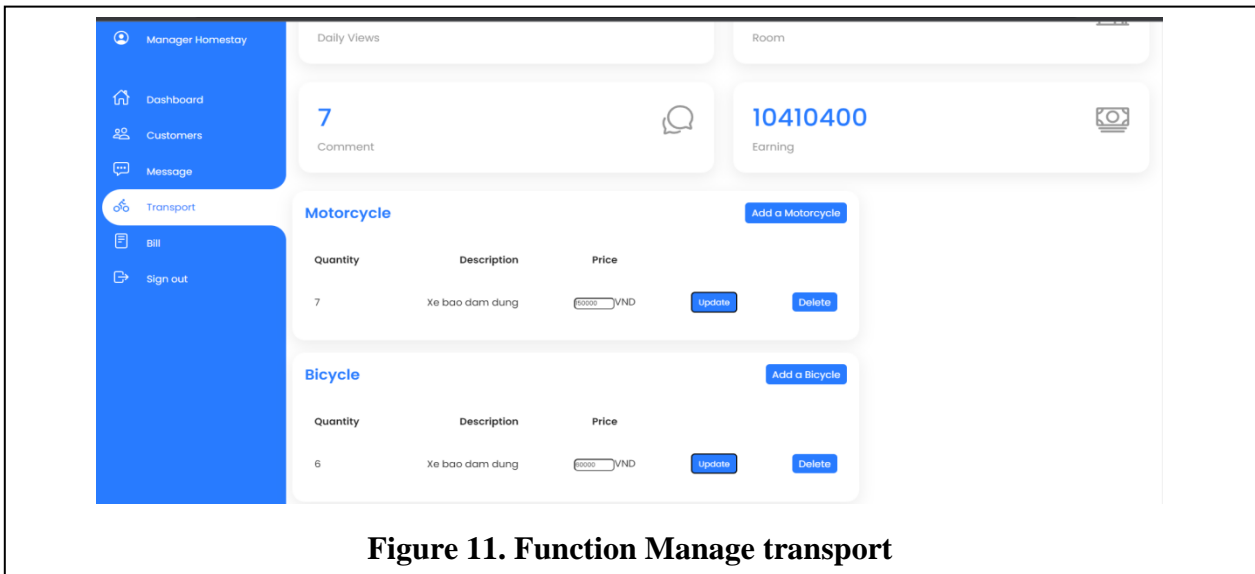
Figure 9. Function Manage message

UC ID and Name:	Mange Customer		
Created By:		Date Created:	
Primary Actor:	Admin	Secondary Actors:	
Trigger:	None		
Description:	The admin can view the user's comment on the system and they can delete that they want.		

Preconditions:	The admin must have login account.
Postconditions:	After finish login admin can view the comment and they can delete comment that they want
Normal Flow:	Admin must access to manage message page.
Alternative Flows:	The admin can create rooms and delete room that they want.
Exceptions:	None
Priority:	High
Frequency of Use:	Always
Business Rules:	Must access the admin, do not for user access to this page.
Other Information:	None
Assumptions:	None

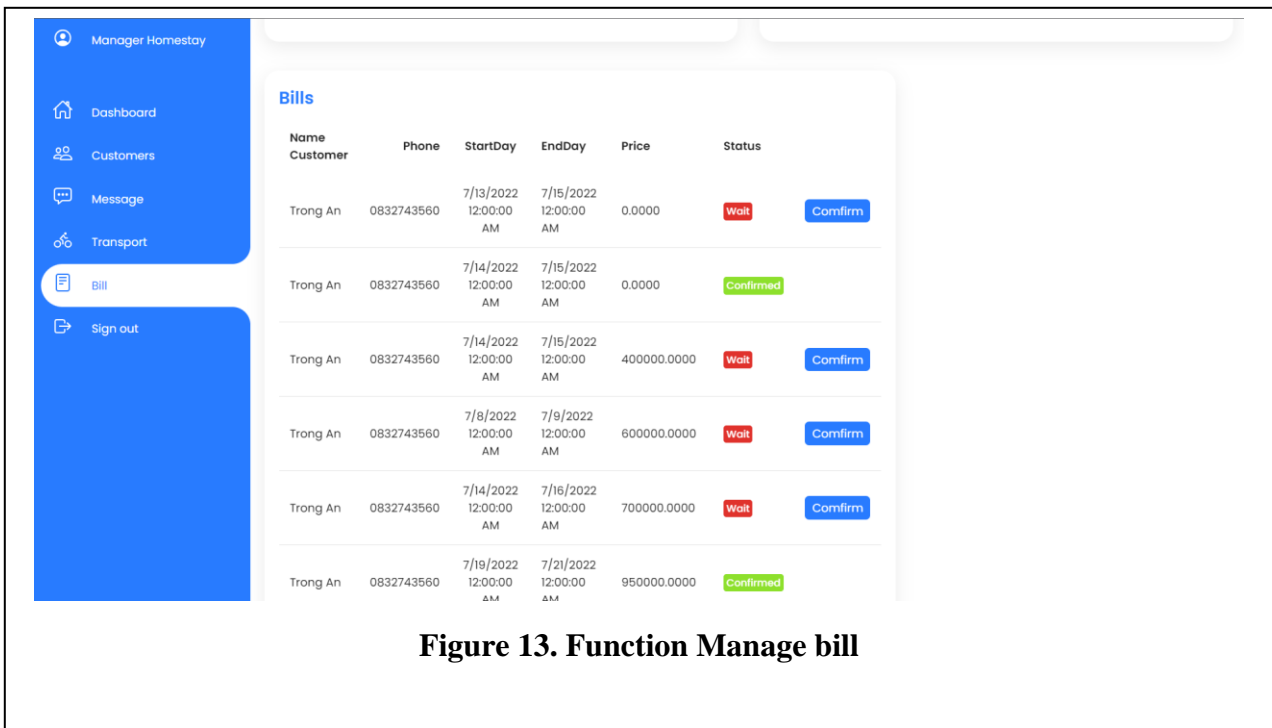
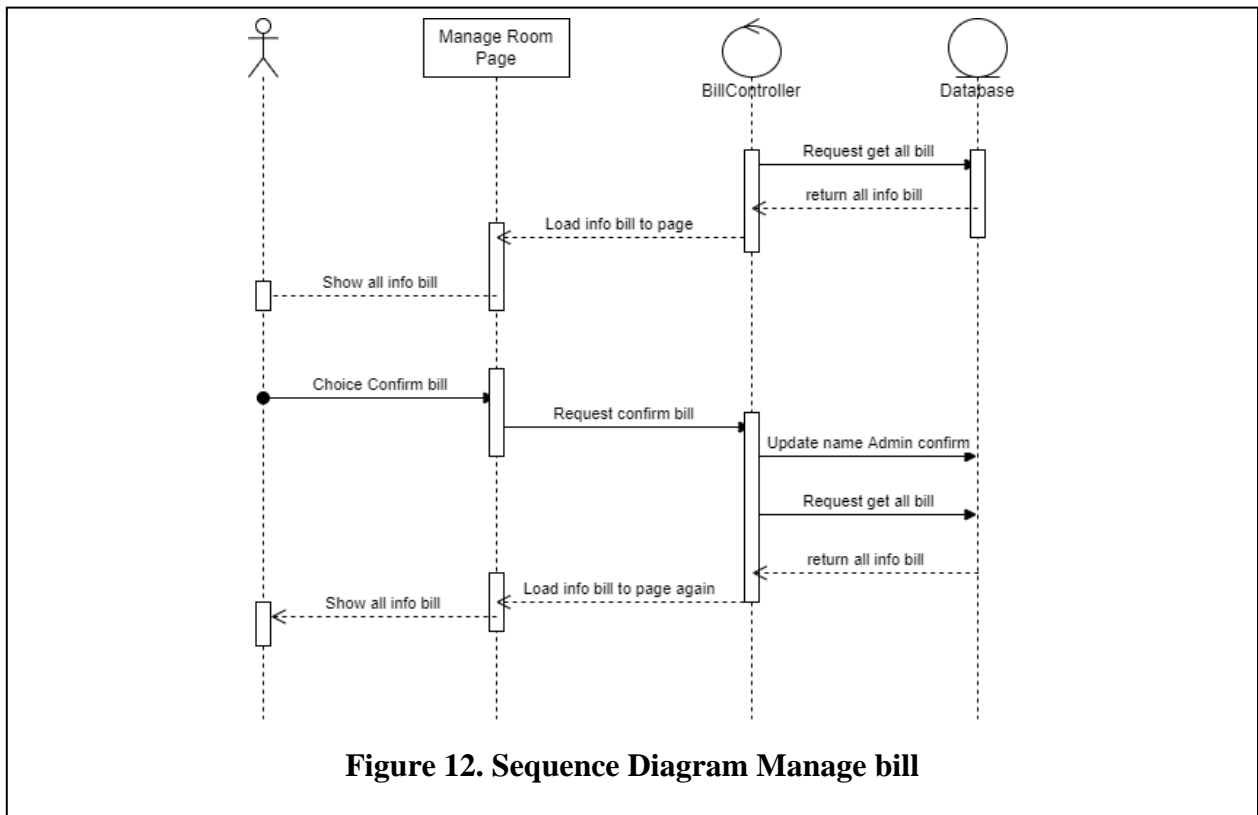
III.1.5 Function mange transport





UC ID and Name:	Mange Customer		
Created By:		Date Created:	
Primary Actor:	Admin	Secondary Actors:	
Trigger:	None		
Description:	The admin can update and delete transport if they want		
Preconditions:	The admin must have login account.		
Postconditions:	After finish login admin can update and delete transport.		
Normal Flow:	Admin must access to manage transport page.		
Alternative Flows:	The admin can create rooms and delete room that they want.		
Exceptions:	None		
Priority:	High		
Frequency of Use:	Always		
Business Rules:	Must access the admin, do not for user access to this page.		
Other Information:	None		
Assumptions:	None		

III.1.6 Function manage bill



UC ID and Name:	Mange Bill		
Created By:		Date Created:	
Primary Actor:	Admin	Secondary Actors:	
Trigger:	None		
Description:	The admin can view the bill of the user		
Preconditions:	The admin must have login		
Postconditions:	After user finished the booking, they will have the bill their own bill. The admin can confirm that bill.		
Normal Flow:	Admin must access to page mange		
Alternative Flows:	None		
Exceptions:	None		
Priority:	High		
Frequency of Use:	Always		
Business Rules:	Must access the admin, do not for user access to this page.		
Other Information:	None		
Assumptions:	None		

III.2 System Feature Login and Register

III.2.1 Function Login

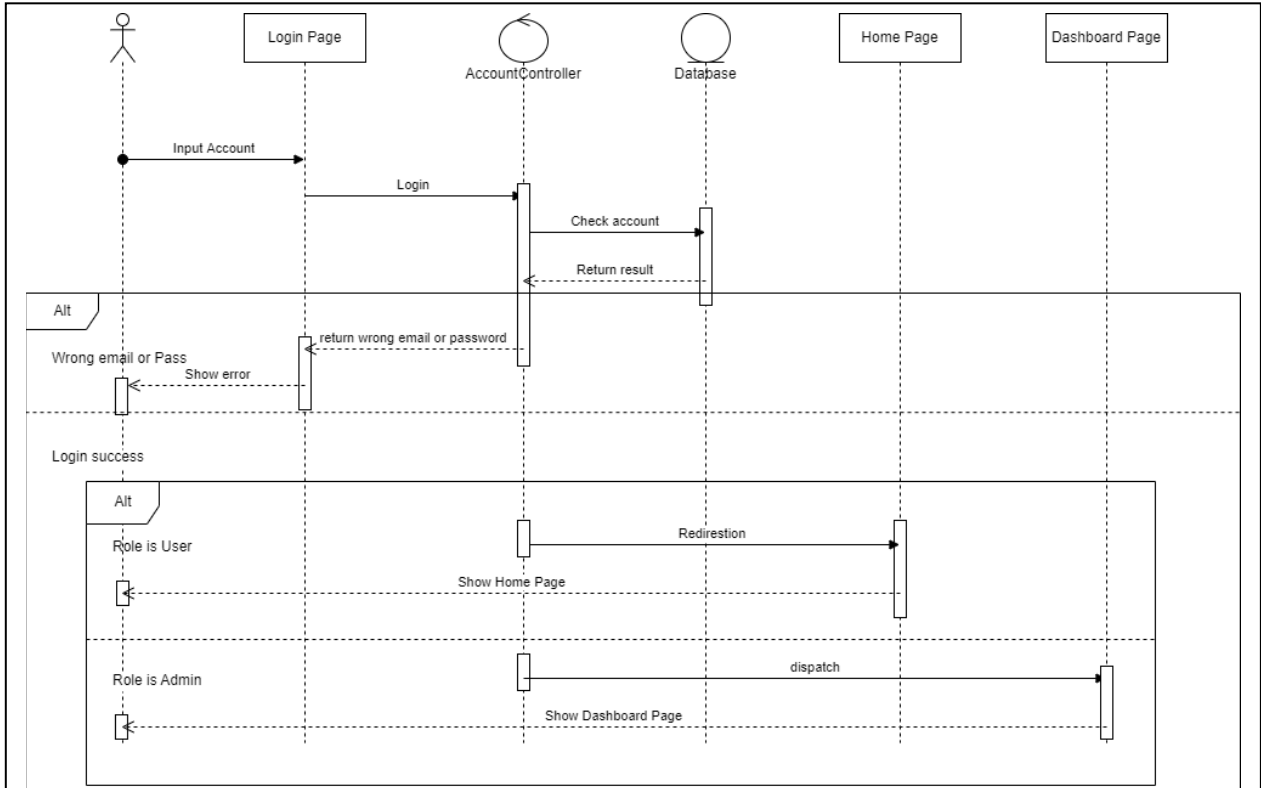


Figure 14. Sequence Diagram User login

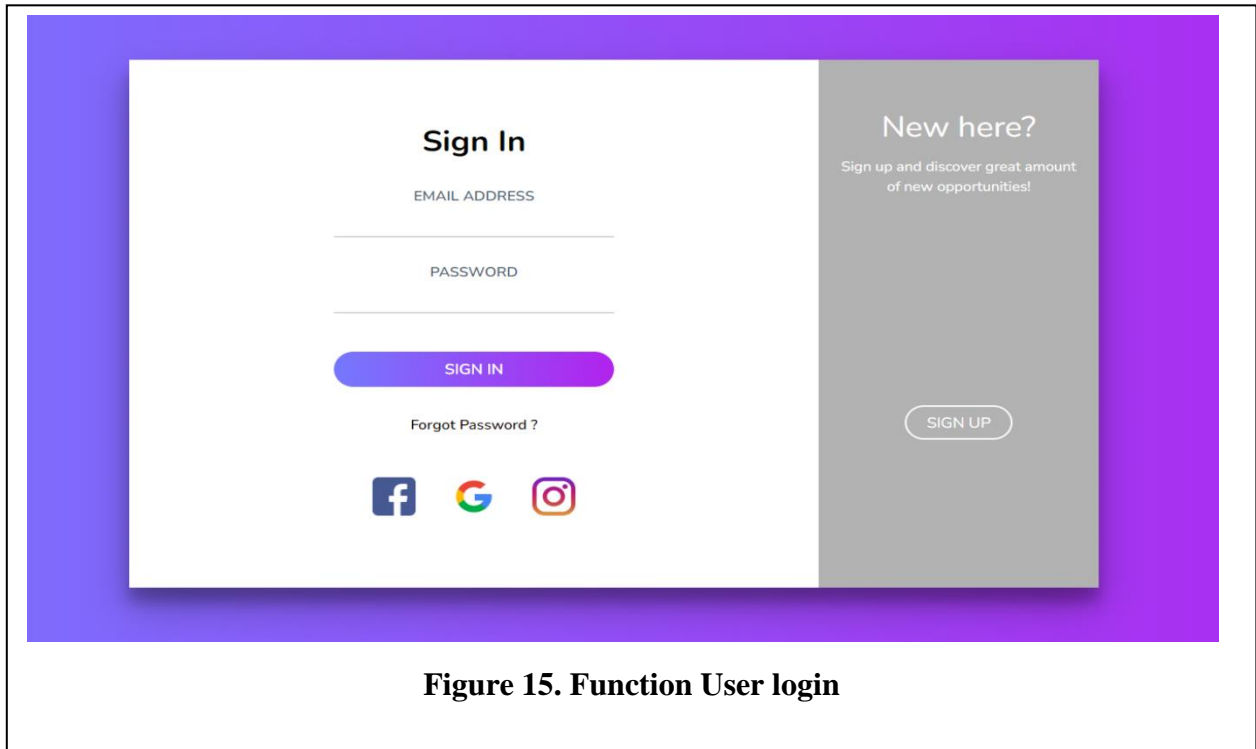
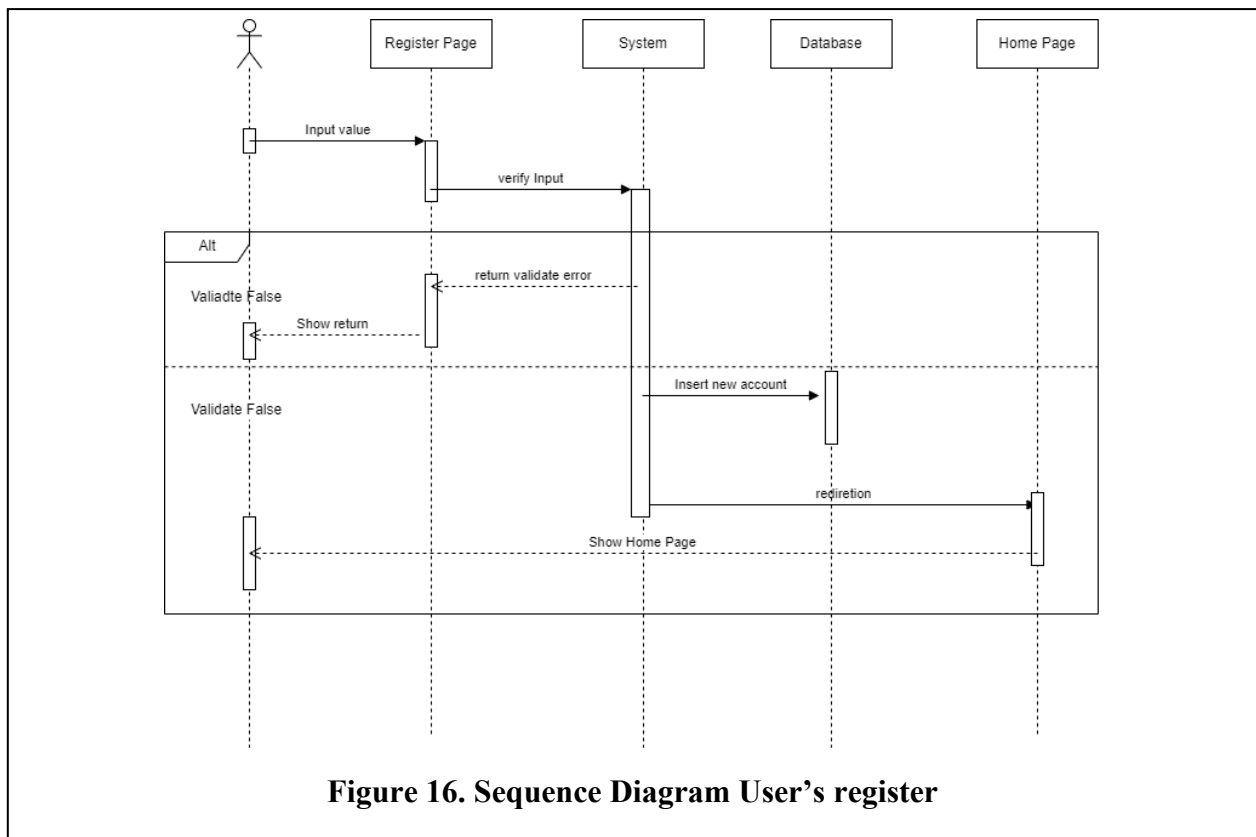


Figure 15. Function User login

UC ID and Name:	Login		
Created By:		Date Created:	
Primary Actor:	User	Secondary Actors:	Admin
Trigger:	None		
Description:	<p>If users want to interact with any function in the system, they must log in to the system.</p> <p>Here's how to know what role the logged-in person has in the system, each role will have permissions different terms to manipulate the system.</p> <p>If the user does not have an account in the system, they must register before logging in</p>		
Preconditions:	The customer must have the internet to access		
Postconditions:	Display the corresponding page for each role.		
Normal Flow:	<p>1. Each stage to login</p> <p>+ Enter email and password</p>		

	<ul style="list-style-type: none"> + Send information to the system to log in + The systems will return the results, if successful, it will redirect to the main page, else showing error <p>2. Log in successfully:</p> <ul style="list-style-type: none"> + Case 1: You are customer, you can do the following: view Home page + Case 2: You are admin, you can exercise management rights on your site such as manage account's user, manage homestay.
Alternative Flows:	
Exceptions:	Wrong email or password
Priority:	High
Frequency of Use:	Always
Business Rules:	
Other Information:	
Assumptions:	

III.2.2 Function Register



One of us?
If you already has an account, just sign in. We haven't missed you!

Sign Up

NAME

EMAIL

PHONE

PASSWORD

SIGN IN

SIGN UP NOW

Figure 17. Function User's register

UC ID and Name:	Register		
Created By:		Date Created:	
Primary Actor:	User	Secondary Actors:	
Trigger:	None		
Description:	<p>If the customers do not have an account to login, they must have to register the account to login</p> <p>User needs to go to the registration page.</p> <p>Fill in all information about the account (name, email, phone, password).</p> <p>Successful registration will return to the login page.</p> <p>If registration fails, it will request to fill in the correct format.</p>		
Preconditions:	The customer must have the internet to access.		
Postconditions:	<p>POST-1. The user has now the rule "Member" and can manage his account.</p> <p>POST-2. This user is also now logged in.</p>		
Normal Flow:	The user visits the register page.		

	<p>If we have not an account, we can create a new one. The user enters his email and password to create a new account.</p> <ol style="list-style-type: none"> 1. Open register page. 2. Enters data to register. 3. Send register data to server. 4. Create account. 5. when successful will be redirect to login page.
Alternative Flows:	None
Exceptions:	<p>Do not be null the Name</p> <p>Email must have the @gmail.com.</p> <p>Phone must begin with +84 or must have ten number.</p> <p>Password must have the letter and the number.</p>
Priority:	High
Frequency of Use:	Always
Business Rules:	One email must create one account
Other Information:	None
Assumptions:	None

III.3 System Feature Booking

III.3.1 Function booking room

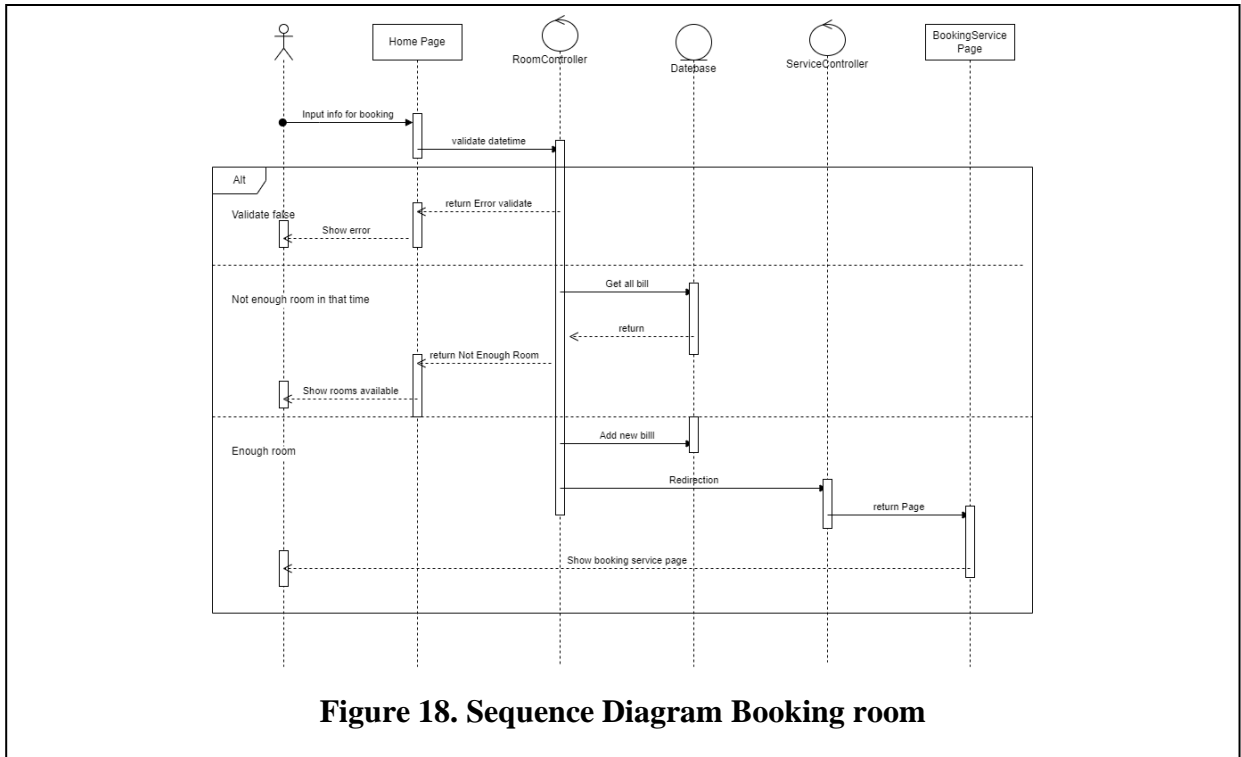


Figure 18. Sequence Diagram Booking room

Book a Room

YOUR NAME

ARRIVAL

DEPARTURE

ADULTS

▼

ROOM

▼

Figure 19. Function Booking room

UC ID and Name:	Booking Room		
Created By:		Date Created:	
Primary Actor:	User	Secondary Actors:	Admin
Trigger:	None		
Description:	<p>If users want to interact with any function in the system, they must log in to the system.</p> <p>Here's how to know what role the logged-in person has in the system, each role will have permissions different terms to manipulate the system.</p> <p>If the user does not have an account in the system, they must register before logging in</p>		
Preconditions:	The customer must have the internet to access		
Postconditions:	Display the corresponding page for each role.		
Normal Flow:	<p>2. Each stage to login + Enter email and password + Send information to the system to log in + The systems will return the results, if successful, it will redirect to the main page, else showing error</p> <p>2. Log in successfully: + Case 1: You are customer, you can do the following: view Home page + Case 2: You are admin, you can exercise management rights on your site such as manage account's user, manage homestay.</p>		
Alternative Flows:	None		
Exceptions:	Wrong email or password		
Priority:	High		
Frequency of Use:	Always		
Business Rules:	None		
Other Information:	None		
Assumptions:	None		

III.3.2 Function add service

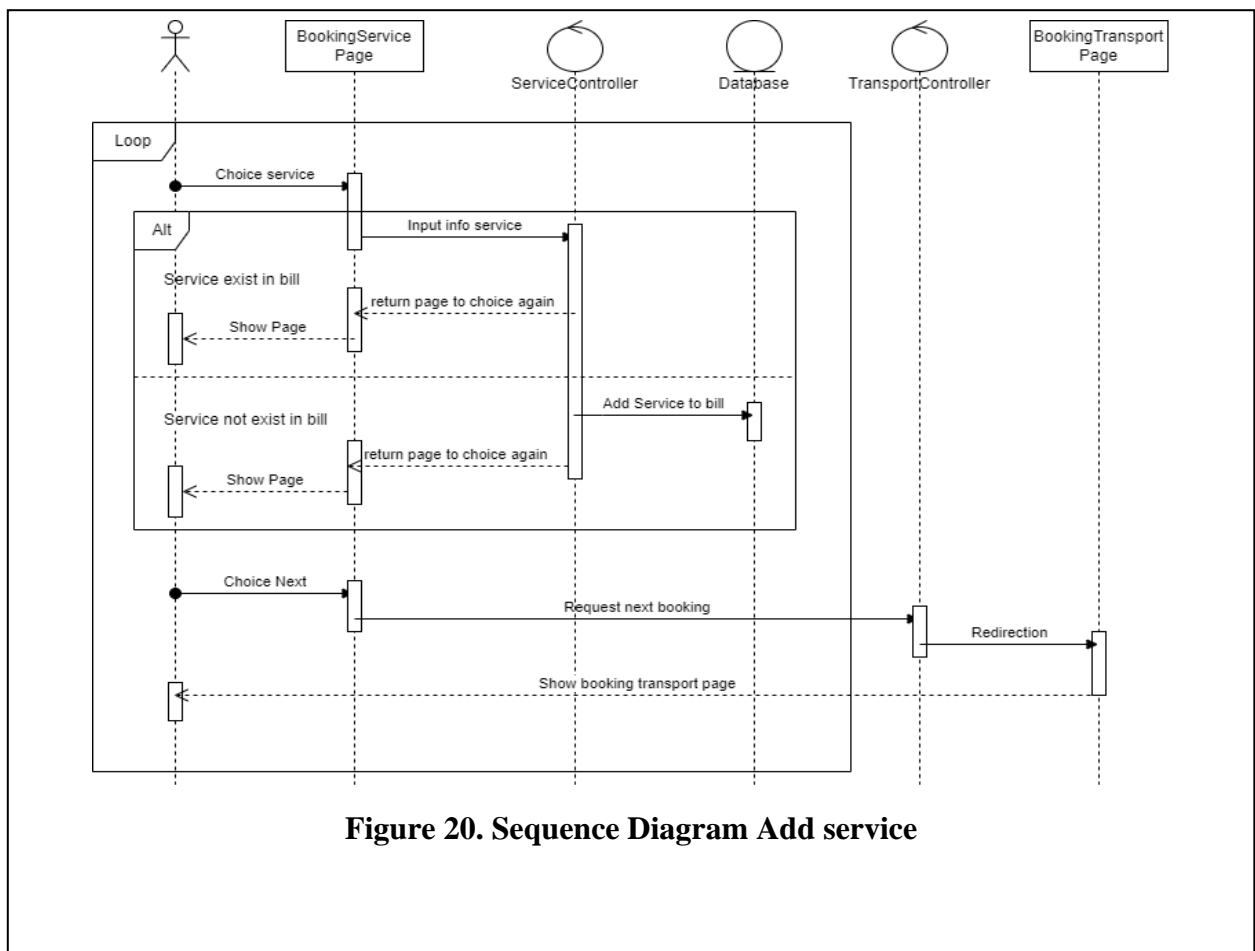


Figure 20. Sequence Diagram Add service

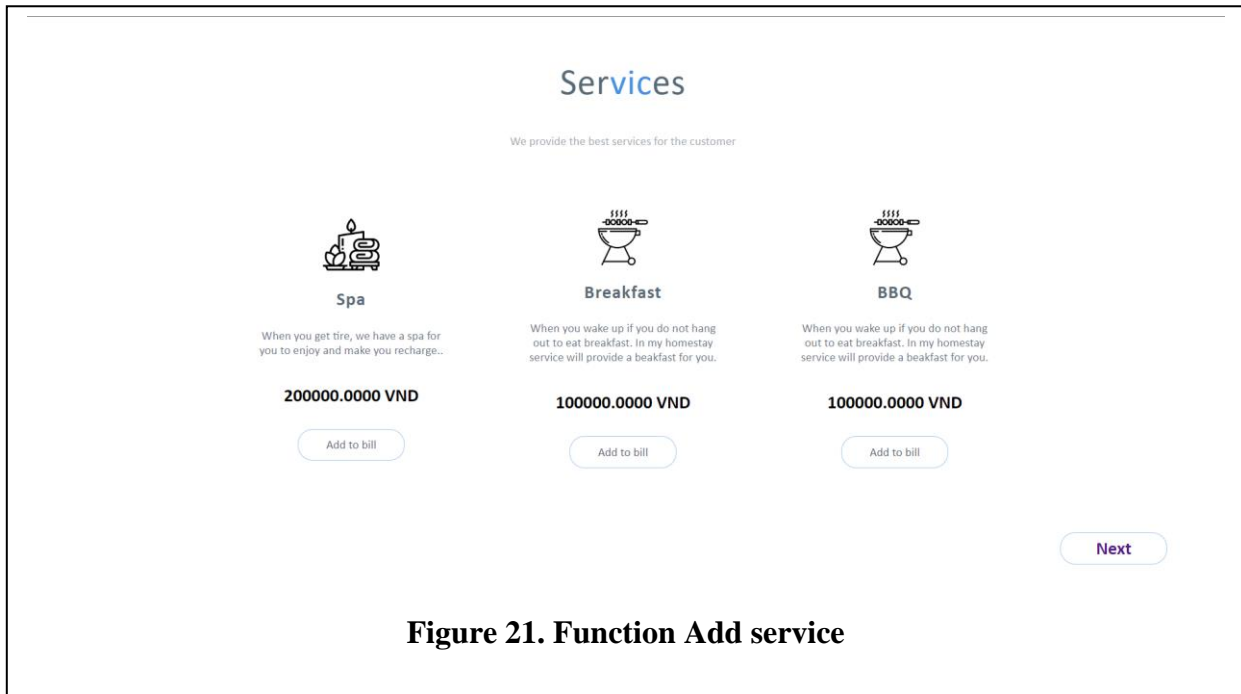


Figure 21. Function Add service

UC ID and Name:	Add Service		
Created By:		Date Created:	
Primary Actor:	User	Secondary Actors:	Admin
Trigger:	None		
Description:	<p>If users want to interact with any function in the system, they must log in to the system and done the booking.</p> <p>If the user wants to use service in homestay, they must register before logging in and booking</p>		
Preconditions:	The customer must have the internet to access		
Postconditions:	Display the corresponding page for each role.		
Normal Flow:	<p>1. Each stage to add service</p> <ul style="list-style-type: none"> + Login account + Booking room + Add service <p>2. Adding successfully:</p>		

	+ Case 1: You are customer, you can do the following: view the bill page +Case 2: You are admin, if the customer done booking and add service, you can exercise management rights on your site such as manage bill's user.
Alternative Flows:	None
Exceptions:	None
Priority:	High
Frequency of Use:	None
Business Rules:	None
Other Information:	None
Assumptions:	None

III.3.3 Function add transport

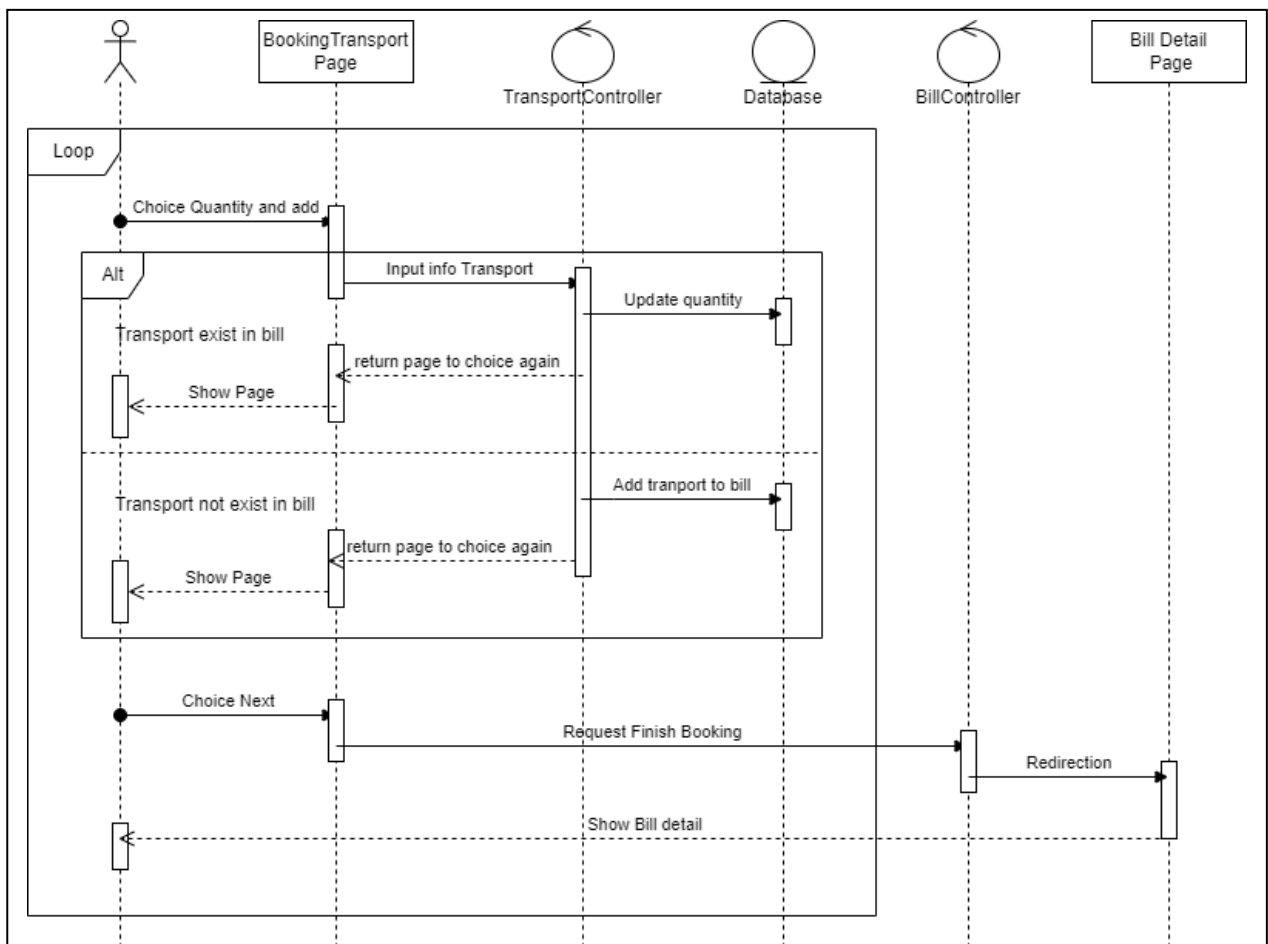


Figure 22. Sequence Diagram Add transport

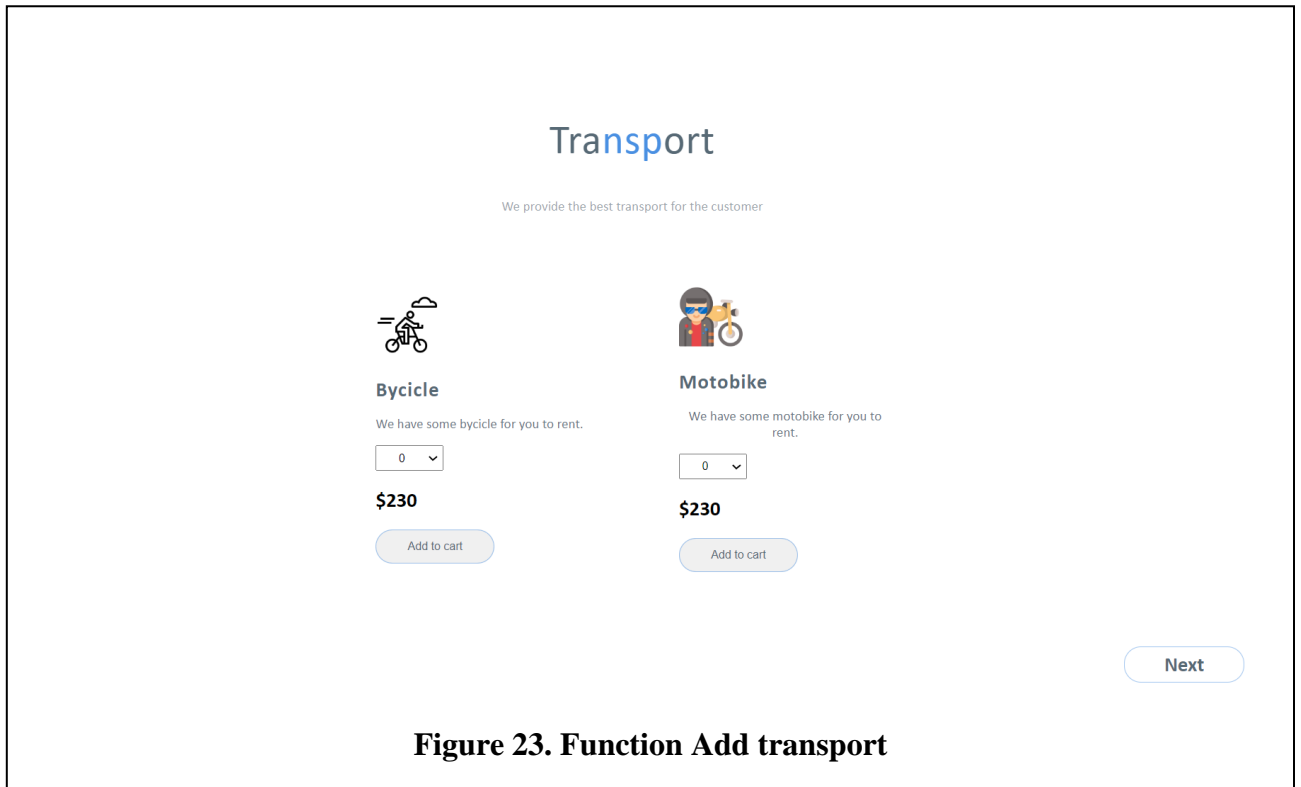


Figure 23. Function Add transport

UC ID and Name:	Add transport		
Created By:		Date Created:	
Primary Actor:	User	Secondary Actors:	Admin
Trigger:	None		
Description:	<p>If users want to interact with any function in the system, they must log in to the system and done the booking.</p> <p>If the user wants to use service in homestay, they must register before logging in and booking</p>		
Preconditions:	The customer must have the internet to access		
Postconditions:	Display the corresponding page for each role.		
Normal Flow:	<p>1. Each stage to add service</p> <p>+ Login account</p> <p>+ Booking room</p> <p>+ Click next button in service page</p> <p>+ Add transport</p>		

	<p>2. Adding successfully:</p> <p>+ Case 1: You are customer, you can do the following: view the bill page</p> <p>+Case 2: You are admin, if the customer done booking and add transport, you can exercise management rights on your site such as manage bill's user.</p>
Alternative Flows:	None
Exceptions:	None
Priority:	High
Frequency of Use:	None
Business Rules:	None
Other Information:	None
Assumptions:	None

III.4 System feature Homepage

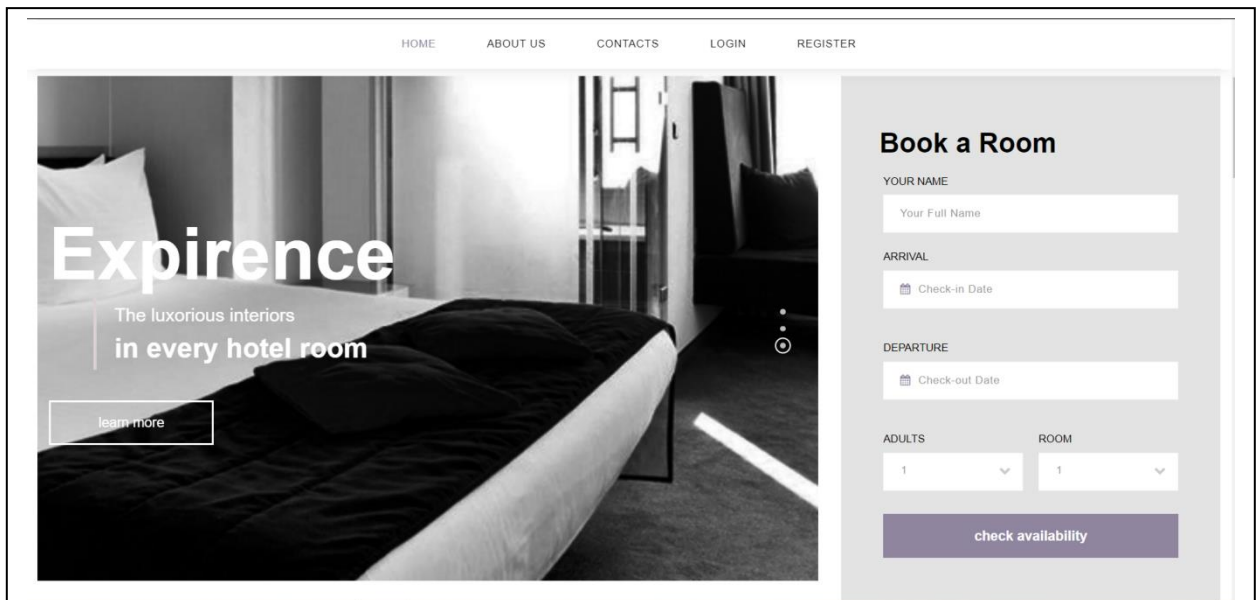


Figure 24. Home page

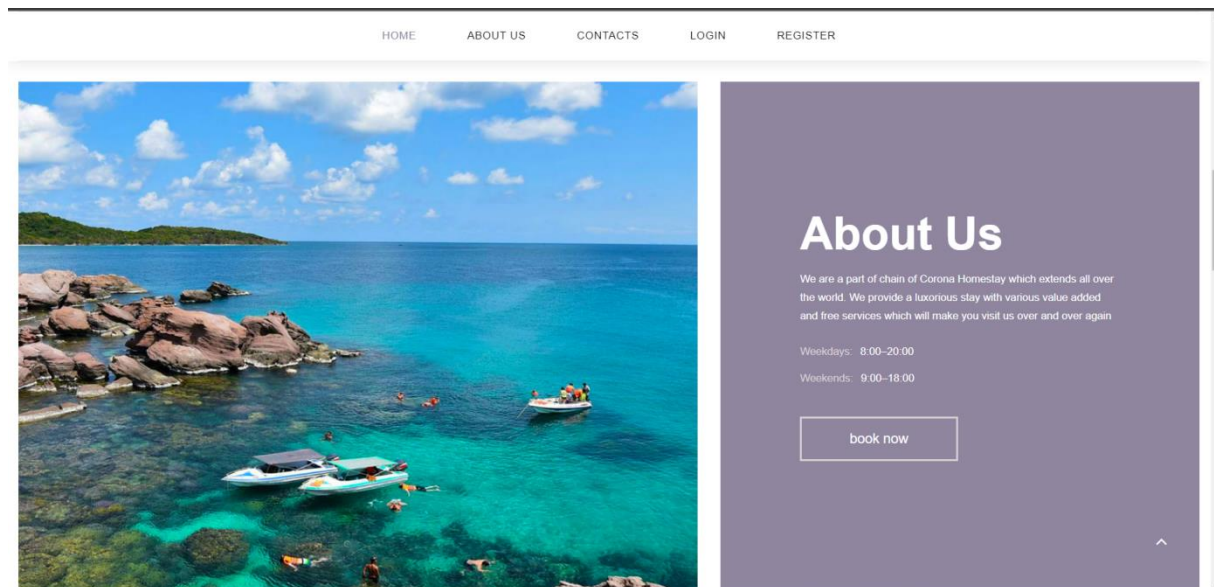


Figure 25. Home page

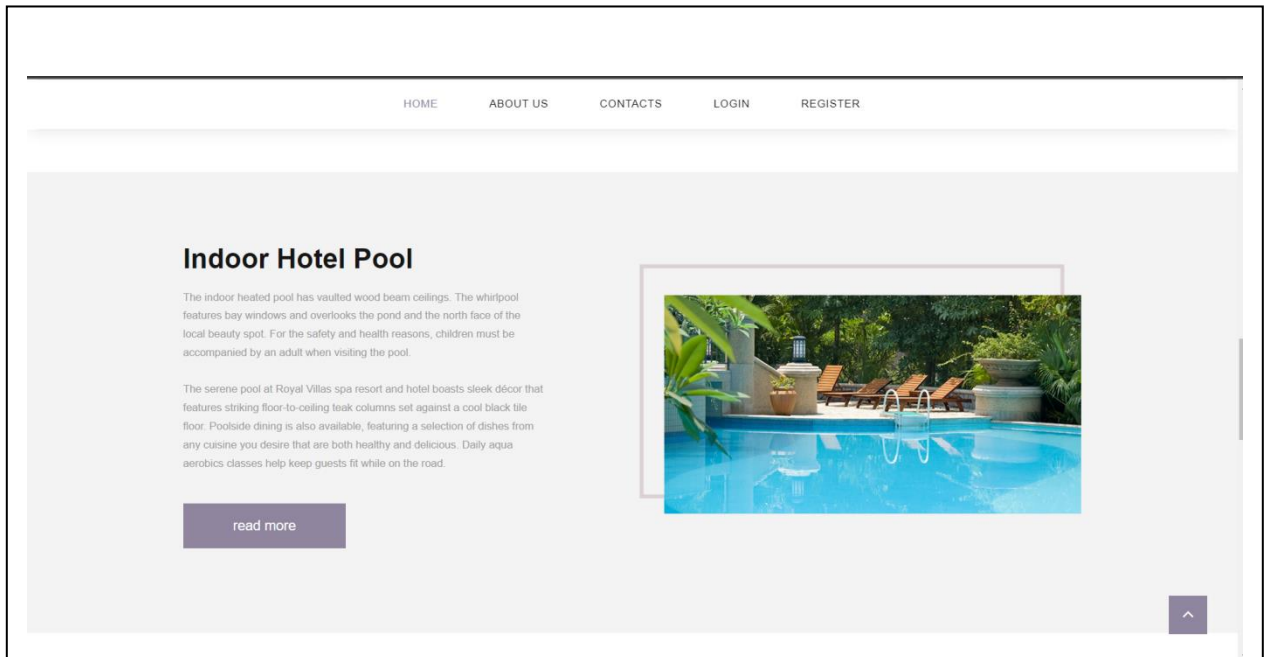


Figure 26. Home page

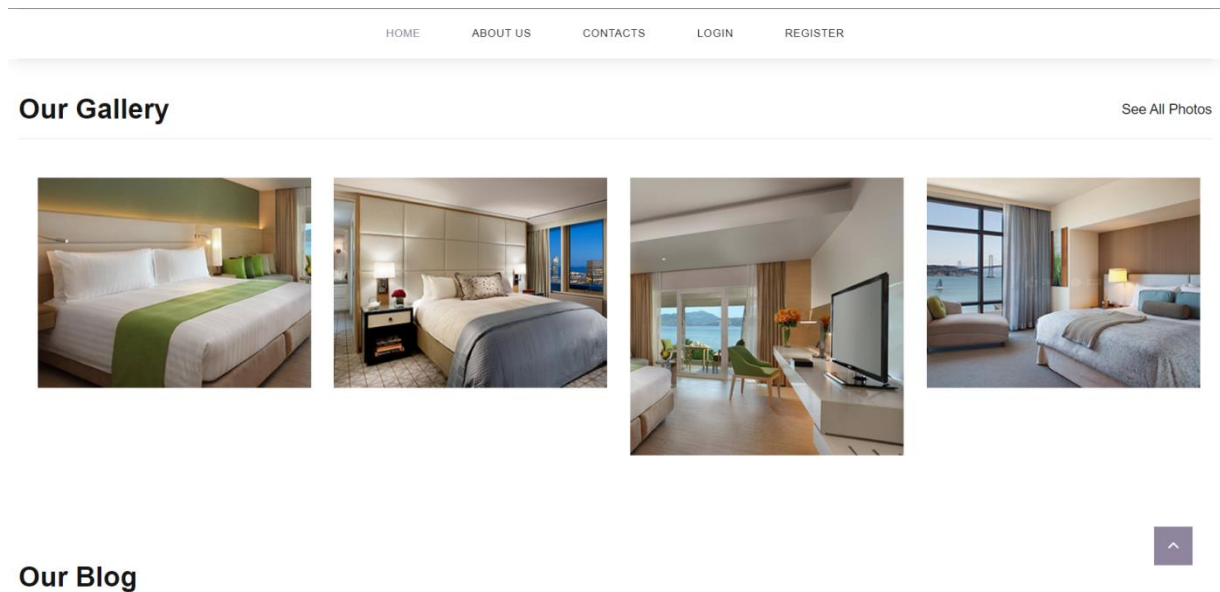



Figure 27. Home page

UC ID and Name:	Home page		
Created By:		Date Created:	
Primary Actor:	User	Secondary Actors:	Admin
Trigger:	None		
Description:	In home page the user can view the room and get information of the homestay.		
Preconditions:	The customer must have the internet to access		
Postconditions:	Display the corresponding page for each role.		
Normal Flow:	None		
Alternative Flows:	None		
Exceptions:	None		
Priority:	High		
Frequency of Use:	None		
Business Rules:	None		
Other Information:	None		
Assumptions:	None		

[HOME](#)
[ABOUT US](#)
[COMMENT](#)
[HISTORY](#)
[TRONG AN](#)
[LOGOUT](#)



Bill Details

Complete your purchase by providing your Bill details

Customer Name

Number Phone

Cashier

Order summary

Service	Start Day	End Day	Quantity	Price
305	7/15/2022 12:00:00 AM	7/16/2022 12:00:00 AM	Single Room	200
Spa	7/15/2022 12:00:00 AM	7/16/2022 12:00:00 AM	1	200000
Bicycle	7/15/2022 12:00:00 AM	7/16/2022 12:00:00 AM	2	60000
Motorcycle	7/15/2022 12:00:00 AM	7/16/2022 12:00:00 AM	3	150000
Total				770200VND

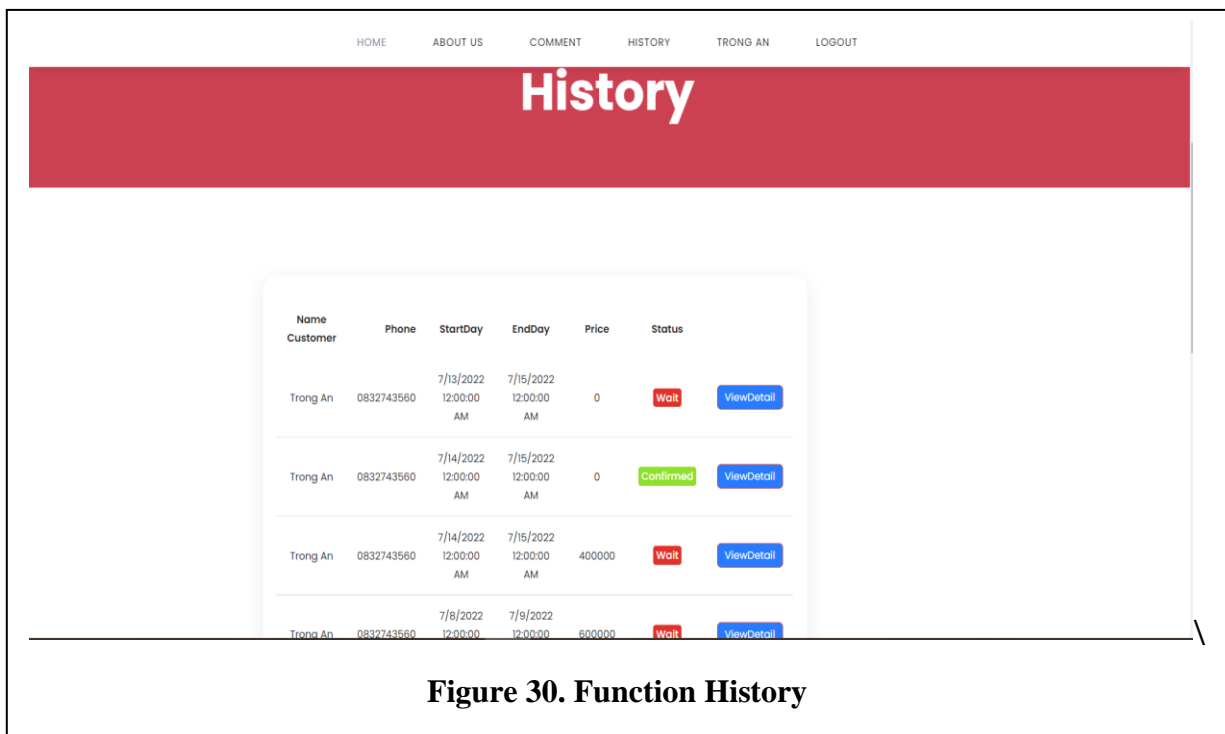
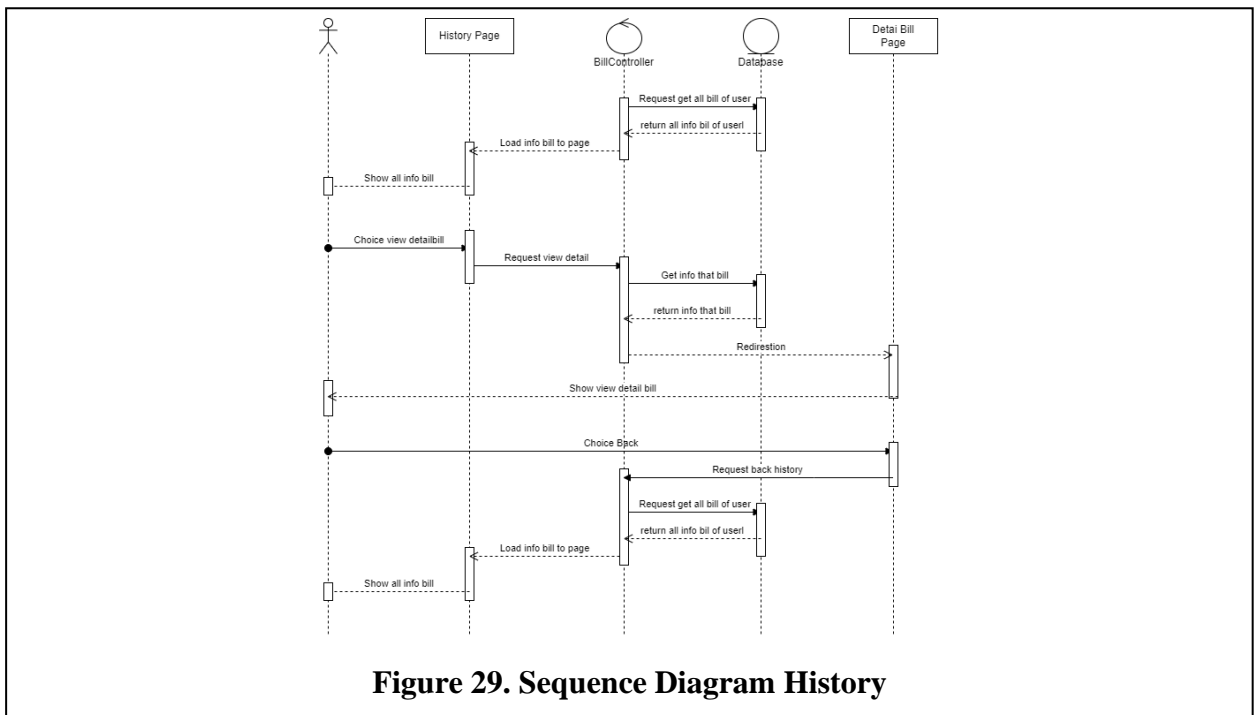
[CHECK OUT](#)

Figure 28. View bill

III.5 System Feature View Bill

UC ID and Name:	View Bill		
Created By:		Date Created:	
Primary Actor:	User	Secondary Actors:	Admin
Trigger:	None		
Description:	When finished book homestay, you can view your detail bill		
Preconditions:	The customer must have the internet to access		
Postconditions:	Display the corresponding page for each role.		
Normal Flow:	Each stage view detail bill: 1. Book homestay 2. Finish booking 3. The system will show the bill		
Alternative Flows:	None		
Exceptions:	None		
Priority:	High		
Frequency of Use:	None		
Business Rules:	None		
Other Information:	None		
Assumptions:	None		

III.6 System feature history



UC ID and Name:	View Bill		
Created By:		Date Created:	
Primary Actor:	User	Secondary Actors:	Admin
Trigger:	None		
Description:	When finished book homestay, you can view your history that you have booked.		
Preconditions:	The customer must have the internet to access		
Postconditions:	Display the corresponding page for each role.		
Normal Flow:	Each stage view history: <ol style="list-style-type: none"> 1. Booking success. 2. Go to the history page. 		
Alternative Flows:	None		
Exceptions:	None		
Priority:	High		
Frequency of Use:	None		
Business Rules:	None		
Other Information:	None		
Assumptions:	None		

III.7 System Feature Comment

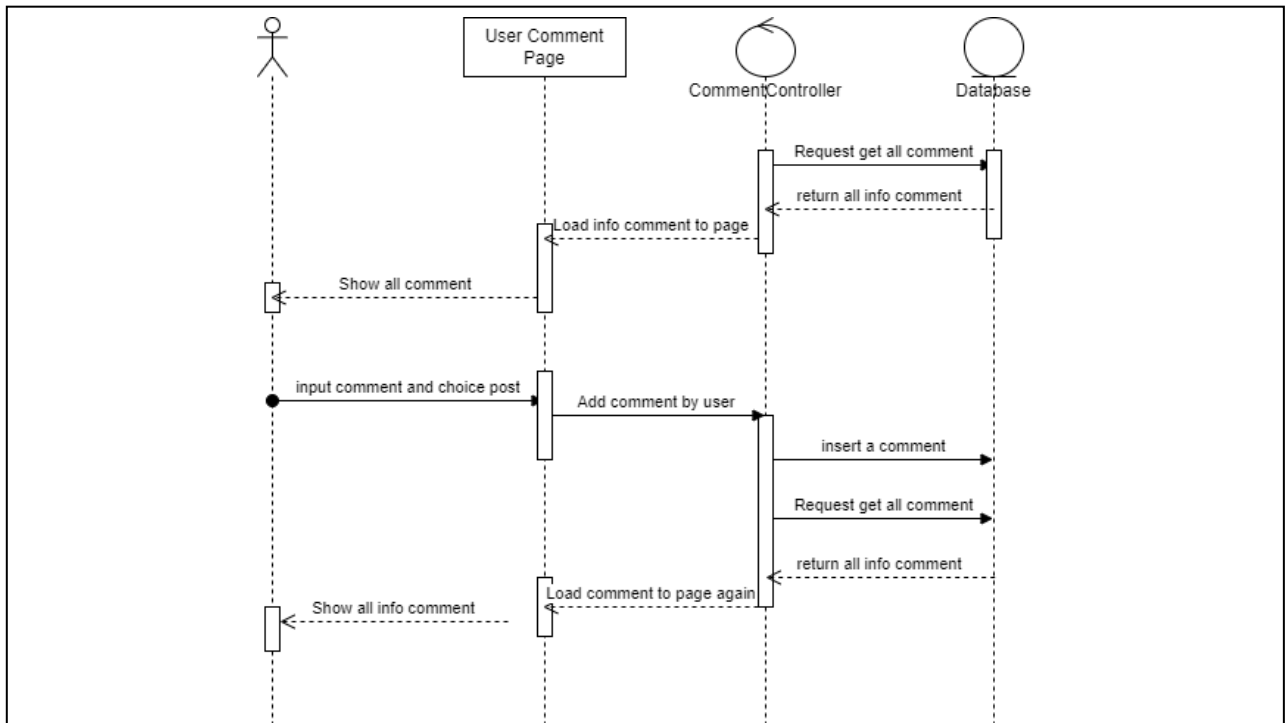


Figure 31. Sequence Diagram User's comment

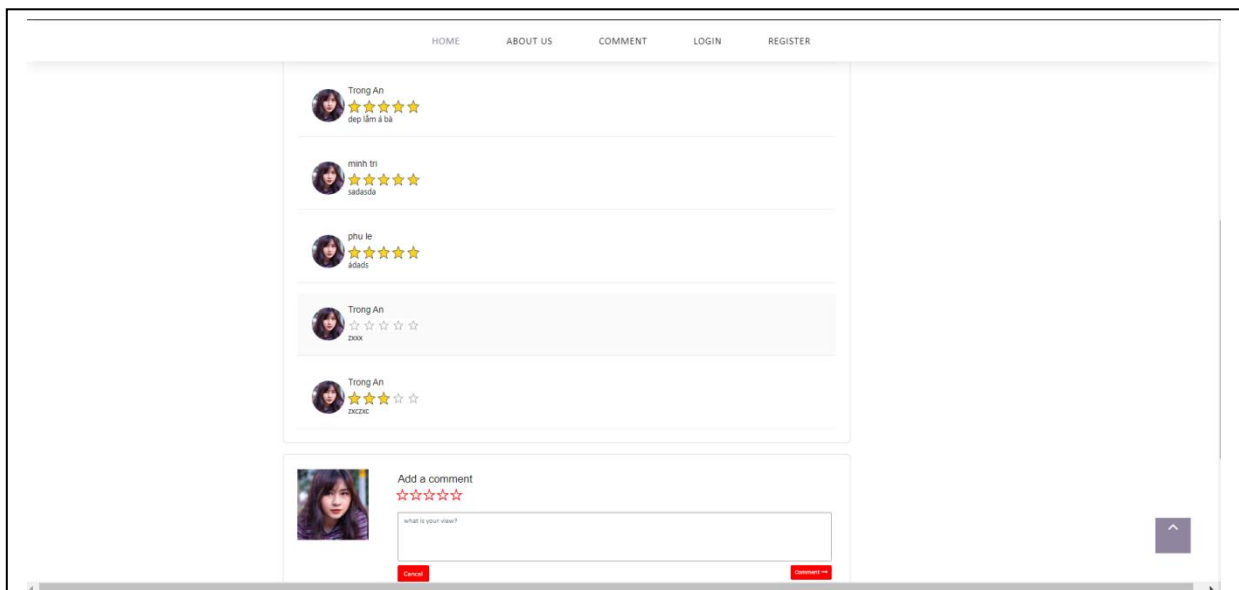
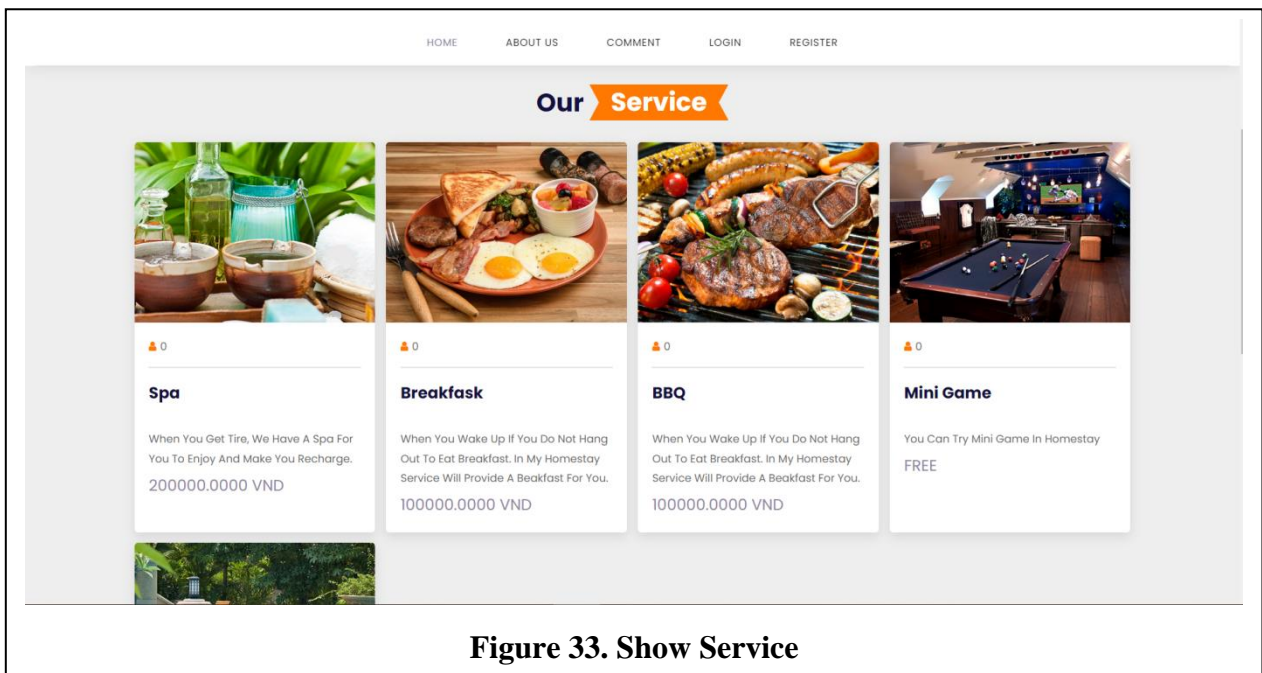


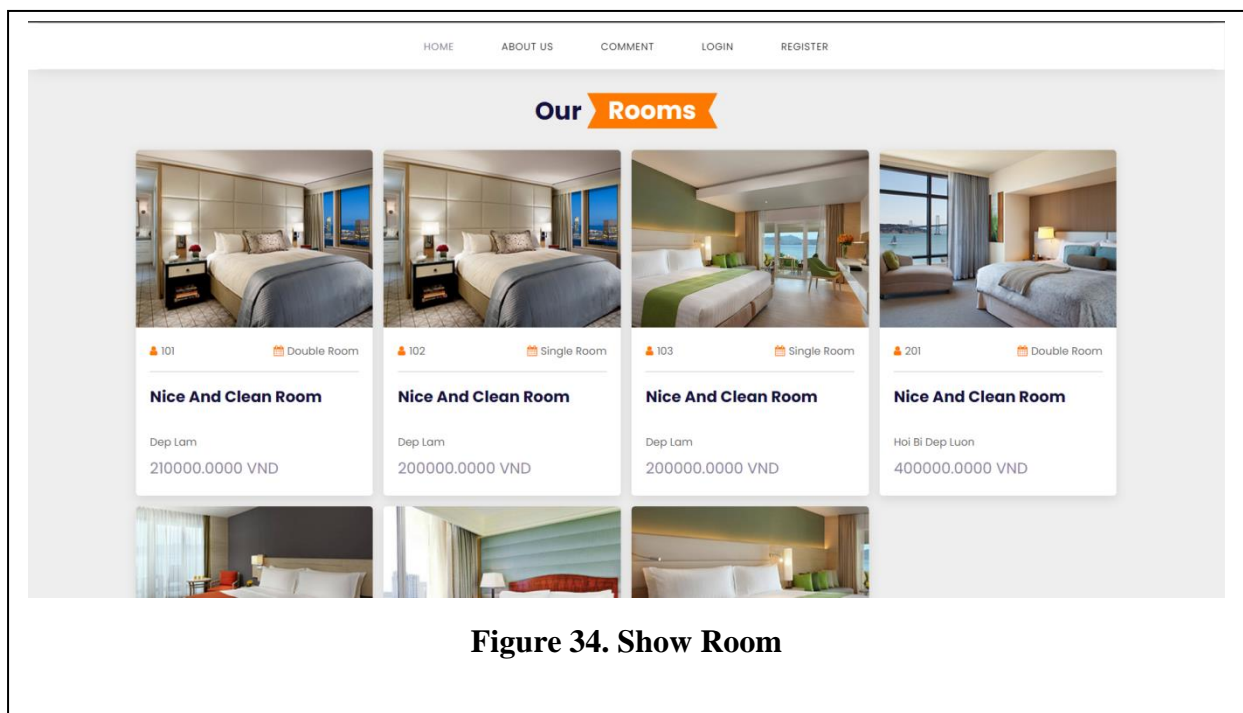
Figure 32. Function User's comment

UC ID and Name:	View Bill		
Created By:		Date Created:	
Primary Actor:	User	Secondary Actors:	Admin
Trigger:	None		
Description:	The user can comment any to rate the homestay.		
Preconditions:	The customer must have the internet to access		
Postconditions:	Display the corresponding page for each role.		
Normal Flow:	Each stage to comment: <ol style="list-style-type: none"> 1. Go to the comment page 2. Enter your text 3. Rate the star that you want 4. And submit your comment 		
Alternative Flows:	None		
Exceptions:	None		
Priority:	High		
Frequency of Use:	None		
Business Rules:	None		
Other Information:	None		

III.8 Feature Service



III.9 Feature Room



IV. Data requirement

There are many fields in many forms in which user have to put some data. If you just not give any entry or any text in some kind of fields then it won't allow because of that, our data is stored very neatly and all the required fields of database won't be blank.

IV.1 Logical Data Model

The Logical Data Model is used to define the structure of data elements and to set relationships between them. The logical data model adds further information to the conceptual data model elements. The advantage of using a Logical data model is to provide a foundation to form the base for the Physical model. However, the modeling structure remains generic.

IV.2 Data Dictionary

<none>

IV.3 Reports

<none>

IV.4 Data Acquisition, Integrity, Retention, and Disposal

<none>

V.External Interface Requirements

About the external interface of the application, the interface has a reasonable layout and colors, making it easy for users in a short time to use, the application design can be installed on many platforms, can be interoperable with other applications.

V.1 Software Interfaces

The application will use Microsoft SQL to store data such as history of booking, information of user, ...

V.2 Hardware Interfaces

The application will have the following interfaces:

- The home page interface displays homestay, and the can booking at the home page, the user want to view detail of the rooms, they can switch to the room page to get more knowledge.
- Login, register interface to log in to an account or register an account when having an account, the user can order food.

- History that the user can view the history detail booking that include the bill
- Promotion interface displays promotional information of homestay.
- The profile interface updates user information.

V.3 Communications Interfaces

If the user does not want to create a new account right at the application. To create an account, the user needs to provide full name account information. name, email address, phone number, address, in addition, the user needs to provide information truly.

VI. Quality Attribute

VI.1 Security

We believe the security of your information is a serious issue and we are committed to protecting the information we receive from you. We take precautions to protect your information. We use security measures to protect against the loss, misuse or alteration of the information under our control. When you submit sensitive information via mobile application, your information is protected both online and offline. Whenever you enter sensitive information on our forms, the information is encrypted using MD5 and transmitted to us in a secure way. While we use encryption to protect your sensitive information transmitted online, we also protect your information offline. The mobile/servers in which we store personally identifiable information are kept in a secure environment. We will retain personal information only as long as our business needs require. We will then destroy or render unreadable any such information upon disposal. However, we do not guarantee that unauthorized access will never occur. Users who have registered to app mobile agree to keep their password in strict confidence and not disclose such password to any third party.

VI.2 Safety

Your booking will be confirmed by admin.

Your booking will be confirmed in real time and the homestay will get your booking right away.

No middle-man, no confusing call-center, no over-promises. This is just between you and your chosen homestay.

VII. Internationalization and Localization Requirements

Requirements for internationalization and localization Ensure that room are suited for the nation and nation, culture, and that they are easy to use in the nation and nation. This program allows clients to select rooms from homestay in their home country as well as

other parts of the world. The application must meet certain fundamental internationalization standards. Region, language, symbols used and character sets, first name order, time zone, international rules and regulations, cultural and political concerns, tourism offered by legally registered establishments are all resolved through localization.

VIII. Other Requirements

More multilingual development is required, as well as the use of new technologies to reach the present market and the development of more add-on features to reproduce the project model.