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ITS570 – OBJECT ORIENTED DESIGN AND IMPLEMENTATION

Software Design Document for NurHomestay Booking System

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1. Introduction

1.1 Purpose

The purpose of the Software Design Document (SDD) is to provide a detailed design description of the requirement for project Homestay Reservation System (HRS). This allows full understanding of what is to be expected from the newly introduced built system and how the system will work. Thus, a clear understanding and well-function system meets the requirements needed from ideal developed software for the end user to the development of the project's future phases. The system would be designed based on the end user needs and the agreement made in System Requirement Specification (SRS).

The target audience of the document would be the project manager, system analyst, programmer and other team project members with the intention of referencing and reviewing the document's details. The document is to describe the specifications of the project and the approaches that have been implemented. In the end, the document will have a good picture of the structure that is being designed. Hence, this document can be used as a reference to understand the flow of the system. Several modeling have been described in the documentation including Use Case Diagram, Use Case Description, Activity Diagram, Domain Class Diagram and System Sequence Diagram.

1.2 Scope

The system, known as NurHomestay Booking System (NBS), was proposed by Encik Ghafar to receive online booking from the customer and save all data in the database instead of his current approach, the manual file-based system. The system could also be used by customers to see availability of homestay based on the date and view condition of the homestay. Customers also could use the system to view the date that they have booked, cancel booking, update booking by creating an account to fully experience the module built.

Every staff cannot be an admin and an admin is a staff. Staff can only view his/her profile only, view schedule reservation and manage branches while admin gain privileges to manage staff.

The main goal for the system is to help the owner in managing his business especially on customer booking online and managing branches. Other than to organize the day-to-day operations, it would also reduce data redundancy or data lost due to human error. This system should be able to help the homestay business to increase its profit and attention to attract more customers in the future.

1.3 References

Satzinger, J. W., Jackson, R. B., & Burd, S. D. (2007). **Systems analysis and design in a changing world**. Boston, MA: Thomson Course Technology.

Fakhroutdinov, K., 2021. *UML Deployment Diagrams Overview, Common Types Of Deployment Diagrams - Manifestation Diagram, Specification And Instance Level Deployment Diagram..* [online] Uml-diagrams.org. Available at: <https://www.uml-diagrams.org/deployment-diagrams-overview.html>

Logi Report. 2021. *3-Tier Architecture: A Complete Overview - Logi Report*. [online] Available at: <https://www.jinfonet.com/resources/bi-defined/3-tier-architecture-complete-overview>

1.4 Document Structure

This document contains:

- Chapter 1: Discuss the introduction to the system.
The purpose of this chapter is to introduce the system that will be developed. This chapter contains several parts namely introduction, purpose, scope, references, document structure, and definitions, acronyms and abbreviations.
- Chapter 2: Architecture of the system.
This chapter explains the architectural description, the design rationale, the domain class diagram and the design class diagram.
- Chapter 3: Design of the data
It is also identified as a relational database for this project. The database description and data dictionary will be explained in this chapter.
- Chapter 4: Package Diagram
Explains the package diagram with the package function and package content of the System.
- Chapter 5: Class Method Description
Contain explanation of class description with the attributes and methods class
- Chapter 6: Human Interface Design
This section will contain human interface design that focuses on how the user views the system and how the user communicates with the system. It's also.
- Chapter 7: Matrix Traceability Criterion
In this section, it will clarify all the functional requirements of the SRS.
- Chapter 8: Appendices
Contains all extensive class diagrams and multilayer diagrams have been used as supplementary sources.

1.5 Definitions, Acronyms and AbbreviationsTable 1 *Acronyms*

Acronyms	Definition
DCD	Domain Class Diagram
NBS	NurHomestay Booking System
HRS	Homestay Reservation System
SDD	Software Design Document
SDLC	Software Development Life Cycle
SRS	Software Requirement Specification

1.6 System Overview



Figure 1.1 Use Case Diagram for NBS

This system consists of three(3) users which are customer, staff and admin. Customer is mainly on booking a homestay and making payment while the staff oversee the reservation made based on homestay and manage branches. The admin can do most of the staff and gain authority to manage staff profiles, either create, view and delete.

2. System Architecture

2.1 Architectural Description

Network Diagram

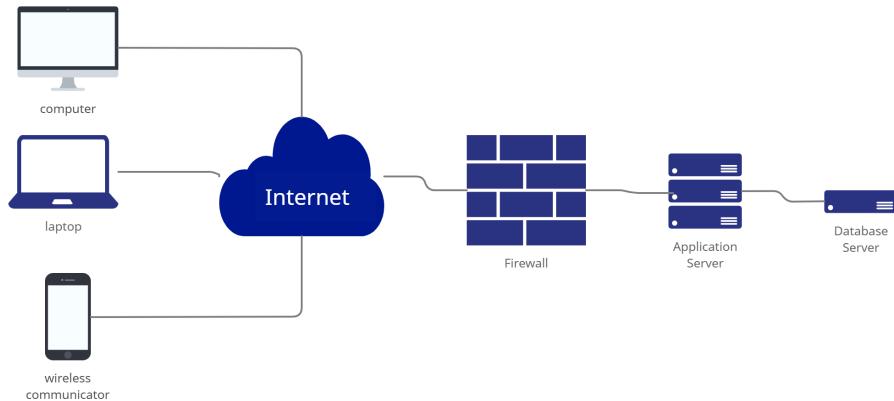


Figure 2.1.1 Network Diagram for NBS

Based on the above figure, this application is deployed across networks and computers. The database server used is Oracle Database 11g Express Edition and Sql Developer. The Application Server is Tomcat v9.0.41. This system is able to be used in computer, laptop and phone screens.

UML Deployment Diagram

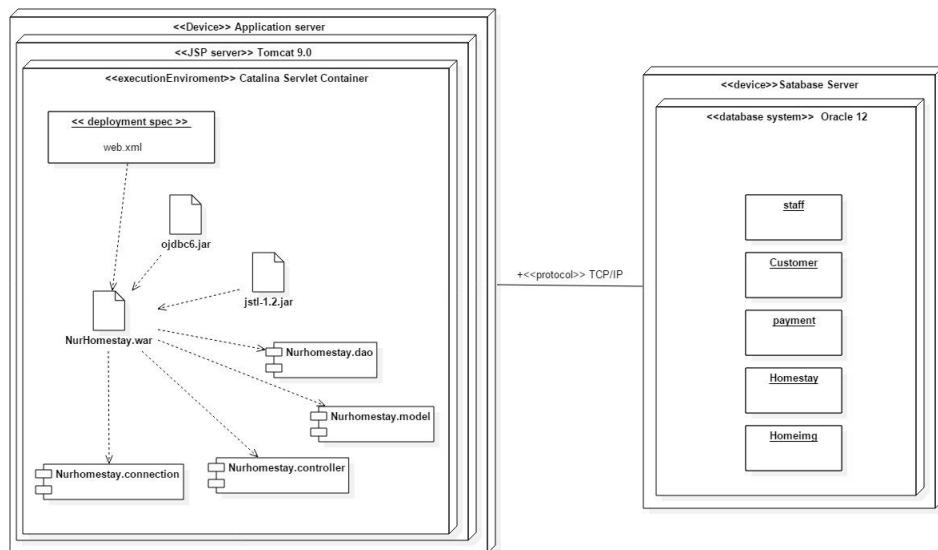


Figure 2.1.2 UML Deployment Diagram for NBS

This is the UML used from the Eclipse application. It contains Java JRE, connection file, controller, data access and model files.

Three Layer Architecture

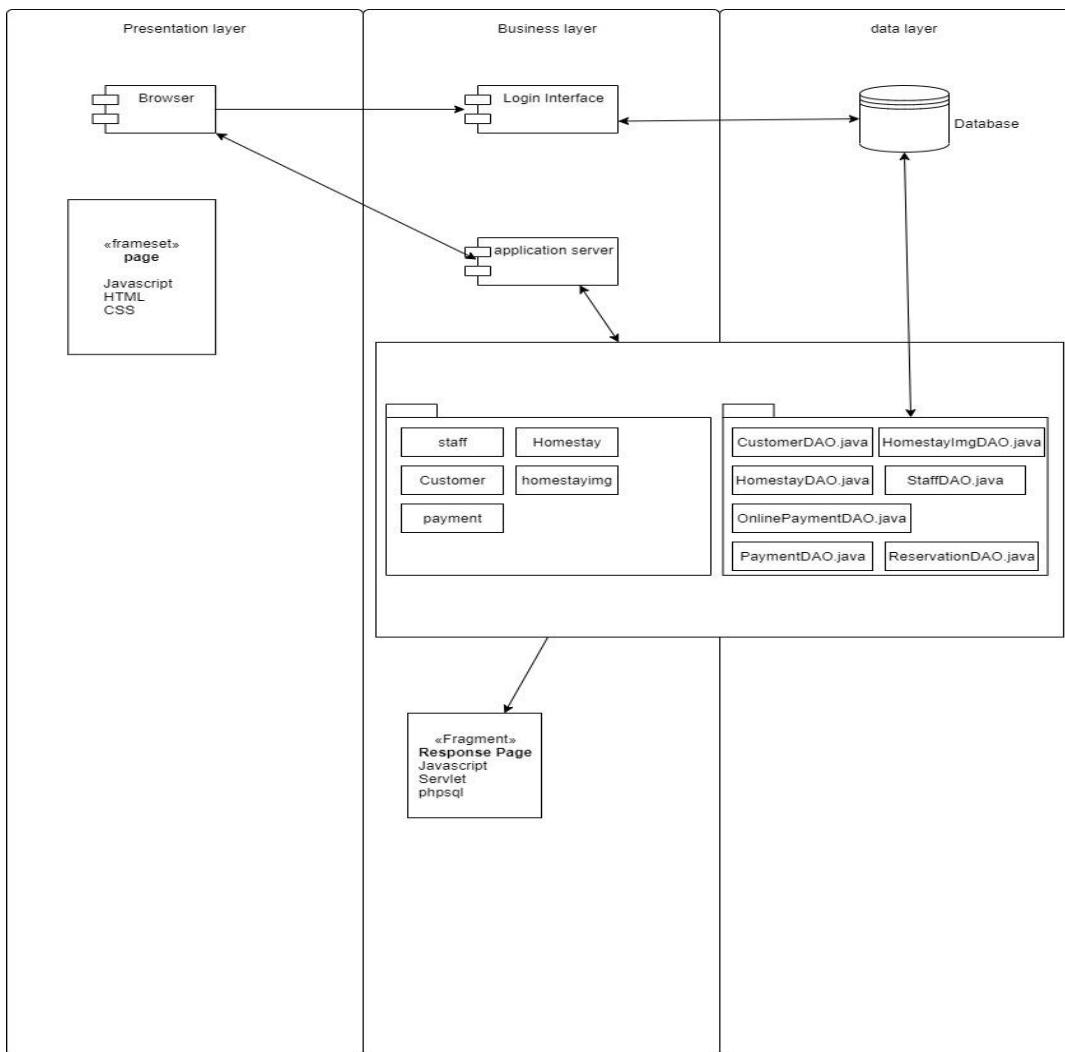


Figure 2.1.3 Three Layer Architecture for NBS

Users should login first to experience the view built according to type of users. The website is build based on MVC approach

The main purpose of designing this three layer architecture design system is to gain a general understanding of how and why the system was decomposed and how the individual parts work together.

2.2 Design Rationale

The chosen design for web based applications which is required for NBS project is three-layers architecture. The three-tier system is more scalable, robust and flexible. In addition, they can integrate data from multiple sources. It is also more secure than two-layers of architecture because the client is not allowed to communicate with the database directly. However, the issue that arises from using three-layers architecture is that it is complex to build and maintain the system and results in performance loss whenever the system is run on the Internet.

Next, based on comparison towards two-layers architecture and three-layers architecture, the former has a problem with decrease of performance when a lot of users use the system. It is found out that it is less secure because users can communicate with the database directly. Last but not least, the two-layers architecture runs slower than three-layers architecture.

2.3 Domain Class Diagram

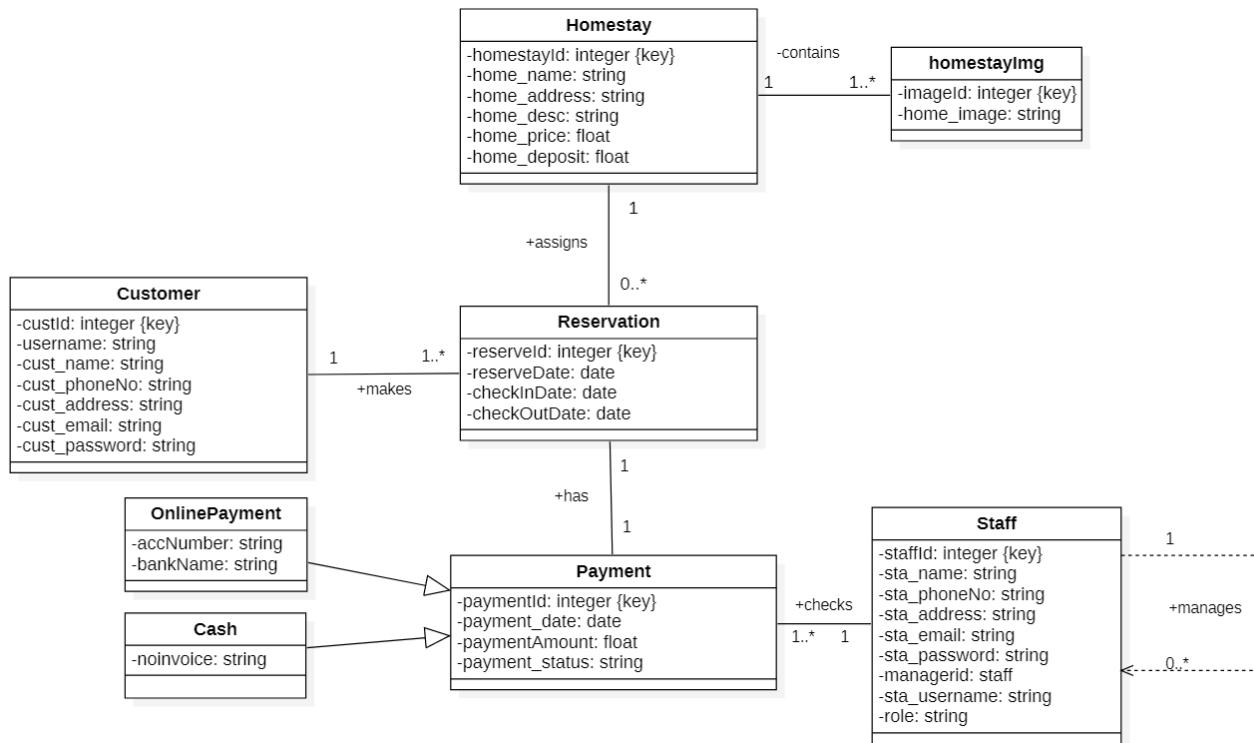


Figure 2.3 Domain Class Diagram for NBS

There are five main entities in NBS. The entities are staff, Customer, Payment, Homestay and homestayimg. Next, there is one inheritance which is OnlinePayment. They also have a recursive method where not all staff is admin while admin can be staff.

2.4 Design Class Diagram

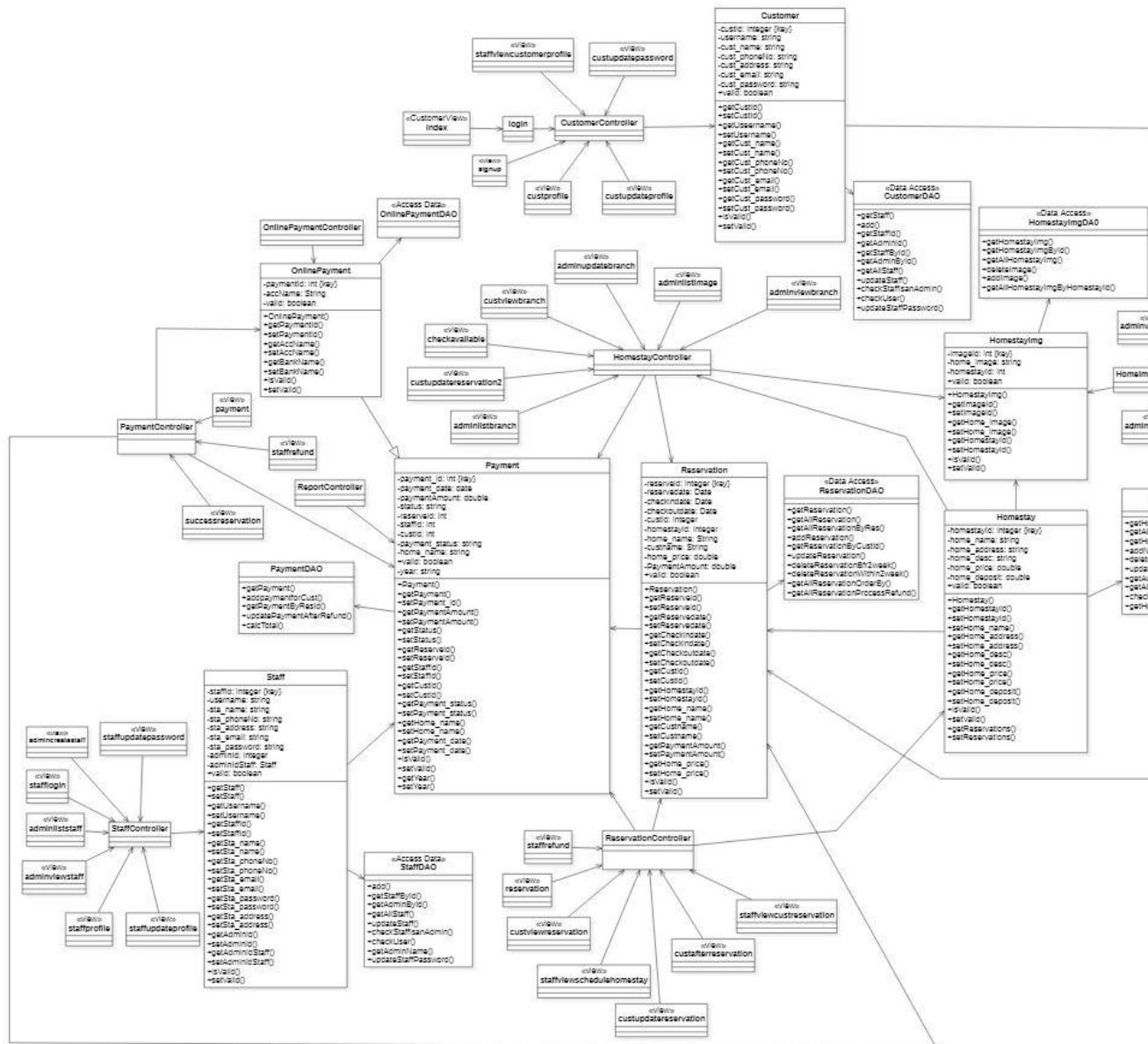


Figure 2.4 Design Class Diagram for NBS

Diagram above explains the context of the method in respective classes.

3. Data Design

3.1 Database Description

NBS used oracle sql developer as our database. These are the business rules that are applied in the database.

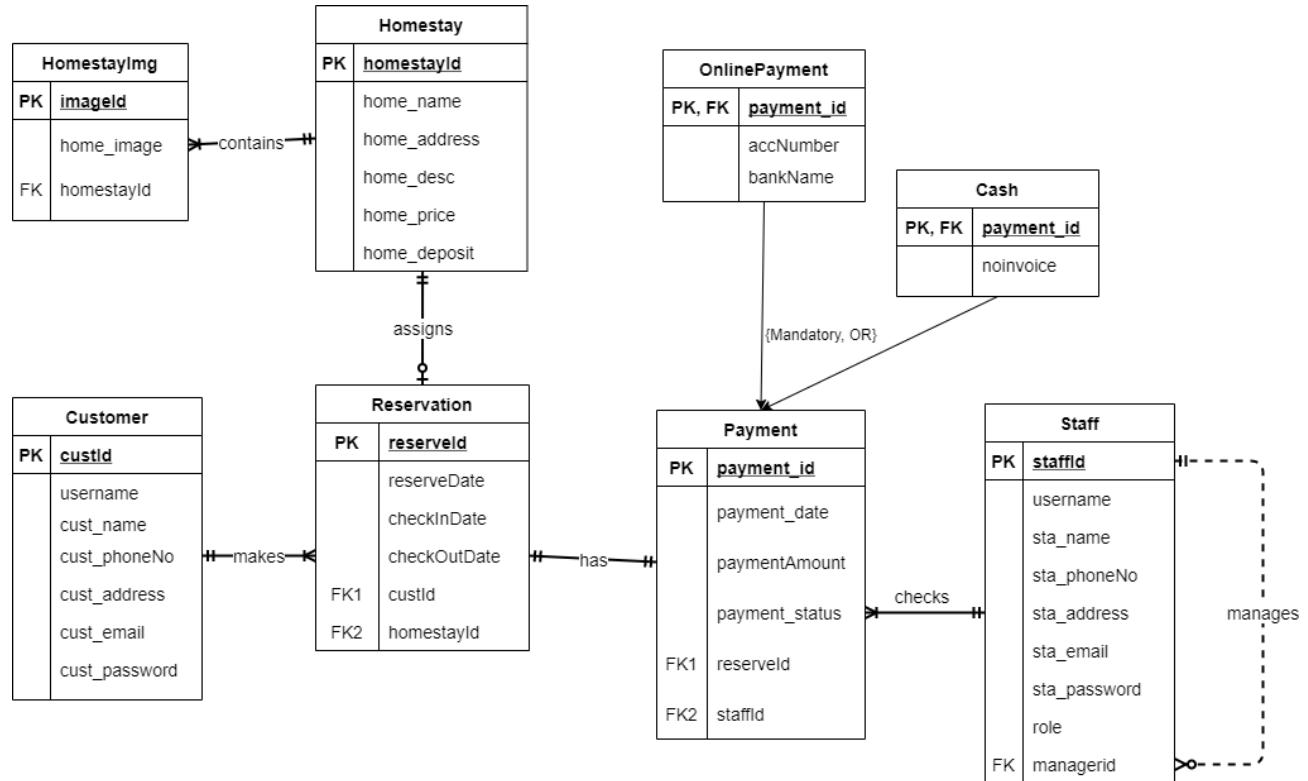


Figure 3.1 Entity Relationship Diagram for NBS

- ❑ Every customer should make a reservation according to only available homestays based on check-in and check-out date.
- ❑ Each reservation must be paid online from a third-party.
- ❑ Each homestay must have at least one image.
- ❑ Staff view reservation made for day-to-day operation
- ❑ Staff oversee the payment status as there may be the need to refund the payment exclude deposit due to the customer cancelling their reservation.
- ❑ Every staff will be managed by the manager.

3.2 Data Dictionary

CUSTOMER		Type	Additional Type Information	Default Value	M	U
Attribute Name	Description	Type	Additional Type Information	Default Value	M	U
custId	Id of each customer	Number	10	-	Y	Y
username	Username of customer	Varchar2	max = 50 Not Null	-	Y	N
cust_name	Name of customer	Varchar2	max = 200	-	Y	N
cust_phoneNo	Phone Number of customer	Varchar2	max = 10	-	Y	N
cust_address	Address of customer	Varchar2	max = 350	-	Y	N
cust_email	Email of customer	Varchar2	max = 100	-	Y	N
cust_password	Password of customer	Varchar2	max = 12	-	Y	N

STAFF		Type	Additional Type Information	Default Value	M	U
Attribute Name	Description	Type	Additional Type Information	Default Value	M	U
staffId	Id of each staff	Number	38	-	Y	Y
sta_name	Name of staff	Varchar2	max = 50	-	Y	N
sta_phoneNo	Phone Number of staff	Varchar2	max = 50	-	Y	N
sta_address	Address of staff	Varchar2	max = 25	-	Y	N
sta_email	Email of staff	Varchar2	max = 60	-	Y	N
sta_password	Password of staff	Varchar2	max = 12	-	Y	N
username	Username of staff	Varchar2	max = 50	-	Y	N
managerid	Id for each admin	Number	38	-	Y	N
role	Role for staff	Varchar2	max = 20, Manager or Staff	-	Y	N

RESERVATION		Type	Additional Type Information	Default Value	M	U
Attribute Name	Description	Type	Additional Type Information	Default Value	M	U
reserveld	Id of each reservation	Number	38	-	Y	Y
reserveDate	Date of reservation	Date	-	sysdate	Y	N
checkInDate	Check in date	Date	-	-	Y	N
checkOutDate	Check out date	Date	-	-	Y	N

PAYMENT						
Attribute Name	Description	Type	Additional Type Information	Default Value	M	U
payment_id	Id of each payment	Number	38	-	Y	Y
payment_date	Date of payment	Date	-	sysdate	Y	N
paymentAmount	Amount charge	Number	8,2	-	Y	N
payment_status	Payment status	Varchar2	max = 20	-	Y	N

ONLINEPAYMENT						
Attribute Name	Description	Type	Additional Type Information	Default Value	M	U
payment_id	Id of each payment	Number	38	-	Y	Y
accNumber	User account bank number	Varchar2	max = 20	-	Y	N
bankName	Name of bank	Varchar2	max = 50	-	Y	N

CASH						
Attribute Name	Description	Type	Additional Type Information	Default Value	M	U
payment_id	Id of each payment	Number	38	-	Y	Y
noinvoice	Number of invoice	Varchar2	max = 20	-	Y	N

HOMESTAY						
Attribute Name	Description	Type	Additional Type Information	Default Value	M	U
homestayId	Id of each homestay	Number	10	-	Y	Y
home_name	Name of homestay	Varchar2	max = 150 Not null	-	Y	N
home_address	Address of homestay	Varchar2	max = 350	-	Y	N
home_desc	Description of customer	Varchar2	max = 450	-	Y	N
home_price	Price of homestay	Number	8,2	-	Y	N
home_deposit	Deposit of homestay	Number	8,2	-	Y	N

HOMESTAYIMG						
Attribute Name	Description	Type	Additional Type Information	Default Value	M	U
imageid	Id of each image of homestay	Number	38	-	Y	Y
home_image	Image of homestay	Varchar2	max = 50	-	Y	N

4. Package Diagram

4.1 Package Diagram

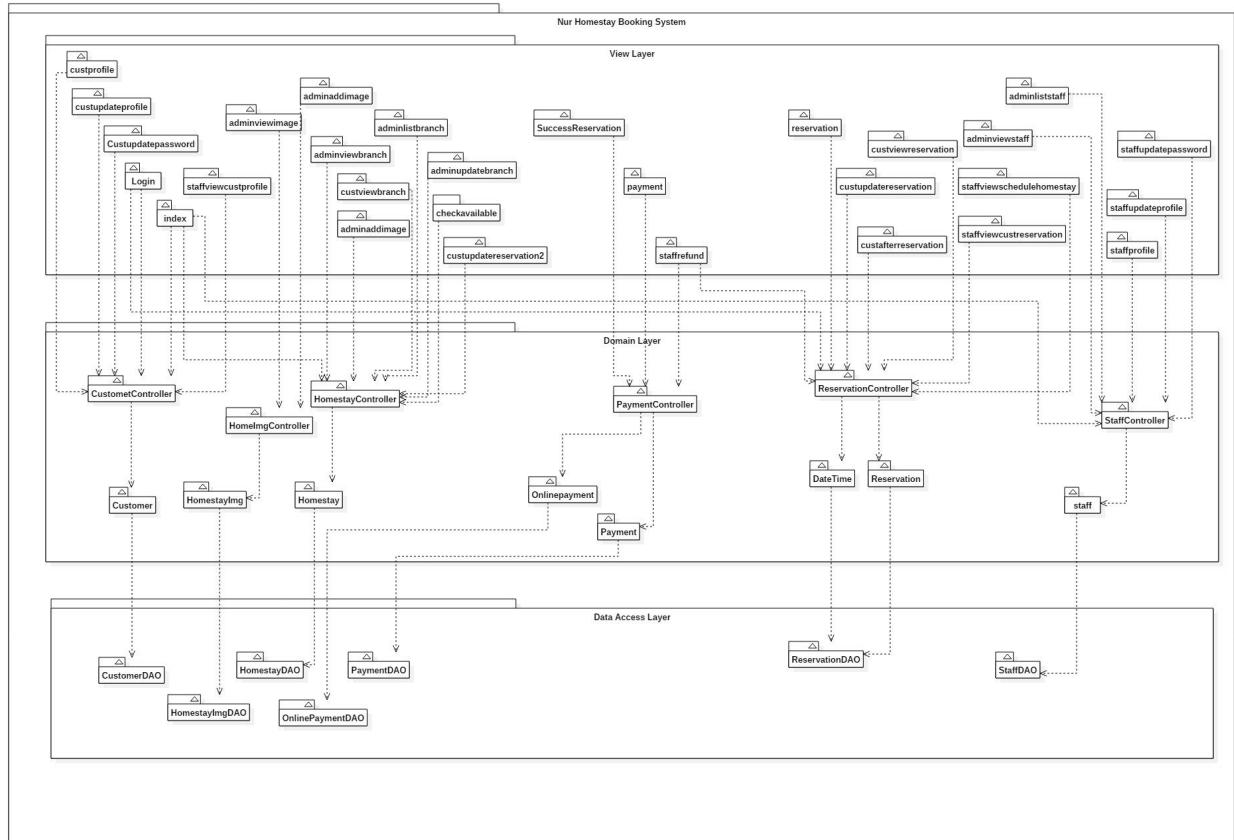


Figure 4.1 Package Diagram for NBS

Package diagram consists of a view layer, domain layer and data access layer in this project.

4.2 Package Functions

Table 4.1 Package functions

Package	Package Functions
View Layer (SDD_PKG_100)	<ul style="list-style-type: none"> • To display form • Display data and accepts input data • Edit and validate input data
Domain Layer (SDD_PKG_200)	<ul style="list-style-type: none"> • Process the business rules
Data Access Layer (SDD_PKG_300)	<ul style="list-style-type: none"> • Establish and maintain connection of database

4.3 Package Content

Table 4.2 Package Content

Package	Class ID	Class Name
View Layer (SDD_P_100)	SDD_NBS_101	index
	SDD_NBS_102	custprofile
	SDD_NBS_103	custupdateprofile
	SDD_NBS_104	custupdatepassword
	SDD_NBS_105	login
	SDD_NBS_106	staffviewcustprofile
	SDD_NBS_107	adminviewimage
	SDD_NBS_108	adminaddimage
	SDD_NBS_109	adminviewbranch
	SDD_NBS_110	custviewbranch
	SDD_NBS_111	adminlistbranch
	SDD_NBS_112	adminupdatebranch
	SDD_NBS_113	checkavailable
	SDD_NBS_114	custupdatereservation2

	SDD_NBS_115	SuccessReservation
	SDD_NBS_116	payment
	SDD_NBS_117	staffrefund
	SDD_NBS_118	reservation
	SDD_NBS_119	about
	SDD_NBS_120	custafterreservation
	SDD_NBS_121	custviewreservation
	SDD_NBS_122	adminliststaff
	SDD_NBS_123	admincreatetstaff
	SDD_NBS_124	staffviewschedulehomestay
	SDD_NBS_125	staffviewcustreservation
	SDD_NBS_126	staffprofile
	SDD_NBS_127	staffupdateprofile
	SDD_NBS_128	staffupdatepassword
	SDD_NBS_129	adminaddbranch
	SDD_NBS_130	adminlistimage
	SDD_NBS_131	custupdatereservation
	SDD_NBS_132	ribbib
	SDD_NBS_133	rumahInfo
	SDD_NBS_134	signup
	SDD_NBS_135	stafflogin
Domain Layer (SDD_P_200)	SDD_NBS_201	CustomerController
	SDD_NBS_202	HomestayController
	SDD_NBS_203	ReservationController
	SDD_NBS_204	PaymentController
	SDD_NBS_205	StaffController
	SDD_NBS_206	HomeImgController
	SDD_NBS_207	Customer
	SDD_NBS_208	Homestay

	SDD_NBS_209	HomestayImg
	SDD_NBS_210	Onlinepayment
	SDD_NBS_211	Payment
	SDD_NBS_212	Reservation
	SDD_NBS_213	Staff
Data Access Layer (SDD_P_300)	SDD_NBS_301	CustomerDAO
	SDD_NBS_302	ReservationDAO
	SDD_NBS_303	PaymentDAO
	SDD_NBS_304	OnlinePaymentDAO
	SDD_NBS_305	StaffDAO
	SDD_NBS_306	HomestayDAO
	SDD_NBS_307	HomestayImgDAO

5. Class Description

5.1 Class ID & NAME

Table 5.1 Class ID and name for each layer

Class ID & Name	Purpose
View Layer (SDD_P_100)	
SDD_NBS_101 index	<ul style="list-style-type: none"> 1. The main page for NurHomestay Booking System 2. Display form of check homestay availability
SDD_NBS_102 custprofile	<ul style="list-style-type: none"> 1. Display customer profile and detail after the customer signs up to the system.
SDD_NBS_103 custupdateprofile	<ul style="list-style-type: none"> 1. Display update profile form for the customer to fill in.
SDD_NBS_104 custupdatepassword	<ul style="list-style-type: none"> 1. Display update password form for customer to fill in.
SDD_NBS_105 login	<ul style="list-style-type: none"> 1. Display login form for customers to fill in their username and password to log in.
SDD_NBS_106 staffviewcustprofile	<ul style="list-style-type: none"> 1. Display customer profile and details that register to the system.
SDD_NBS_107 adminviewimage	<ul style="list-style-type: none"> 1. Display homestay image by branch ID.
SDD_NBS_108 adminaddimage	<ul style="list-style-type: none"> 1. Display form for admin to insert new image for particular branch.
SDD_NBS_109 adminviewbranch	<ul style="list-style-type: none"> 1. Display list of homestays that are available in the database.
SDD_NBS_110 custviewbranch	<ul style="list-style-type: none"> 1. Display list of homestay for customer.

SDD_NBS_111 adminlistbranch	1. Display list of homestay that has been created.
SDD_NBS_112 adminupdatebranch	1. Display update branch form for admin to update particular branch.
SDD_NBS_113 checkavailable	1. Display available homestay according to date check-in and check-out by the customer.
SDD_NBS_114 custupdatereservation2	1. Display update date reservation form for customers to under their checkin and checkout date, but this only works if the check in date is less than 2 week of booking date.
SDD_NBS_115 SuccessReservation	1. Display success reservation message and display information of homestay book by customer
SDD_NBS_116 payment	1. Display 3rd party payment gateway.
SDD_NBS_117 staffrefund	1. Display list of homestay booked by customer and refund button for staff to click if they want to address a refund.
SDD_NBS_118 reservation	1. Display reservation form for customer fill to reserve homestay
SDD_NBS_119 about	1. Display description and history of Nur Homestay Melaka.
SDD_NBS_120 custafterreservation	1. Display reservation list after the customer finishes making a reservation.
SDD_NBS_121 custviewreservation	1. Display reservation list for customers to view lates or past reservations.
SDD_NBS_122 adminliststaff	1. Display list of staff for admin.
SDD_NBS_123 admincreatetestaff	1. Display staff form.
SDD_NBS_124	1. Display update homestay form for admin and staff.

staffviewschedulehomestay	
SDD_NBS_125 staffviewcustreservation	1. Display list of homestay reservation book by customer.
SDD_NBS_126 staffprofile	1. Display staff profile and their details.
SDD_NBS_127 staffupdateprofile	1. Display staff update profile form to fill in.
SDD_NBS_128 staffupdatepassword	1. Display update password form for staff to fill in.
SDD_NBS_129 adminaddbranch	1. Display add branch form.
SDD_NBS_130 adminlistimage	1. Display list of branches' images.
SDD_NBS_131 custupdatereservation	1. Display customer search available date to update date
SDD_NBS_132 ribbib	1. Display Term and Conditions file
SDD_NBS_133 rumahInfo	1. Display details about homestay.
SDD_NBS_134 signup	1. Display customer registration form.
SDD_NBS_135 stafflogin	1. Display login page for staff and admin.
Domain Layer (SDD_P_200)	
SDD_NBS_201 CustomerController	<ul style="list-style-type: none"> 1. Collect data from the customer to create and update their account and login into the system. 2. Retrieve customer data to view their account and logout from

	<p>the system.</p> <ol style="list-style-type: none"> 3. Process to collect data for update and delete customer details.
SDD_NBS_202 HomestayController	<ol style="list-style-type: none"> 1. Collect data from the homestay to create and update their details and check available homestay in the system. 2. Retrieve homestay data to view and delete their details.
SDD_NBS_203 ReservationController	<ol style="list-style-type: none"> 1. Collect data from the form to create reservation and update reservation. 2. Retrieve homestay data to view and delete their details. 3. Retrieve homestay to check homestay availability based on customer check in and check out date.
SDD_NBS_204 PaymentController	<ol style="list-style-type: none"> 1. Collect data from the from to add payment details into the database. 2. Collect data from the form for the refund process. 3. Retrieve data from payment table in database for view.
SDD_NBS_205 StaffController	<ol style="list-style-type: none"> 1. Collect data from the homestay to create and update their details and login into the system. 2. Retrieve customer data to view and delete their account and logout from the system.
SDD_NBS_206 HomeImgController	<ol style="list-style-type: none"> 1. Retrieve data from the staff and manager input. 2. Manage the data of Staff either create, update or delete for staff details.
SDD_NBS_208 Customer	<ol style="list-style-type: none"> 1. To process, manipulate and store all the attributes.
SDD_NBS_209 Homestay	<ol style="list-style-type: none"> 1. To process, manipulate and store all the attributes.
SDD_NBS_210 HomestayImg	<ol style="list-style-type: none"> 1. To process, manipulate and store all the attributes.
SDD_NBS_211 Onlinepayment	<ol style="list-style-type: none"> 1. To process, manipulate and store all the attributes.
SDD_NBS_212 Payment	<ol style="list-style-type: none"> 1. To process, manipulate and store all the attributes.

SDD_NBS_213 Reservation	1. To process, manipulate and store all the attributes.
SDD_NBS_214 Staff	1. To process, manipulate and store all the attributes.
Data Access Layer (SDD_P_300)	
SDD_NBS_301 CustomerDAO	1. To save and retrieve data of the customer. 2. Stored by customers.
SDD_NBS_302 ReservationDAO	1. To save and retrieve data of reservation. 2. Stored by customers.
SDD_NBS_303 PaymentDAO	1. To save and retrieve data of payment. 2. Stored by customers.
SDD_NBS_304 OnlinePaymentDAO	1. To save and retrieve data of online payment. 2. Stored by customers.
SDD_NBS_305 StaffDAO	1. To save and retrieve data of staff. 2. Stored by customers.
SDD_NBS_306 HomestayDAO	1. To save and retrieve data of homestay. 2. Stored by staff and admin.
SDD_NBS_307 HomestayImgDAO	1. To save and retrieve data of staff. 2. Stored by staff and admin.

5.1.1 Class Attributes & Methods

Table 5.2 Class attributes and method in each layer

Class	Pseudocode	Method
View Layer (SDD_P_100)		
SDD_NBS_101 index	BEGIN Display NurHomestay main page END	NONE
SDD_NBS_102 custprofile	BEGIN Display customer profile page END	getCustomerById()
SDD_NBS_103 custupdateprofile	BEGIN Display customer update profile form Input username,cust_name,custPhoneNo,address,cu st_email END	updateCustomer()
SDD_NBS_104 custupdatepassword	BEGIN Display customer update password form Input password,new_password,confirm_password END	updateCustomerPassw ord()
SDD_NBS_105 login	BEGIN Input username,password END	checkUser()
SDD_NBS_106 staffviewcustprofile	BEGIN Display customer profile END	getCustomerById()
SDD_NBS_107 adminviewimage	BEGIN Display branch image END	getHomestayImgById()
SDD_NBS_108 adminaddimage	BEGIN Display add image form Input home_name,home_image END	addImage()
SDD_NBS_109 adminviewbranch	BEGIN Display branch END	getHomestayById()

SDD_NBS_110 custviewbranch	BEGIN Display branch END	getHomestayById()
SDD_NBS_111 adminlistbranch	BEGIN Display all branch END	getAllHomestay()
SDD_NBS_112 adminupdatebranch	BEGIN Display form update branch Input homestayId, home_name, home_address ,home_desc, home_deposit, home_price END	updateBranch()
SDD_NBS_113 checkavailable	BEGIN Display check in and check out date form Input checkin, checkout END	getAllAvailableHomestay()
SDD_NBS_114 custupdatereservation 2	BEGIN Display update reservation form Input checkin, checkout END	checkAvailableForUpdate()
SDD_NBS_115 SuccessReservation	BEGIN Display payment statuses and details END	getPaymentByResId()
SDD_NBS_116 SuccessReservation	BEGIN Display payment statuses and details END	getPaymentByResId()
SDD_NBS_117 staffrefund	BEGIN Display payment and refund details END	getAllReservationProcessRefund()
SDD_NBS_118 reservation	BEGIN Display reservation details IF Display update reservation form Return to updatereservation2 ENDIF ELSE delete reservation ENDIF END	deleteReservationBfr2week(), deleteReservationWithin2week(),updateReservation2()
SDD_NBS_119 custupdatereservation	BEGIN Display check in and check out form Input checkin, checkout	updateReservation()

	END	
SDD_NBS_120 custafterreservation	BEGIN Display reservation and homestay details END	getAllHomestay()
SDD_NBS_121 custviewreservation	BEGIN Display reservation details END	NONE
SDD_NBS_122 adminliststaff	BEGIN Display all list staff IF Display update staff form Return to admindeletestaff ENDIF END	getAdminName(), deleteStaff() ,
SDD_NBS_123 admincreatetestaff	BEGIN Display staff form Input staff details END	addStaff()
SDD_NBS_124 staffviewschedulehom estay	BEGIN Display reservation details END	getAllReservationByRe s(), getPaymentByResId(), getCustomerById()
SDD_NBS_125 staffviewcustreservati on	BEGIN Display customer reservation details END	getAllReservationByRe s(), getPaymentByResId()
SDD_NBS_126 staffprofile	BEGIN Display staff profile END	getStaffById()
SDD_NBS_127 staffupdateprofile	BEGIN Display update profile form Input username, sta_name, sta_phoneNo, sta_address, sta_email END	getStaffById(), updateStaff()
SDD_NBS_128 staffupdatepassword	BEGIN Display update password form Input password, new_password, confirm_password END	getStaffById(), updateStaffPassword()
SDD_NBS_129 adminaddbranch	BEGIN Display add branch form Input branch details	addNewBranch()

	END	
SDD_NBS_130 adminlistimage	BEGIN Display list image of the branch END	getAllHomestayImgByHomeid()
SDD_NBS_131 custupdatereservation	BEGIN Display search available homestay form Input date END	checkAvailableForUpdate()
SDD_NBS_132 ribbib	BEGIN Display Term and Conditions details END	NONE
SDD_NBS_133 rumahInfo	BEGIN Display homestay details END	NONE
SDD_NBS_134 signup	BEGIN Display sign up form Input customer's details END	add()
SDD_NBS_135 stafflogin	BEGIN Display staff login form Input staff details END	checkStaffUser()

Domain Layer (SDD_P_200)

SDD_NBS_201 CustomerController	<pre> BEGIN IF (action == viewCustomer) THEN cust = daoCustomer.getCustomerById() ENDIF ELSE IF(action == staffviewCustomer) cust = daoCustomer.getCustomerById() ENDIF ELSE IF(action == updatecustomer) cust = daoCustomer.getCustomerById() ENDIF ELSE IF(action == updatePassword) cust = daoCustomer.getCustomerById() ENDIF ELSE IF(action == logout) session.invalidate() ENDIF IF (action == signup) customer = daoCustomer.getCustomer() daoCustomer.add() ENDIF ELSE IF (action == login) id = daoCustomer.getCustomerId() IF(daoCustomer.checkUser()) THEN cust = daoCustomer.getCustomerById() ENDIF ENDIF </pre>	getCustomerById(), getCustomer(), session.invalidate(), add(), checkUser(), getCustomerId(), getCust_email(), updateCustomerPassword(), updateCustomer().
-----------------------------------	--	---

	<pre> cust = daoCustomer.getCustomerById() Display cust.getCust_email() ENDIF ENDIF ELSE IF (action ==updatecustomer) daoCustomer.updateCustomer() ENDIF ELSE IF (action == updateCustomerPassword) daoCustomer.updateCustomerPassword() ENDIF END </pre>	
SDD_NBS_202 HomestayController	<pre> BEGIN IF (action == listallhomestay) daoHomestay.getAllHomestay() ENDIF ELSE IF (action == viewBranch) homestay = daoHomestay.getHomestayById() daoHomestayImg.getAllHomestayImgByHomestayId() ENDIF ELSE IF(action ==addImage) homestay = daoHomestay.getHomestayById() daoHomestayImg.getAllHomestayImgByHomeid() ENDIF ELSE IF (action == viewBranch2) homestay = daoHomestay.getHomestayById() daoHomestayImg.getAllHomestayImgByHomestayId() ENDIF ELSE IF(action == listHomestay) daoHomestay.getAllHomestay() daoHomestayImg.getAllHomestayImg() ENDIF ELSE IF(action == deleteBranch) daoHomestay.getAllHomestay() ENDIF ELSE IF(action ==updateBranch) homestay = daoHomestay.getHomestayById() homestay.getHome_price() homestay.getHome_deposit() ENDIF IF(action ==addBranch) homestay= daoHomestay.getHomestay() IF(!homestay.isValid()) daoHomestay.addNewBranch() daoHomestay.getAllHomestay() ENDIF </pre>	getAllHomestay(), getHomestayById(), getAllHomestayImgByHomestayId(), getAllHomestayImgByHomeid(), getAllHomestayImg(), getHome_price(), getHome_deposit(), getHomestay(), addNewBranch(), updateBranch(), getAllAvailableHomestay(), checkAvailableForUpdate(), getAllReservationByRes().

	<pre> ENDIF ELSE IF(action == updateBranch) homestay= daoHomestay.getHomestay() daoHomestay.updateBranch() ENDIF ELSE IF(action ==checkAvailable) homestays = daoHomestay.getAllAvailableHomestay() ENDIF ELSE IF (action ==checkAvailable2) IF(daybetweenCinCoutSelection <= daybetweenCinCout) IF(daoHomestay.checkAvailableForUpdate() res = daoReservation.getAllReservationByRes() ENDIF ENDIF ENDIF END </pre>	
SDD_NBS_203 ReservationController	<pre> BEGIN IF(action == listreservation) daoReservation.getAllReservation() ENDIF ELSE IF(action ==updateReservation2) res = daoReservation.getAllReservationByRes() ENDIF ELSE IF(action == insertaddReservation) IF(SCid.equalsIgnoreCase("null")) forward = "login.jsp" ELSE homestay = daoHomestay.getAvailableHomestay() ENDIF ENDIF ELSE IF(action == viewReservation) daoReservation.getAllReservationByRes() daoPayment.getPaymentByResId() ENDIF ELSE IF(action == staffviewcustReservation) daoReservation.getAllReservationByRes() daoPayment.getPaymentByResId() ENDIF ELSE IF(action == deleteReservation) IF (day > 14) daoReservation.deleteReservationBfr2week() ELSE daoReservation.deleteReservationWithin2week() ENDIF </pre>	getAllReservation(), getAllReservationByRe s(), getAvailableHomestay() , getPaymentByResId(), deleteReservationBfr2w eek(), deleteReservationWithi n2week(), getAllReservationOrder By(), getAllReservationProce ssRefund(), getHomestayId(), getHome_deposit(), getHome_price().

	<pre> ENDIF ELSE IF(action== staffViewReservation) daoReservation.getAllReservationOrderBy() ENDIF ELSE IF(action == viewStatusPayment) daoReservation.getAllReservationProcessRefu nd() ENDIF IF(action ==updateReservation) homestay = daoHomestay.getAvailableHomestay() IF(homestay.getHomestayId() != 0) homestay.getHomestayId() daoReservation.getAllReservation() ENDIF ENDIF ELDE IF(action ==addReservation) homestay = daoHomestay.getAvailableHomestay() totprice = homestay.getHome_deposit()+(homestay.getHo me_price() * day) ENDIF END </pre>	
SDD_NBS_204 PaymentController	<pre> BEGIN IF(action ==makePayment) daoReservation.addReservation() res = daoReservation.getReservationByCustId() IF(!res.isValid()) daoPayment.addpaymentforCust() paid = daoPayment.getPaymentByResId() paymentid = paid.getPayment_id() daoOnlinePayment.addOnlinePayment() onlinepaid = daoOnlinePayment.getOnlinePaymentByPayme ntId() ENDIF ENDIF ELSE IF(action ==payRefundCustomer) paid = daoPayment.getPaymentByResId() home = daoReservation.getHomestayDepositandPrice() paymentAmount = paid.getPaymentAmount() home_deposit = home.getHome_deposit() daoPayment.updatePaymentAfterRefund() ENDIF END </pre>	addReservation(), getReservationByCustI d(), addpaymentforCust(), getPaymentByResId(), getPayment_id(), addOnlinePayment(), getHomestayDepositan dPrice(), getPaymentAmount(), getHome_deposit(), updatePaymentAfterRef und(), OnlinePaymentByPaym entId().
SDD_NBS_205	<pre> BEGIN IF(action ==viewStaff) </pre>	getStaffById(), getAllStaff(),

StaffController	<pre> staff = daoStaff.getStaffById() ENDIF ELSE IF(action == listStaff) daoStaff.getAllStaff() name = daoStaff.getAdminName() ENDIF ELSE IF(action == staffprofile) staff = daoStaff.getStaffById() staff.getAdminId() admin = daoStaff.getStaffById() staff.getSta_email() admin.getSta_name() ENDIF ELSE IF(action == updatestaff) staff = daoStaff.getStaffById() ENDIF ELSE IF(action == logout) session=request.getSession() ENDIF ELSE IF(action == updateStaffPassword) staff = daoStaff.getStaffById() ENDIF ELSE IF(action == deleteStaff) daoStaff.deleteStaff() name = daoStaff.getAdminName() ENDIF IF(action ==createStaff) staff = daoStaff.getStaff() IF(!staff.isValid()) daoStaff.add() ENDIF ENDIF ELSE IF(action== updateStaff) staff = daoStaff.getStaff() daoStaff.getStaffById() ENDIF ELSE IF(action ==updateStaffPassword) daoStaff.updateStaffPassword() daoStaff.getStaffById() ENDIF ELSE IF(action==login) IF(daoStaff.checkUser()) id = daoStaff.getStaffId() IF(daoStaff.checkStaffisanAdmin()) staff = daoStaff.getStaffById() admin2 = daoStaff.getStaffById() admin = daoStaff.getAdminById() ENDIF staff = daoStaff.getStaffById() admin2 = daoStaff.getStaffById() </pre>	getAdminName(), getAdminId(), getSta_email(), getSta_name(), getSession(), deleteStaff(), getAdminName(), getStaff(), isValid(), add(), updateStaffPassword(), getAdminById().
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	ENDIF ENDIF END	
SDD_NBS_206 HomeImgController	<pre> BEGIN IF(action ==viewimage) homestayImg = daoHomestayImg.getHomestayImgById() appPath = request.getServletContext().getRealPath("") savePath = appPath + homestayImg.getHome_image() ENDIF ELSE IF(action ==listImage) daoHomestayImg.getAllHomestayImg() END ELSE IF(action ==deleteImage) daoHomestayImg.deleteImage() homestay = daoHomestay.getHomestayById() daoHomestayImg.getAllHomestayImgByHomeid() ENDIF ENDIF IF(action == addimage) homeimagename = Paths.get(homeimage.getSubmittedFileName()) .getFileNames().toString() homeimagename = new File(homeimagename).getName() daoHomestayImg.addImage() ENDIF ENDIF </pre>	getHomestayImgById(), getServletContext(), getRealPath(""), getHome_image(), getAllHomestayImg(), deleteImage(), getHomestayById(), getAllHomestayImgByHomeid(), getSubmittedFileName(), getFileName(), getName(), addImage().
SDD_NBS_207 Customer	<pre> BEGIN IF(add())THEN SET Customer (username, cust_name, cust_phoneNo, cust_email, address, password) END </pre>	Customer(), getCustId(), setCustId(), getUsername(), setUsername(), getCust_name(), setCust_name(), getCust_phoneNo() , setCust_phoneNo(), getCust_email(), setCust_email(), getAddress(), setAddress(), getPassword(), setPassword(), isValid(), setValid().

SDD_NBS_208 Homestay	BEGIN IF(addNewBranch())THEN SET Homestay (home_address, home_desc, home_price, home_deposit) END	Homestay(), getHomestayId(), setHomestayId(), getHome_name(), setHome_name(), getHome_address(), setHome_address(), getHome_desc(), setHome_desc(), getHome_price(), setHome_price(), getHome_deposit(), setHome_deposit(), isValid(), setValid(), getReservations(), setReservations, getAllHomestay().
SDD_NBS_209 HomestayImg	BEGIN IF(addImage())THEN SET HomestayImg (home_image, homestayId) END	HomestayImg(), getImageId(), setImageId(), getHome_image(), setHome_image(), getHomestayId(), setHomestayId(), isValid(), setValid().
SDD_NBS_210 Onlinepayment	BEGIN IF(addOnlinePayment())THEN SET OnlinePayment (paymentid, bankName, accnumber) END	Onlinepayment(), getAccName(), setAccName(), getBankName(), setBankName(), isValid(), setValid().
SDD_NBS_211 Payment	BEGIN IF(addpaymentforCust())THEN SET Payment (payment_id, payment_date, paymentAmount, status) END	Payment() getPayment_id() getPayment_id() getPayment_date() getPayment_date() getPaymentAmount() getPaymentAmount(), getStatus(), setStatus(), getReserveid(), setReserveid(), getStaffid() , setStaffid() , getCustid(), setCustid(), getHome_name(),

		setHome_name(), getPayment_status(), setPayment_status(), getYear(), setYear(), isValid(), setValid().
SDD_NBS_212 Reservation	BEGIN IF(addReservation())THEN SET Reservation (dateRes, dateCheckIn, dateCheckOut, custid, homestayid) END	Reservation(), getReserveid(), setReserveid(), getReservedate(), setReservedate(), getCheckinDate(), setCheckinDate(), getCheckoutDate(), setCheckoutDate(), getCustid(), setCustid(), getHomestayid(), setHomestayid(), getHome_name(), setHome_name(), getCustname(), setCustname(), getPaymentAmount(), setPaymentAmount(), getHome_price(), setHome_price(), isValid(), setValid(), getHome_deposit(), setHome_deposit().
SDD_NBS_213 Staff	BEGIN IF(add())THEN SET Staff (username, sta_name, sta_phoneNo, sta_email, sta_address, sta_password, adminId) END	Staff(), setStaff(), getUsername(), setUsername(), getStaffId(), setStaffId(), getSta_name(), setSta_name(), getSta_phoneNo(), setSta_phoneNo(), getSta_email(), setSta_email(), getSta_password(), setSta_password(), getAdminId(), setAdminId(), getAdminIdStaff(),

		setAdminIdStaff(), isValid(), setValid().
Data Access Layer (SDD_P_300)		
SDD_NBS_301 CustomerDAO	BEGIN IF customer enter data correctly in the form, then data will be stored into CustomerDAO ENDIF IF data is needed in any process, Then data will be retrieved from CustomerDAO ENDIF END	getCustomer(), add(), checkUser(), getCustomerById(), updateCustomer(), updateCustomerPassw ord().
SDD_NBS_302 ReservationDAO	BEGIN IF customer enter data correctly in the form, then data will be stored into ReservationDAO ENDIF IF data is needed in any process, Then data will be retrieved from ReservationDAO ENDIF END	getReservation (), getAllReservation(), getAllReservationByRe s(), addReservation(), getReservationByCustl d(), updateReservation(), deleteReservationBfr2w eek(), deleteReservationWithi n2week(), getAllReservationOrder By(), getAllReservationProce ssRefund(), getHomestayDepositan dPrice().
SDD_NBS_303 PaymentDAO	BEGIN IF customer enter data correctly in the form, then data will be stored into PaymentDAO ENDIF IF data is needed in any process, Then data will be retrieved from PaymentDAO ENDIF END	getPayment(), addpaymentforCust(), getPaymentByResId(), updatePaymentAfterRef und(), calcTotal().
SDD_NBS_304 OnlinePaymentDAO	BEGIN IF customer enter data correctly in the form, then data will be stored into OnlinePaymentDAO ENDIF IF data is needed in any process, Then data will be retrieved from OnlinePaymentDAO ENDIF	addOnlinePayment(), getOnlinePaymentByPa ymentId().

	END	
SDD_NBS_305 StaffDAO	BEGIN IF staff and admin enter data correctly in the form, then data will be stored into StaffDAO ENDIF IF data is needed in any process, Then data will be retrieved from StaffDAO ENDIF END	getStaff(), add(), getStaffId(), getStaffById(), getAdminById(), getAllStaff(), updateStaff(), checkStaffisanAdmin(), checkUser(), getAdminName(), updateStaffPassword(), deleteStaff().
SDD_NBS_306 HomestayDAO	BEGIN IF staff and admin enter data correctly in the form, then data will be stored into HomestayDAO ENDIF IF data is needed in any process, Then data will be retrieved from HomestayDAO ENDIF END	getHomestay(), getAllHomestay(), getHomestayById(), addNewBranch(), deleteHomestay(), updateBranch(), getAvailableHomestay() , getAllAvailableHomestay(), checkAvailableForUpdate().
SDD_NBS_307 HomestayImgDAO	BEGIN IF staff and admin enter data correctly in the form, then data will be stored into HomestayImgDAO ENDIF IF data is needed in any process, Then data will be retrieved from HomestayImgDAO ENDIF END	getHomestayImg(), getImageId(), getHomestayImgById(), getAllHomestayImg(), deleteImage(), addImage(), getAllHomestayImgByHomeid(), getAllHomestayImgByHomestayId().

6. Human Interface Design (Screens)

6.1 Overview of the User Interface

Based on the customer's viewpoint, the customer should sign up first before login into the system to reserve a homestay. However, if the customer wants to browse information about homestay, check availability of the homestay, pictures of homestay, and about Nur Homestay company, they do not need to register an account. Once the customer has logged into the system, the customer views their profile. There are options to either update details or password.

The customer can also book a homestay by checking the availability of check-in and check-out date. After that, the customer can view or choose which homestay that is available to reserve and they will be directed to the reservation details. The customer will see the details of the reservation homestay include total payment and term and condition before settling the online payment from a third party payment gateway. After the customer has finished the booking process, the system will display a receipt to the customer. Customers can view their reservation details in their history booking details and make updates or cancel their reservation. There are conditions applied to when the customer wants to update or cancel their reservation.

- Update reservation
 - The customer can only update their reservation dates before two weeks from the check-in date.
 - Within those two weeks, the customer can no longer update their reservation dates.
- Cancel reservation
 - If the customer cancels a reservation two weeks from the check-in date, the customer can receive a refund two weeks from it but the deposit will be burned.
 - Once the customer cancels the reservation within those two weeks, the customer cannot ask for a refund.

Next, look into the staff's perspective, the staff need to have an account where the account can only be created by the admin. Once they have an account, they can login into the system and will be redirected to the staff profile. From there, staff can view his profile and update his profile. Other than viewing the reservation schedule and refund requested by the customer, the staff can manage the homestay branch such as viewing, updating, deleting and creating.

From the admin's view, the admin needs to login with admin's username and will be redirected to admin profile. Admin can also update their details. Most of staff's privileges in managing the NBS, the admin can also manage it except view schedule homestay. Admin have privileges where staff does not have which are create and delete staff and view list staff.

6.1.1 Screen Images

The screenshot shows the homepage of the NurHomestay website. At the top, there is a dark blue header bar with the logo "NurHomestay Melaka" on the left and navigation links "HOME", "GALLERY", "ABOUT US", and "LOG IN/SIGN UP" on the right. Below the header is a large image of a modern, two-story homestay at dusk or night, illuminated from within. To the left of the image, a white sidebar contains the text "Welcome to NurHomestay" and "Comfortable and Worth it!". Below this, a paragraph describes the homestay's location in Bandaraya Melaka and its features. At the bottom of the page, there is a search form with fields for "Check-in" and "Check-out" dates, and a "CHECK AVAILABILITY" button.

Gallery
Nur Homestay is a family business that prioritizes customer satisfaction for a vacation in Bandaraya Melaka. It is perfect for duo, or family vacation to create memories with a comfortable homestay to stay! Not only that, the homestay is near at Melaka's tourist attraction. You can come over anytime as long as the it is still open.)

[READ MORE](#)

About Us
At Nur homestay, our passion is to connect our guests to the very best of Melaka. From the heritage of melaka to our unique history and culture, our homestay offer guests extraordinary experiences, created by combining unique architecture and structure, expressive decor and artistry, and magnificent features. Add great service, and the result is an unforgettable guest experience.

[READ MORE](#)

Instagram
Facebook
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Index page. Customer can search homestay availability in the form



Homestay Information



Nur Homestay is a family business that prior our customer satisfaction for a vacation in Bandaraya Melaka. It is perfect for duo, or family vacation to create memories with a comfortable homestay to stay! Not only that, the homestay is near at Melaka's tourist attraction. You can come over anytime as long as the it is still open :)



- **Max:**
10 Persons
- **Address:**
No.4, Jalan PM 1B,Taman Pokok Mangga,75250 Melaka

- **Bathroom:**
2 Room
- **Bed:**
2 Queen
3 King
2 Single
- **Price:**
RM 500 = 1 night



This show the details of homestay



About Us

Owner

Encik Ghaafar
2019-2020
Owner

Company background

Why NurHomestay?
Here we provide wonderful home environment from the busy city life. We welcome you with warm friendly atmosphere and great service! Let Nur Homestay always your first choice and create unforgettable moments!

Mission

For each traveler coming the country to have the experience of staying in a Nur Homestay Melaka because meeting locals is the beauty of the Melaka.

Vision

To create moments that last a lifetime.
To encourage shared cultural experiences.
To show the world the underlying nature of hospitality, friendliness, positivity, present in our company.

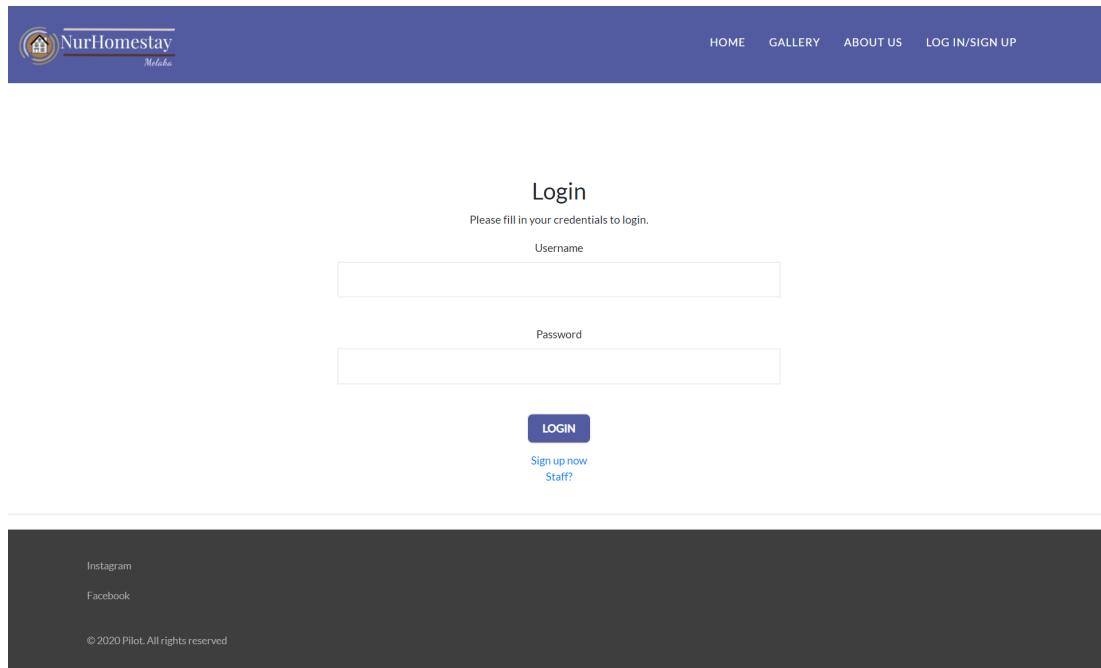
Contact Information

WS: Haslina
FB: Nur Homestay Melaka



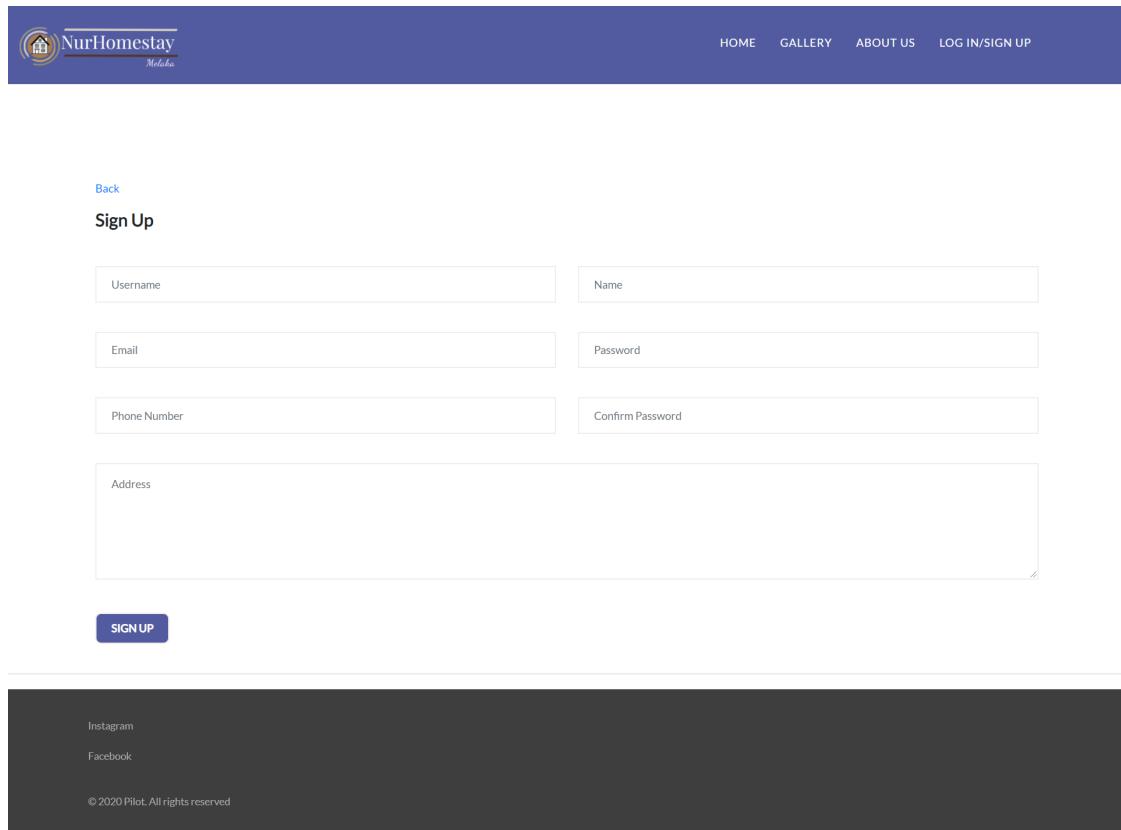
This page display the information of the company

Customer



The screenshot shows the customer login page of the NurHomestay booking system. At the top, there is a dark blue header bar with the "NurHomestay Melaka" logo on the left and navigation links for "HOME", "GALLERY", "ABOUT US", and "LOG IN/SIGN UP" on the right. Below the header is a "Login" form. It includes a placeholder text "Please fill in your credentials to login.", two input fields for "Username" and "Password", a "LOGIN" button, and links for "Sign up now" and "Staff?". At the bottom of the page, there is a dark footer bar with social media links for "Instagram" and "Facebook", and a copyright notice: "© 2020 Pilot. All rights reserved".

Customer login page



The screenshot shows the customer sign-up page of the NurHomestay booking system. At the top, there is a dark blue header bar with the "NurHomestay Melaka" logo on the left and navigation links for "HOME", "GALLERY", "ABOUT US", and "LOG IN/SIGN UP" on the right. Below the header is a "Sign Up" form. It includes four input fields: "Username", "Name", "Email", and "Password", followed by two more fields: "Phone Number" and "Confirm Password". There is also a large text area for "Address". At the bottom of the page, there is a "SIGN UP" button and a dark footer bar with social media links for "Instagram" and "Facebook", and a copyright notice: "© 2020 Pilot. All rights reserved".

Customer register their account



Jihoon

Profile User

Username : Jihoon

Name : Park Jihoon

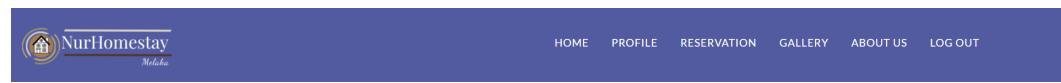
Phone No : 0121433568

Address : No 22, Taman Tasek Titiwangsa, Jalan SuperMan

Email : jihoon@gmail.com



Customer view profile page



Jihoon

Update Profile User

Username : Jihoon

Name : Park Jihoon

Phone No : 0121433568

Address : No 22, Taman Tasek Titiwangsa, Jalan SuperMan

Email : jihoon@gmail.com

UPDATE



Customer update their details

The screenshot shows a user profile update form. At the top left is the NurHomestay Melaka logo. The top right features a navigation bar with links: HOME, PROFILE, RESERVATION, GALLERY, ABOUT US, and LOG OUT. On the left, a sidebar displays the user's name, "Jihoon", and a "VIEW" button. The main content area is titled "Update Profile User". It contains three input fields: "Current Password" (labeled "Current Password :"), "New Password" (labeled "New Password :"), and "Confirm Password" (labeled "Confirm Password :"). Below these fields is a blue "UPDATE" button. At the bottom of the page, there are links for social media platforms: Instagram and Facebook, followed by the copyright notice: "© 2020 Pilot. All rights reserved".

Customer update password

The screenshot shows the 'Reservation' section of the website. At the top, there is a search bar with fields for 'Check-in' (dd/mm/yyyy) and 'Check-out' (dd/mm/yyyy), a 'CHECK AVAILABILITY' button, and a 'RESERVE' button. Below the search bar, there are five homestay listing cards:

- Taman Pokok Mangga**
4 bed, 2 toilet, Parking lot, Coway, Astro, Wifi
No. 4 Jalan PM1B, Taman Pokok Mangga, 75250, Bandar Melaka, Melaka
RM50.00 for booking deposit
RM150.00 for homestay's price per day
[View Homestay](#)
- Taman Perdana Indah**
4 Katil, 4 Bilik Air, parking lot luas
No 28, Taman Pandan Indah, Jalan Kg Jauh, 71500, Melaka
RM40.00 for booking deposit
RM130.00 for homestay's price per day
[View Homestay](#)
- Taman Pandan Murni**
5 Room, Big Parking Lot, Children Swimming Pool
No 12, Taman Pandan Murni, 73421, Jasin Melaka
RM50.00 for booking deposit
RM150.00 for homestay's price per day
[View Homestay](#)
- kg bali**
1 bilik
kg bali
RM70.00 for booking deposit
RM450.00 for homestay's price per day
[View Homestay](#)
- Taman Bairduri**
Ada katil, 3 bedroom, 3 toilet, Tempat Parking luas
No 3A Taman Bairduri Lembah Klang, Selangor22
RM50.00 for booking deposit
RM140.00 for homestay's price per day
[View Homestay](#)

At the bottom of the page, there is a footer with links to Instagram and Facebook, and a copyright notice: © 2020 Pilot. All rights reserved.

Result from search homestay available from the index page



Reservation

Taman Pokok Mangga

Branch : Taman Pokok Mangga

Check In : 05/02/2021

Check Out : 06/02/2021

Day : 1 day(s)

Deposit (RM) : 50.00

Homestay's price per day (RM) : 150.00

Total Payment (RM) : RM 50.00 + (RM 150.00 * 1)
= RM 200.00

[View Term and Condition](#)

Agree to the term and conditions

PAY **CANCEL**

Instagram

Facebook

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Customer add reservation with their choices homestay



Payment Gateway

Individual Account : Bank Simpanan Nasional

Account Number : 15808635678

PAY

Instagram
Facebook
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Customer make payment



Receipt

Payment Gateway Affin Bank

Payment Receipt

Status	:	received
Payment Date	:	2021-02-02
Payment ID	:	10021
Payment Amount	:	RM 350.00

Instagram

Facebook

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Customer view payment details



Reservation

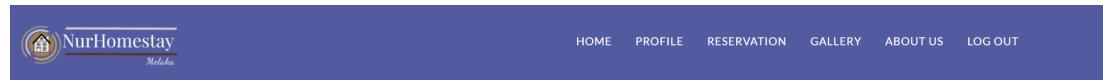
Reservation ID:	Check-In	Check-Out	Homestay	Update	Cancel
100075	2021-02-26	2021-02-28	502	UPDATE	CANCEL BOOKING
100080	2021-01-28	2021-01-28	502		
100081	2021-02-05	2021-02-06	502		CANCEL BOOKING

Instagram

Facebook

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Customer view their reservation list. Update button visible if the red message is not applied.



Update Reservation

BACK

You can only be able to update check-in and check-out, 2 weeks before check-in date.

Check Out

Check-in

05/03/2021

Check-out

06/02/2021

CHECK AVAILABILITY

Instagram

Facebook

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Customer desire to change their reservation date

Update Reservation

You can only be able to update check-in and check-out, 2 weeks before check-in date.

Reservation ID	:	100075
Homestay Name	:	Taman Pokok Mangga
Total Payment (RM)	:	350.0
From Check in	:	2021-02-26
From Check Out	:	2021-02-28
New check-in date:	:	<input type="text" value="05/03/2021"/>
New check-out date:	:	<input type="text" value="06/02/2021"/>

UPDATE

Instagram
Facebook
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Customer view update reservation details if the changed date is acceptable

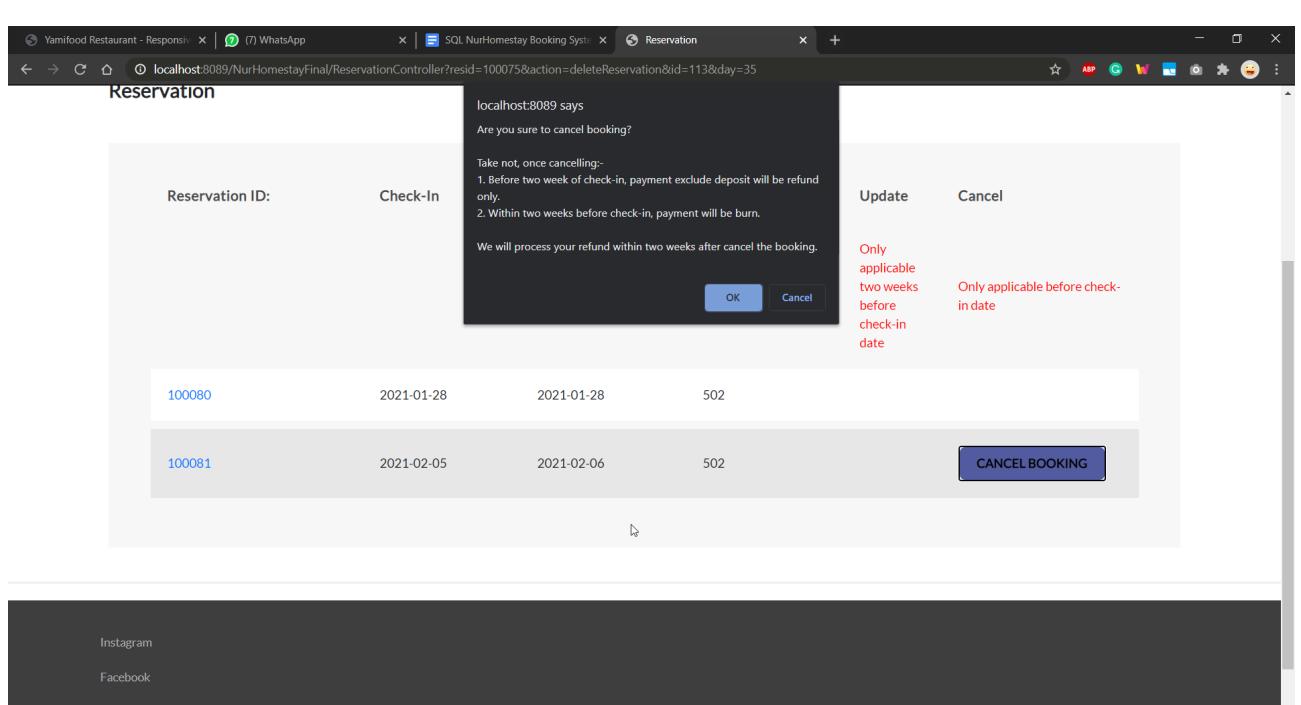
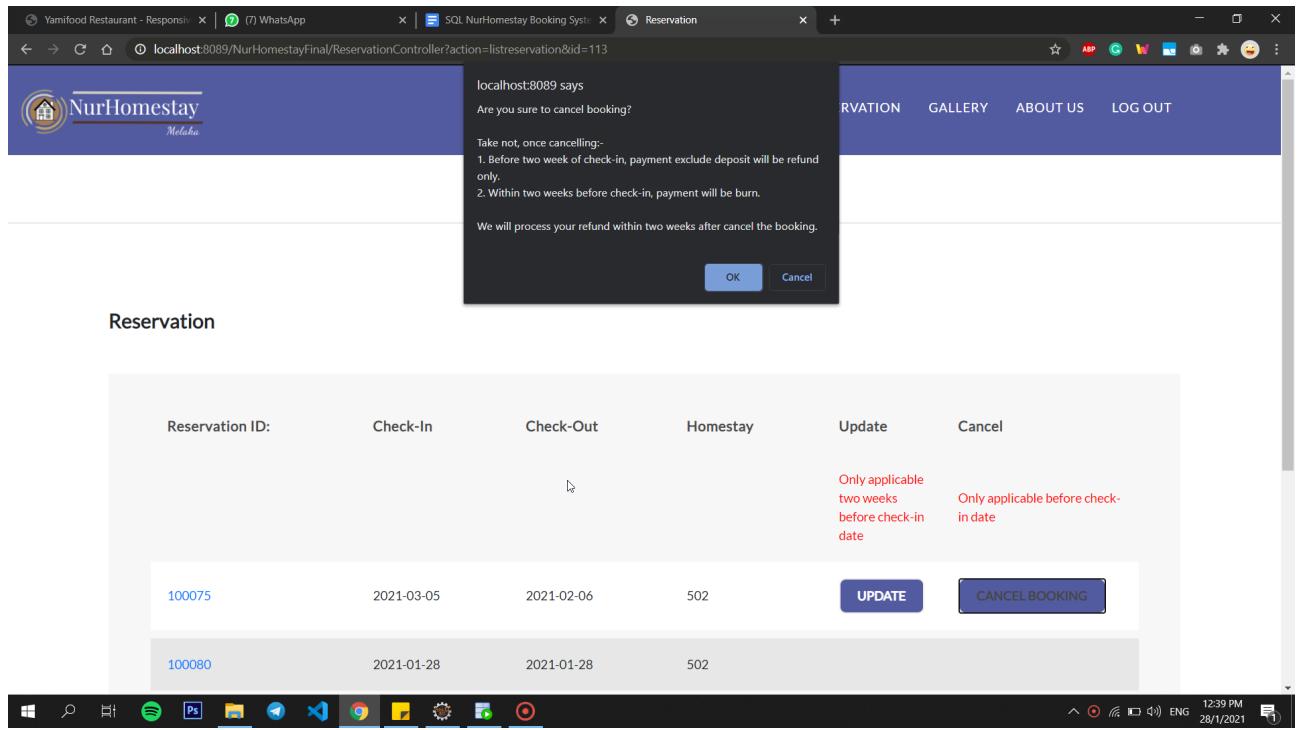
View Reservation

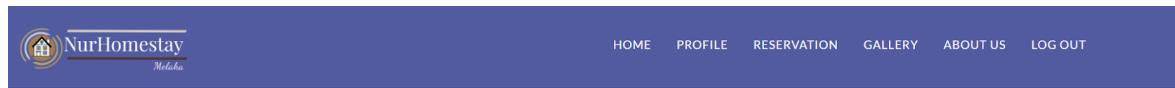
Reservation ID	:	100080
Homestay Name	:	Taman Pokok Mangga
Total Payment (RM)	:	50.0
Check In	:	2021-01-28
Check Out	:	2021-01-28

UPDATE

Instagram
Facebook
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Customer view reservation details





NurHomestay Branch



Branch ID 529

Branch Name kg bali, Perak

Address kg bali

Description 3 bilik, 2 Bilik Air

Deposit RM450.00

Price RM70.00

[Instagram](#)[Facebook](#)

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Customer view homestay

Admin

Staff Login

Please fill in your credentials to login.

Username

Password

LOGIN

Instagram
Facebook
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Admin Login page

Staff Profile

ksoo

UPDATE PROFILE
UPDATE PASSWORD

Staff ID	:	711
Username	:	ksoo
Name	:	Doh Kyungsoo
Phone No	:	01346121012
Address	:	No 21, Taman Baiduri Kg Damai Laut
Email	:	kyungsootakdeemail19@gmail.com
Position	:	Admin

**Admin View Profile**

ay
Melaka

LOG OUT

PROFILE
RESERVATION
BRANCH
STAFF
SALES REPORT

ksoo

BACK

Update Staff Profile

Username : ksoo

Name : Doh Kyungsoo

Phone No : 01346121012

Address : No 21, Taman Baiduri Kg Damai Laut

Email : kyungsootakdeemail19@gmail.com

UPDATE



Admin Update Profile Details

ay
Melaka

LOG OUT

PROFILE
RESERVATION
BRANCH
STAFF
SALES REPORT

ksoo

BACK

Update Profile User

Current Password : Current Password

New Password : New Password

Confirm Password : Confirm Password

UPDATE



Admin Update Profile Password



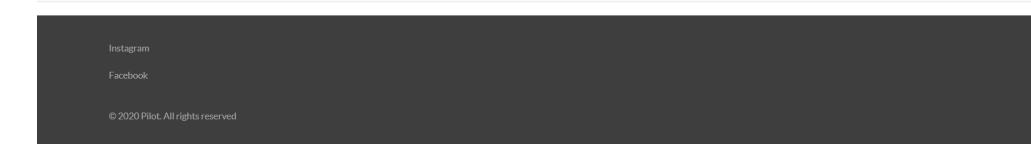
Admin View List Staff



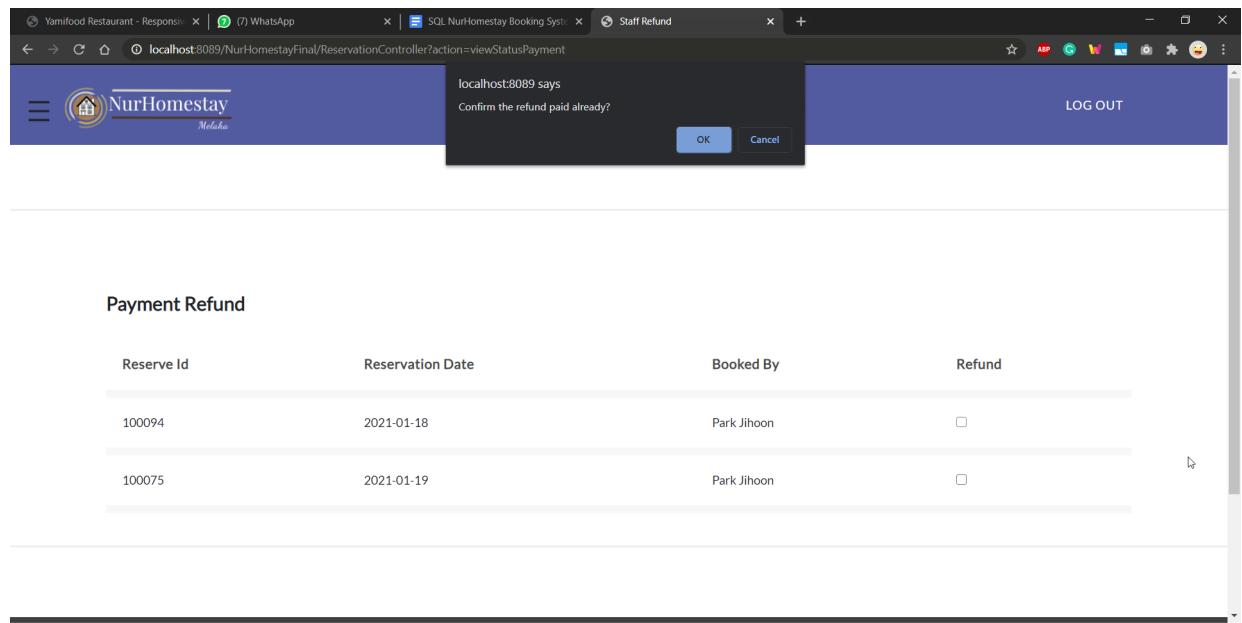
Create Staff Profile

Username :	<input type="text" value="username"/>
Staff Name :	<input type="text" value="Name"/>
Staff Phone :	<input type="text" value="Phone No"/>
Staff Email :	<input type="text" value="Email"/>
Staff Address :	<input type="text" value="Address"/>
Staff Password :	<input type="text" value="Password"/>

SUBMIT



Admin Create Staff Profile



NurHomestay Branch

Branch Id	Branch Name	Branch Price	Action
500	Taman Baiduri	RM140.00	
501	Taman Pandan Murni	RM150.00	
502	Taman Pokok Mangga	RM150.00	
510	Taman Perdana Indah	RM130.00	
529	kg bali	RM450.00	

Instagram
Facebook
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Admin View Branch List

The screenshot shows the 'Add Branch' form for the NurHomestay Melaka booking system. The form consists of several input fields:

- Branch Name :
- Address :
- Description :
- Deposit (RM) :
- Price (RM) :

At the bottom right of the form are two buttons: **ADD** and **CANCEL**.

Below the form, a dark footer bar contains social media links and a copyright notice:

- Instagram
- Facebook
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Admin Add New Branch

The screenshot shows the 'Update Branch' form in the NurHomestay Admin interface. The form fields are as follows:

Field	Value
Branch Id	529
Branch Name	kg bali
Address	kg bali
Description	1 bilik
Deposit (RM)	70.0
Price (RM)	450.0

Below the form is a dark footer bar with social media links and a copyright notice:

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Facebook
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Admin Update Branch



Branch ID 500

Branch Name Taman Bairuri

Address No 3A Taman Bairuri Lembah Klang, Selangor 22

Description Ada katil, 3 bedroom, 3 toilet, Tempat Parking luas

Deposit RM140.00

Price RM50.00

**Admin View Selected Branch Homestay**



NurHomestay Image Branch



Image ID

24

Branch ID

529



Admin View Selected Branch Image



Homestay Image

Homestay Name : kg bali

Add Image : No file chosen

ADD

Image Id

24

Branch ID

529



Instagram

Facebook

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Admin View Image List to add New Branch Image

Staff



Staff Login

Please fill in your credentials to login.

Username

Password

LOGIN



Staff Login page



bbh

UPDATE PROFILE

UPDATE PASSWORD

Staff Profile

Staff ID	:	712
Username	:	bbh
Name	:	Byun Baekhyun
Phone No	:	011261210
Address	:	No 20, Taman Exo Planet II
Email	:	baekhyunvocalternity@gmail.com
Managed by	:	Doh Kyungsoo



Staff View Profile

LOG OUT

bbh

BACK

Update Profile User

Current Password :

New Password :

Confirm Password :

UPDATE



Staff Update Password

LOG OUT

bbh

BACK

Update Staff Profile

Username : bbh

Name : Byun Baekhyun

Phone No : 011261210

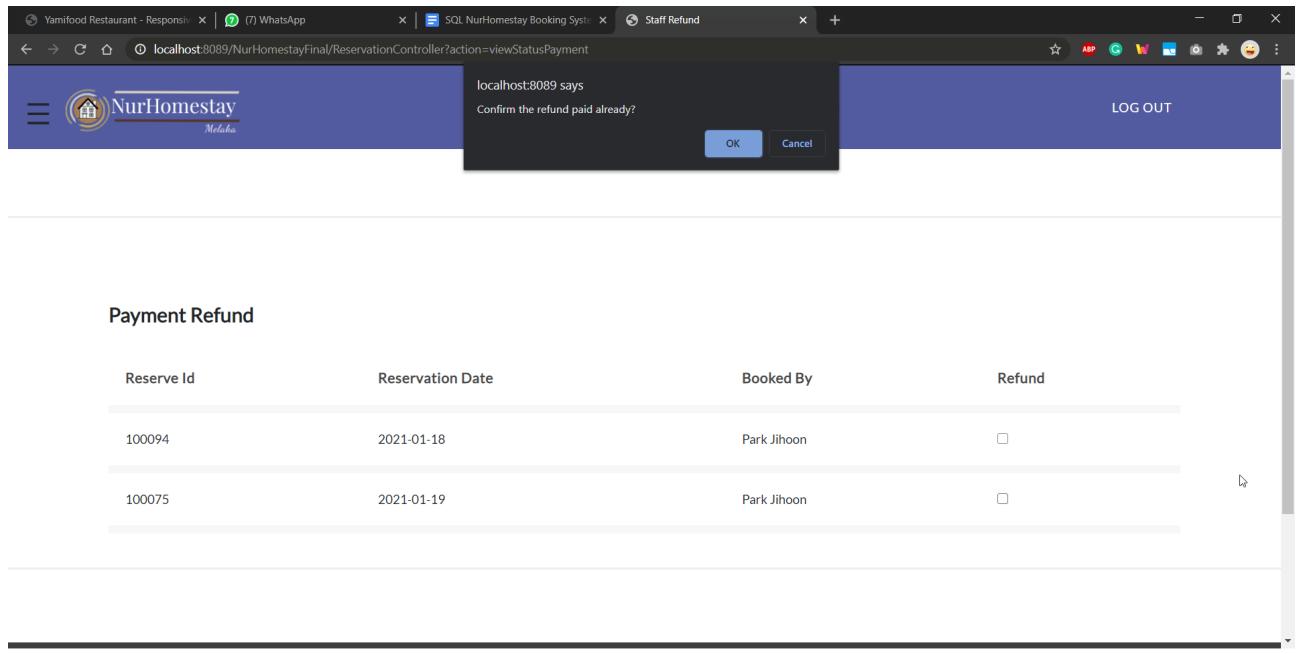
Address : No 20, Taman Exo Planet II

Email : baekhyunvocalternity@gmail.com

UPDATE



Staff Update Profile Details

**Staff View Reservation Schedule**



View Reservation

[BACK](#)

Reservation ID	:	100074
Homestay Name : Taman Perdana Indah		
Total Payment (RM)	:	170.0
Check In	:	2021-02-12
Check Out	:	2021-02-13



Staff View Reservation



Profile User

[BACK](#)

Username	:	Neelofa
Name : Noor Neelofa Mohd Noor		
Phone No	:	0124520118
Address : No 12, Jalan Tasek Damai, 51200 Shah Alam,Selangor		
Email	:	neelofa98@gmail.com



Staff View Customer Profile



NurHomestay Branch

Branch Id	Branch Name	Branch Price		
500	Taman Baiduri	RM140.00		
501	Taman Pandan Murni	RM150.00		
502	Taman Pokok Mangga	RM150.00		
510	Taman Perdana Indah	RM130.00		
529	kg bali	RM450.00		

[Instagram](#)

[Facebook](#)

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Staff View Branch List



NurHomestay Image Branch



Image ID

24

Branch ID

529



Staff View Selected Branch Image

The screenshot shows a software application window titled "NurHomestay Melaka". At the top right is a "LOG OUT" button. The main area is titled "Homestay Image". It displays a form with "Homestay Name" set to "kg bali". Below this is a file input field with "Add Image" and "Choose File" buttons, showing "No file chosen". A blue "ADD" button is below the input field. To the right, there's a table with two columns: "Image Id" (24) and "Branch ID" (529). On the far right of the table is a trash can icon. At the bottom left of the main area, there are links for "Instagram" and "Facebook". The footer contains the copyright notice "© 2020 Pilot. All rights reserved".

Staff View Image List and Add New Branch Image



STAFF

Update NurHomestay Branch

Update Branch

Branch Id : 500

Branch Name : Taman Baiduri

Address : No 3A Taman Baiduri Lembah Klang, Selangor22

Description : Ada katil, 3 bedroom, 3 toilet, Tempat Parking luas

Deposit (RM) : 50.0

Price (RM) : 140.0

UPDATE

Instagram

Facebook

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Staff Update Branch

The screenshot shows a web-based application interface for adding a new homestay branch. At the top, there is a dark blue header bar with the 'NurHomestay Melaka' logo on the left and a 'LOG OUT' link on the right. Below the header, the main content area has a light gray background. The title 'Add Branch' is centered at the top of the form. The form consists of several input fields arranged vertically, each with a label on the left and a text input field on the right. The fields are: 'Branch Name : home_name', 'Address : home_address', 'Description : home_desc', 'Deposit (RM) : home_deposit', and 'Price (RM) : home_price'. At the bottom right of the form, there are two buttons: a white 'ADD' button and a dark blue 'CANCEL' button.

Branch Name :

Address :

Description :

Deposit (RM) :

Price (RM) :

ADD **CANCEL**

Instagram
Facebook
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Staff Add New Branch



Branch ID 500

Branch Name Taman Bairuri

Address No 3A Taman Bairuri Lembah Klang, Selangor 22

Description Ada katil, 3 bedroom, 3 toilet, Tempat Parking luas

Deposit RM140.00

Price RM50.00

Instagram

Facebook

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Staff View Selected Branch Homestay

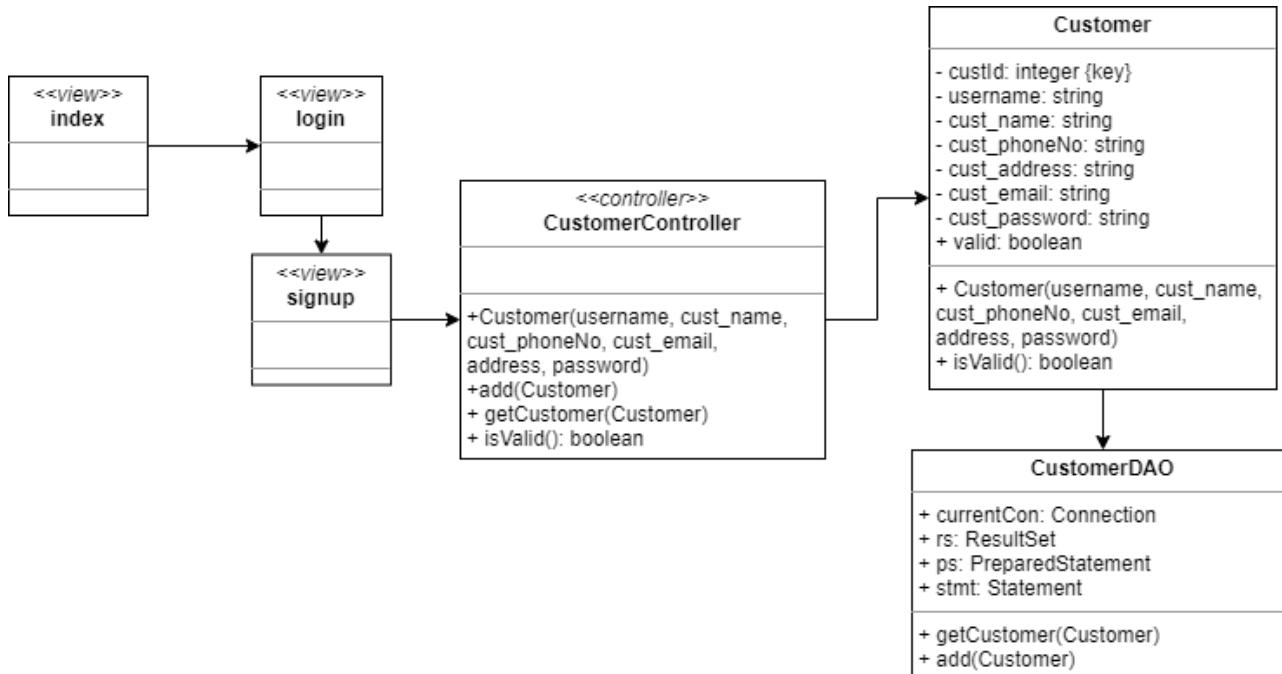
7. Traceability Requirements Matrix

PACKAGE	CLASS	U C D 0 0 1	U C D 0 0 2	U C D 0 0 3	U C D 0 0 4	U C D 0 0 5	U C D 0 0 6	U C D 0 0 7	U C D 0 0 8	U C D 0 0 9	U C D 0 1 0	U C D 0 1 1	U C D 0 1 2	U C D 0 1 3	U C D 0 1 4	U C D 0 1 5	U C D 0 1 6	U C D 0 1 7	U C D 0 1 8	U C D 0 1 9	U C D 0 2 0
		U C D 0 0 1	U C D 0 0 2	U C D 0 0 3	U C D 0 0 4	U C D 0 0 5	U C D 0 0 6	U C D 0 0 7	U C D 0 0 8	U C D 0 0 9	U C D 0 1 0	U C D 0 1 1	U C D 0 1 2	U C D 0 1 3	U C D 0 1 4	U C D 0 1 5	U C D 0 1 6	U C D 0 1 7	U C D 0 1 8	U C D 0 1 9	U C D 0 2 0
SDD_P_100	SDD_NBS_101																				
	SDD_NBS_102																				
	SDD_NBS_103																				
	SDD_NBS_104																				
	SDD_NBS_105																				
	SDD_NBS_106																				
	SDD_NBS_107																				
	SDD_NBS_108																				
	SDD_NBS_109																				
	SDD_NBS_110																				
	SDD_NBS_111																				
	SDD_NBS_112																				
	SDD_NBS_113																				
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	SDD_NBS_130																				
	SDD_NBS_131																				
	SDD_NBS_132																				

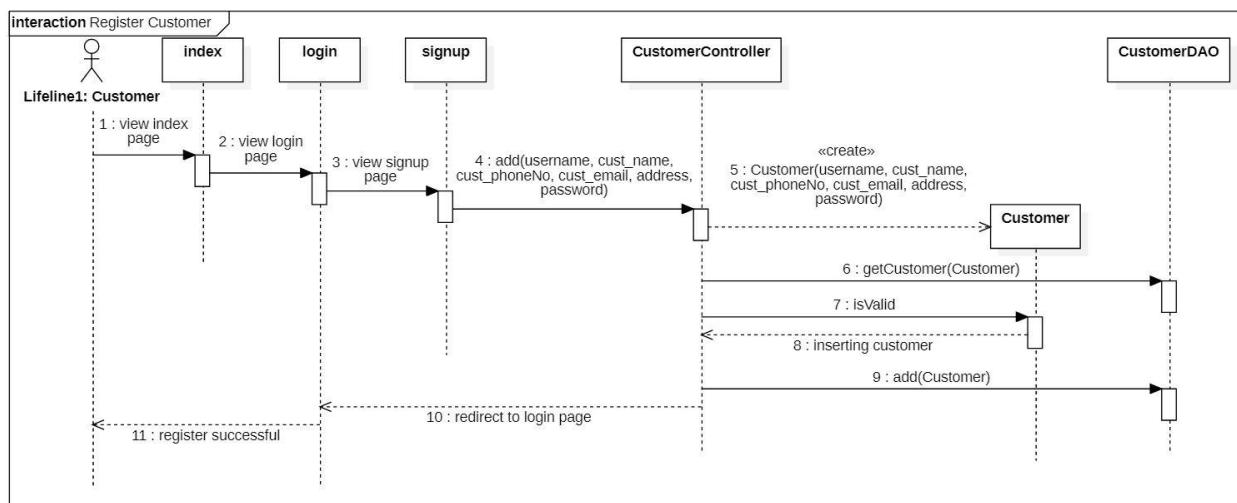
8. Appendices

8.1 Use Case Register Customer Account

8.1.1 Detail Class Diagram

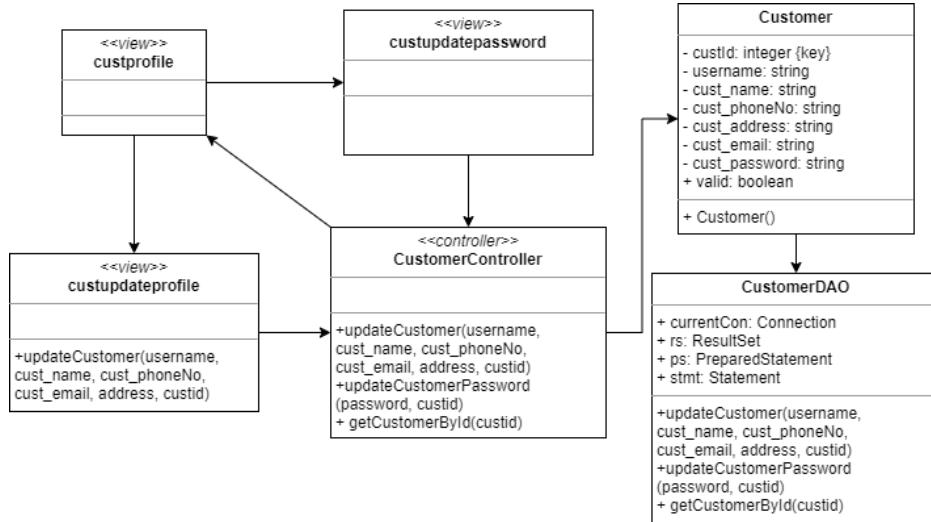


8.1.2 Multilayer Sequence Diagram

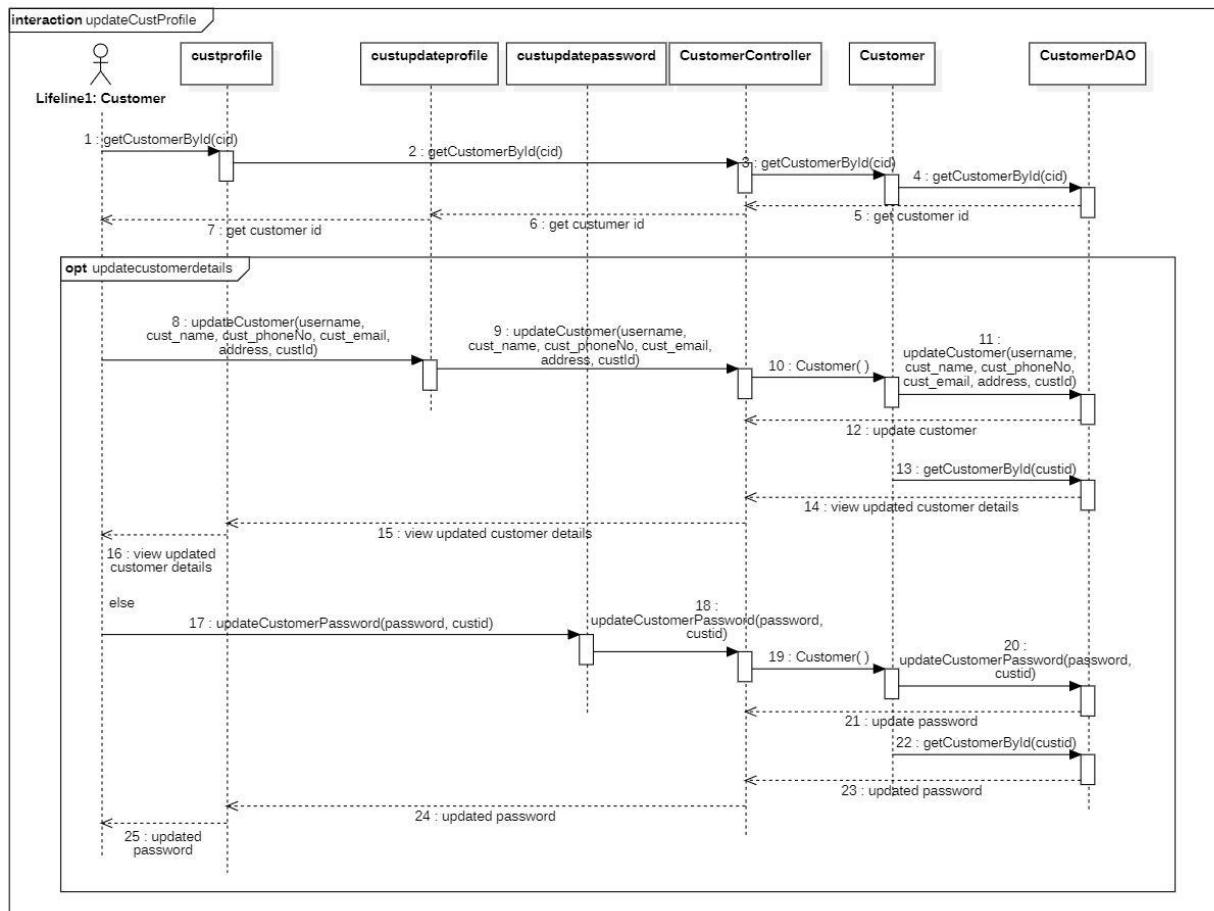


8.2 Use Case Update Customer Profile

8.2.1 Detail Class Diagram

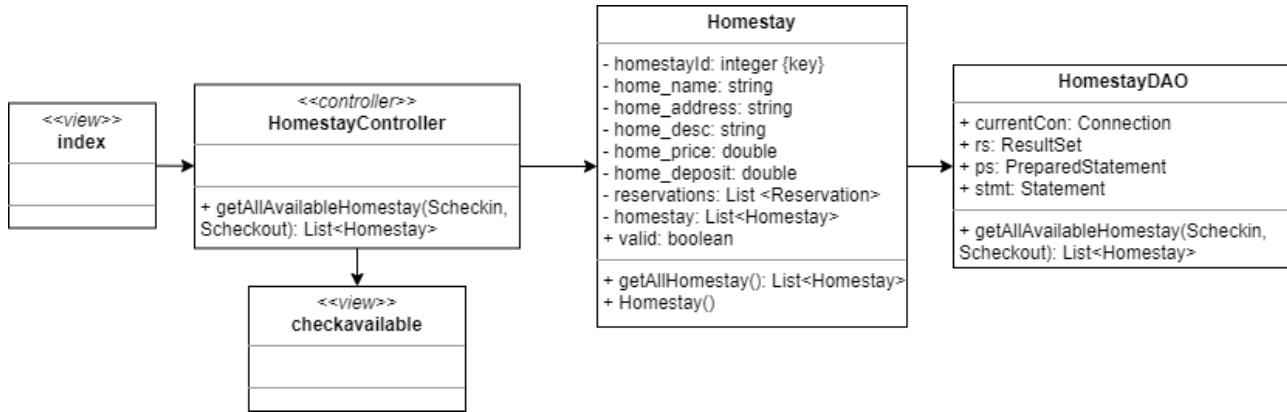


8.2.2 Multilayer Sequence Diagram

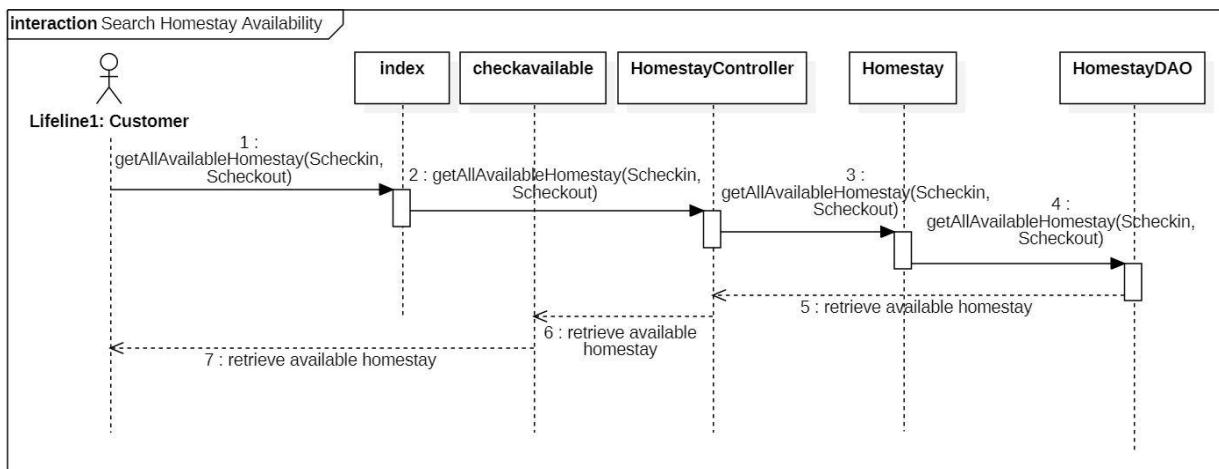


8.3 Use Case Search Homestay Availability

8.3.1 Detail Class Diagram

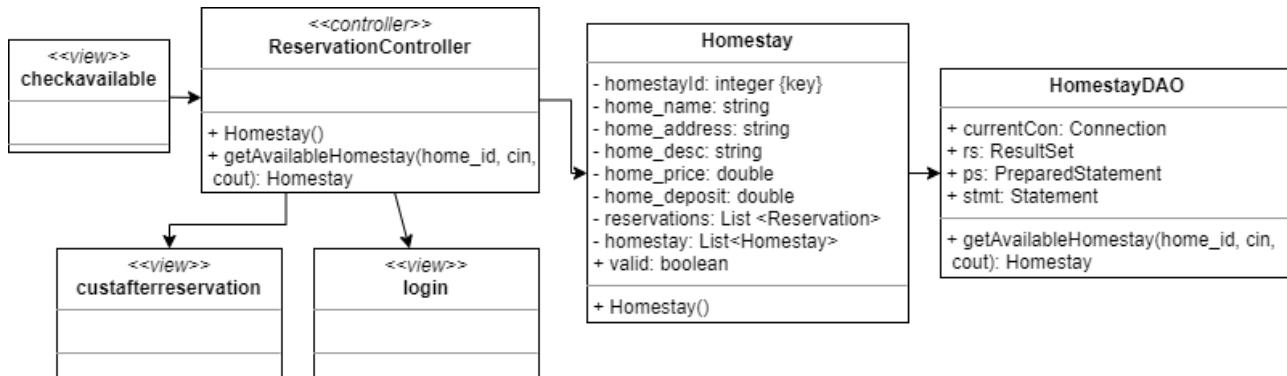


8.3.2 Multilayer Sequence Diagram

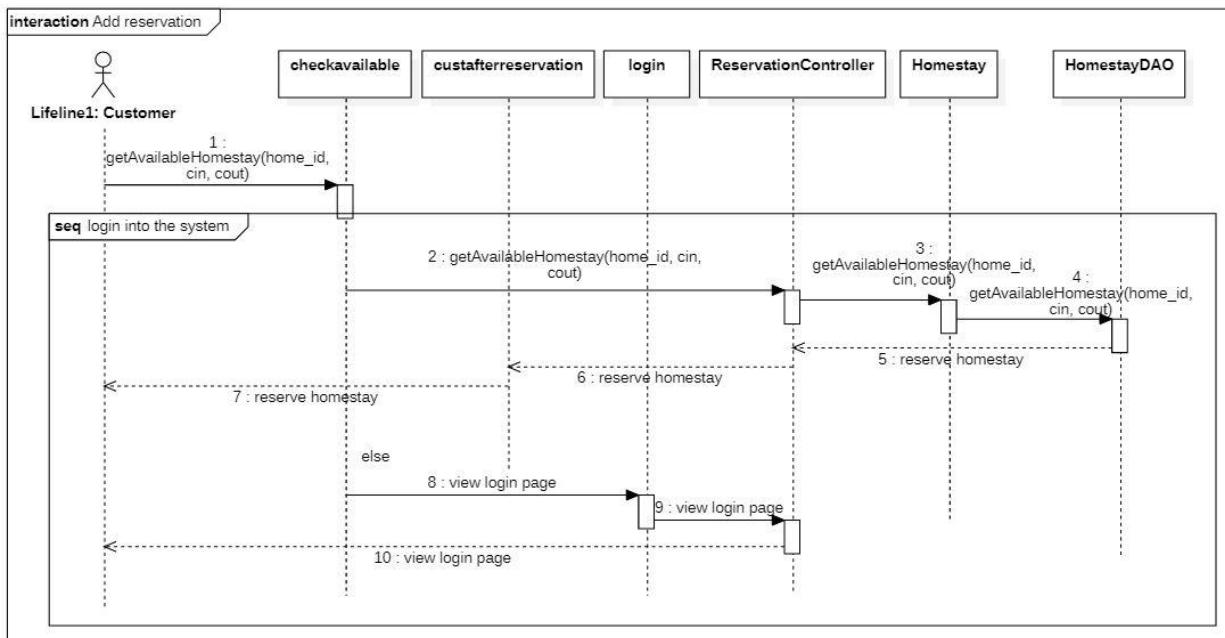


8.4 Use Case Add Reservation

8.4.1 Detail Class Diagram

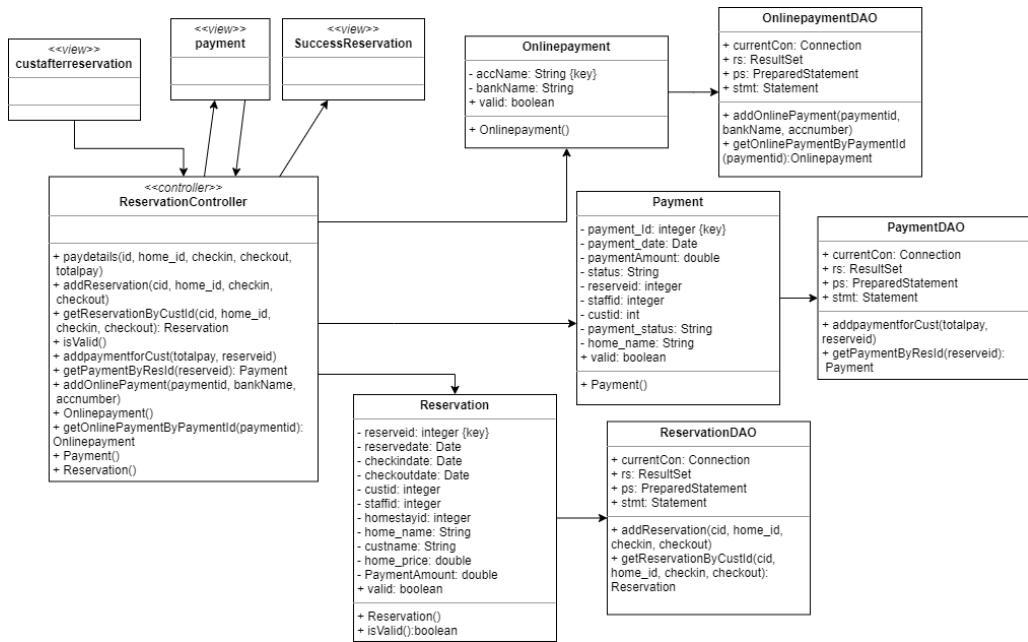


8.4.2 Multilayer Sequence Diagram

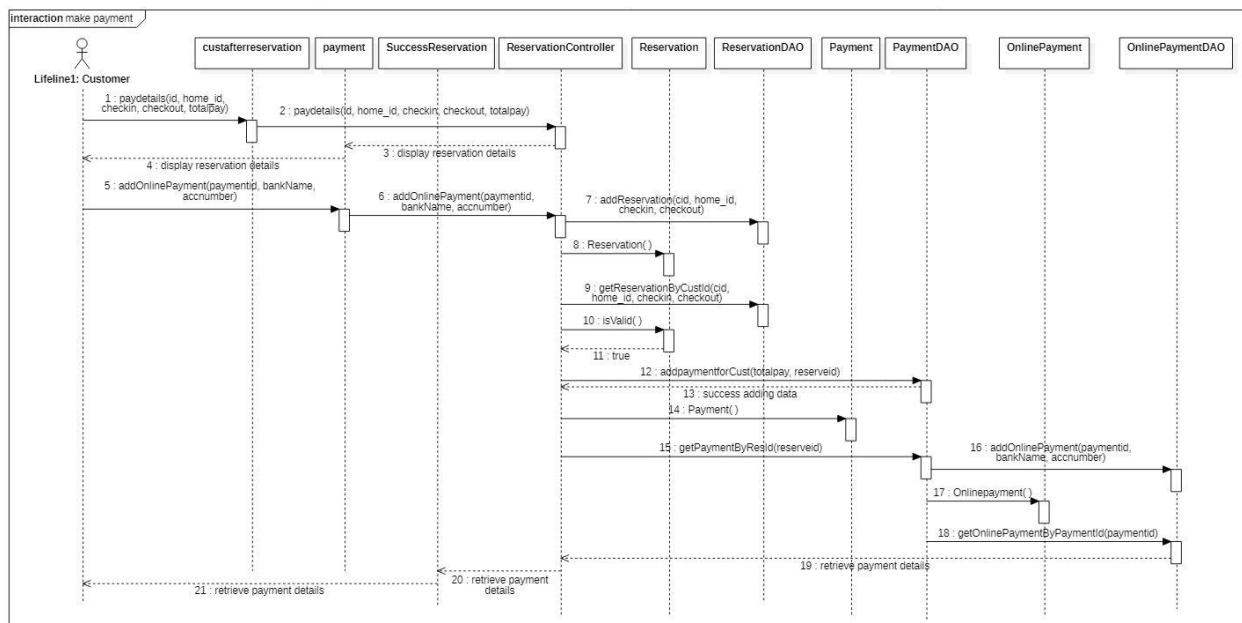


8.5 Use Case Make Payment

8.5.1 Detail Class Diagram

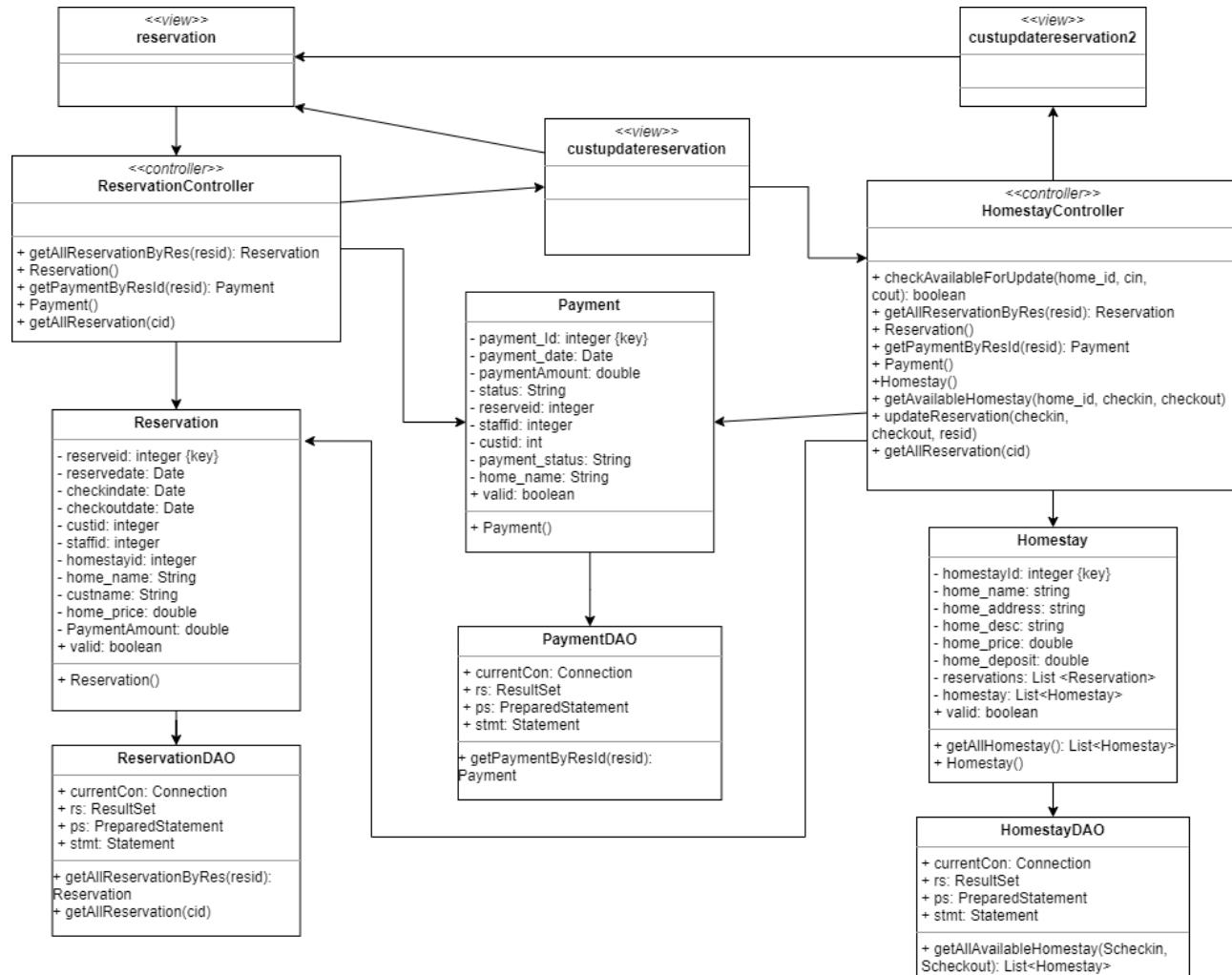


8.5.2 Multilayer Sequence Diagram

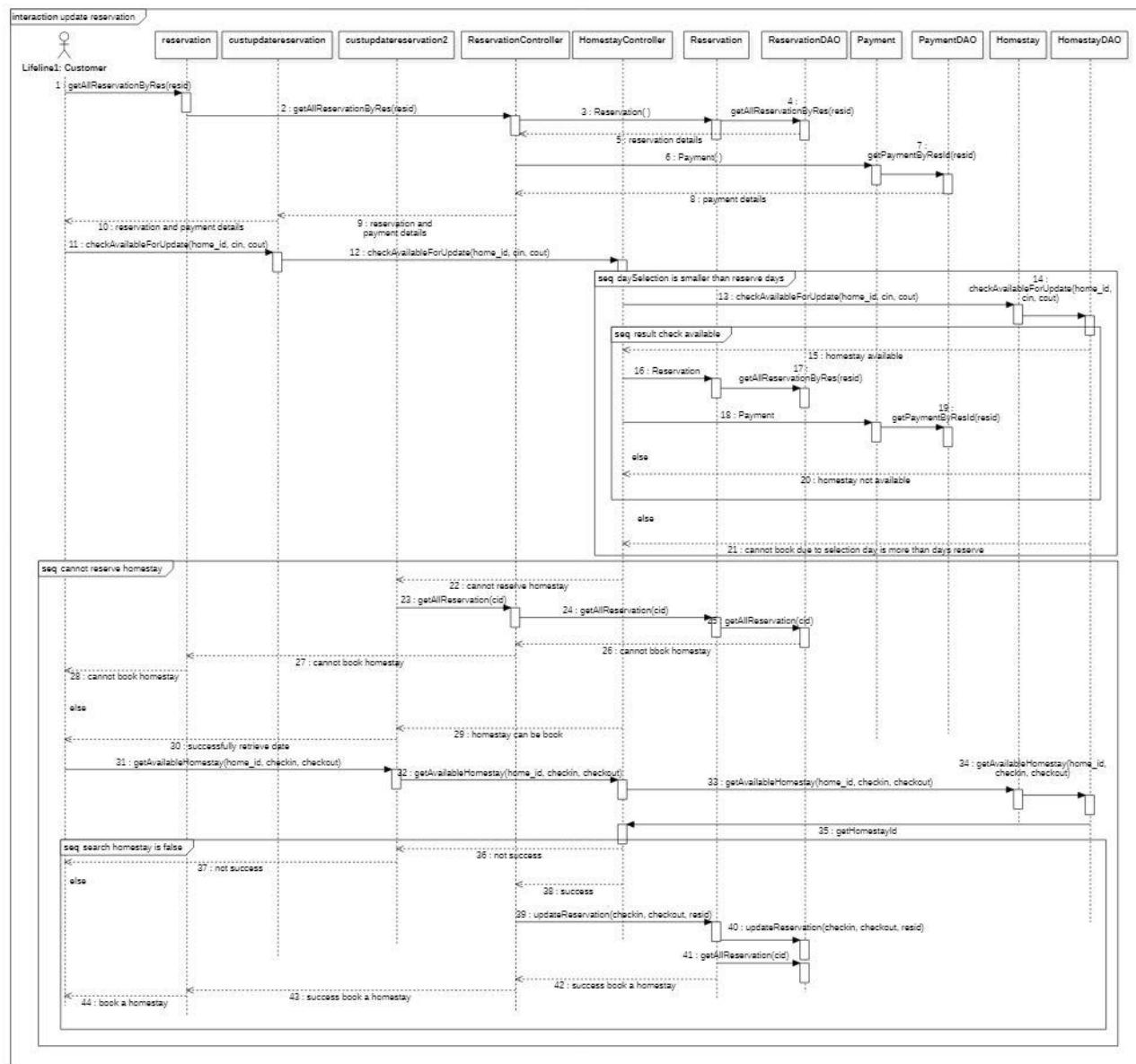


8.6 Use Case Update Reservation

8.6.1 Detail Class Diagram

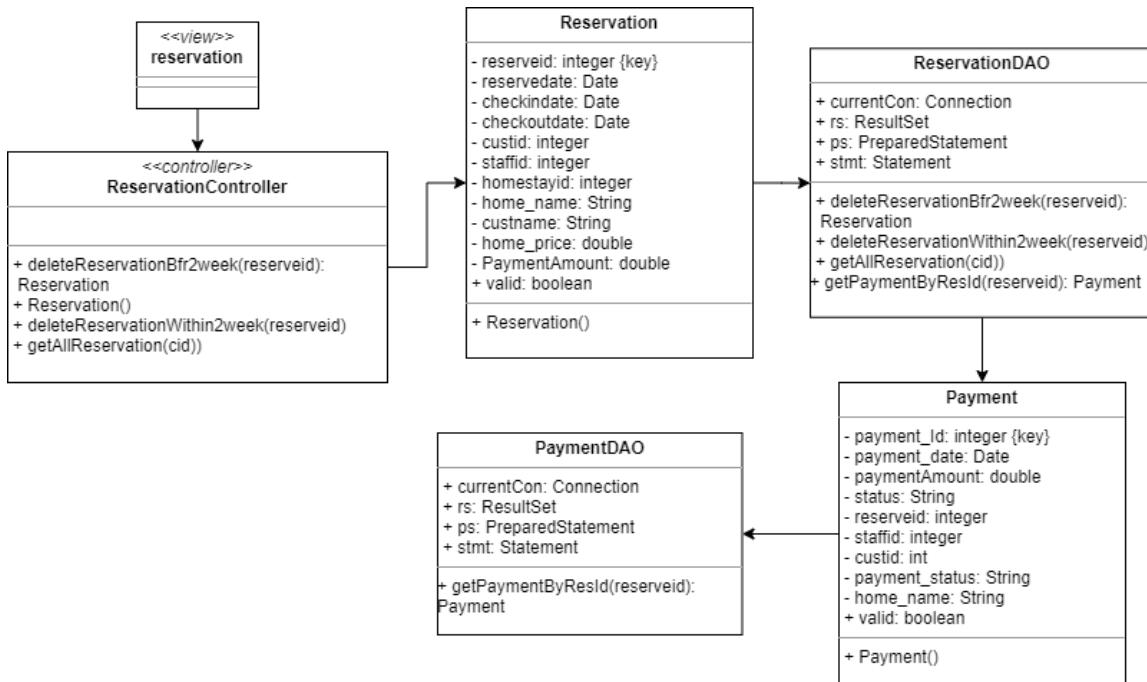


8.6.2 Multilayer Sequence Diagram

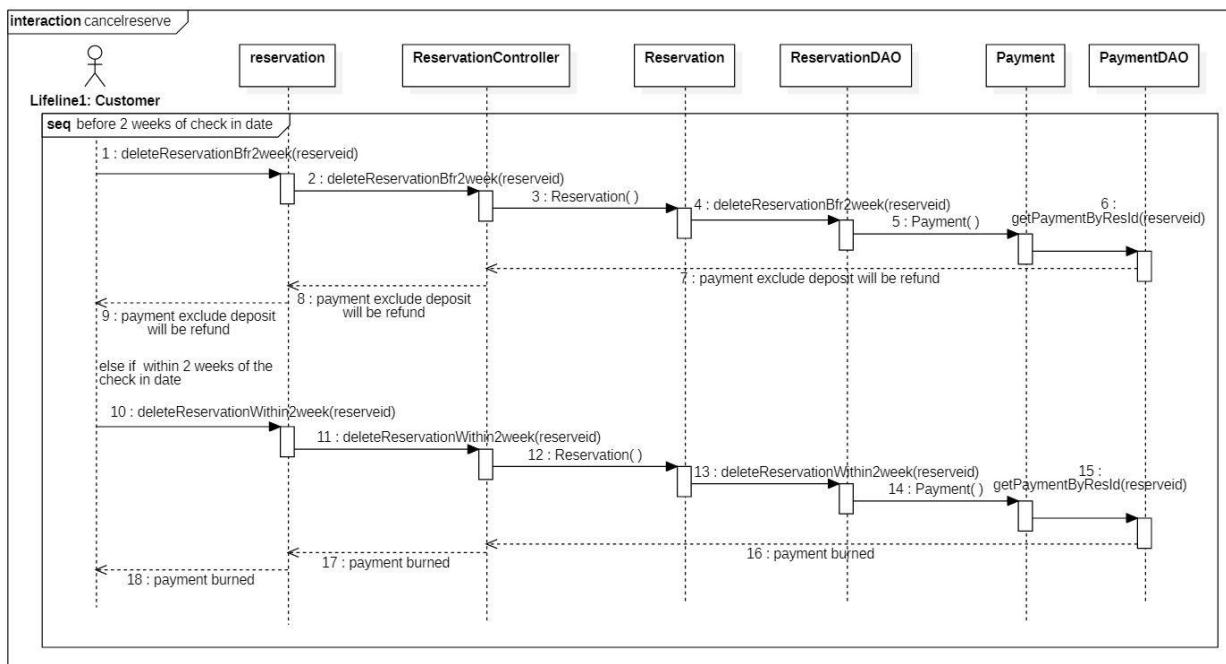


8.7 Use Case Cancel Reservation

8.7.1 Detail Class Diagram

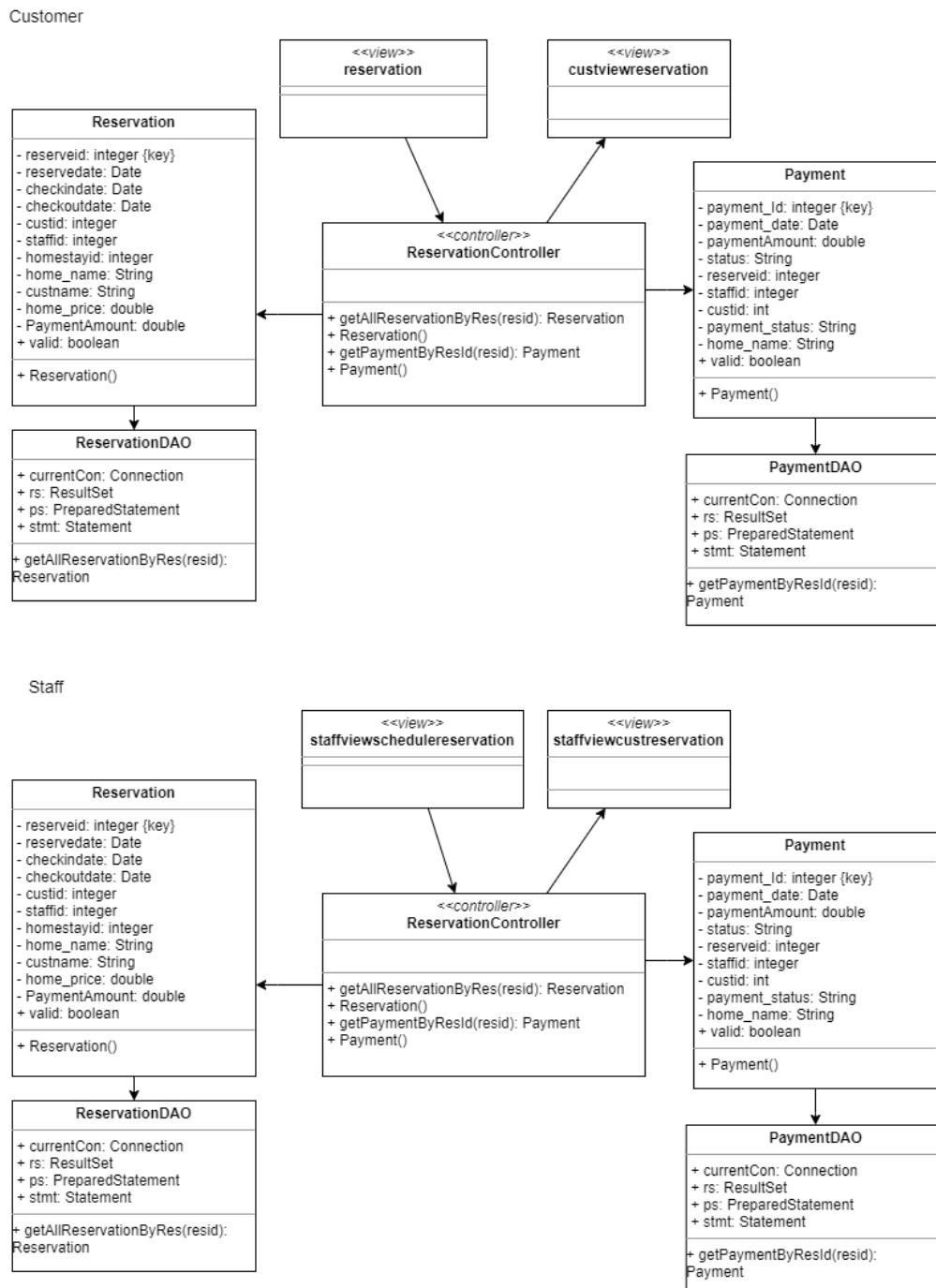


8.7.2 Multilayer Sequence Diagram



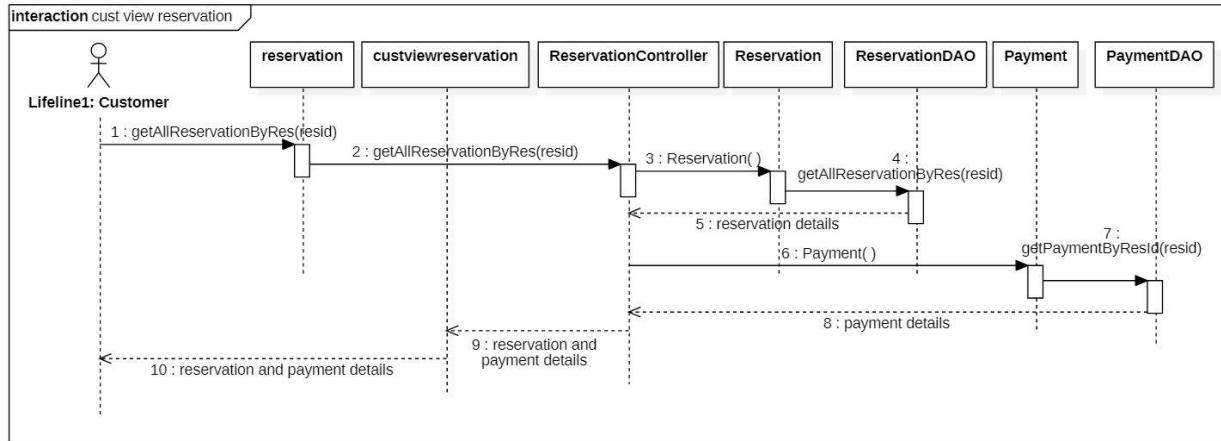
8.8 Use Case View Reservation

8.8.1 Detail Class Diagram

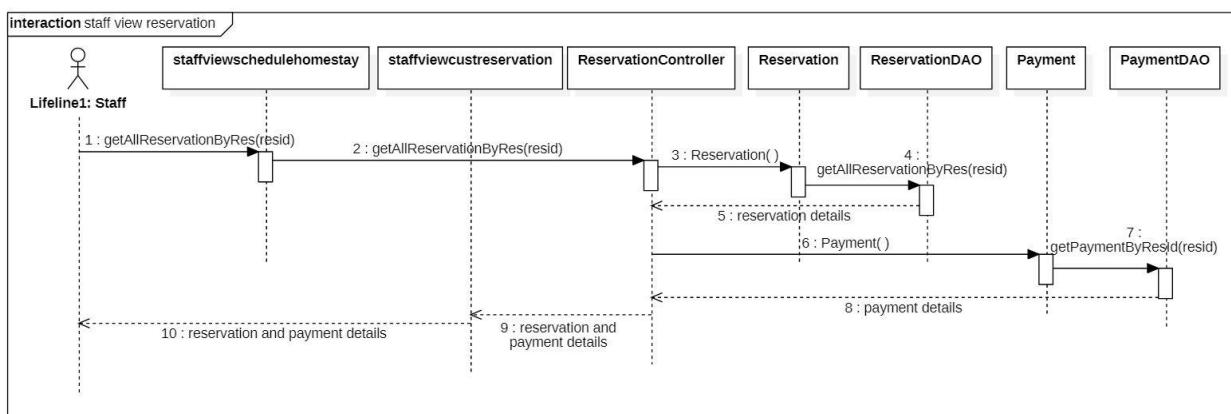


8.8.2 Multilayer Sequence Diagram

Customer

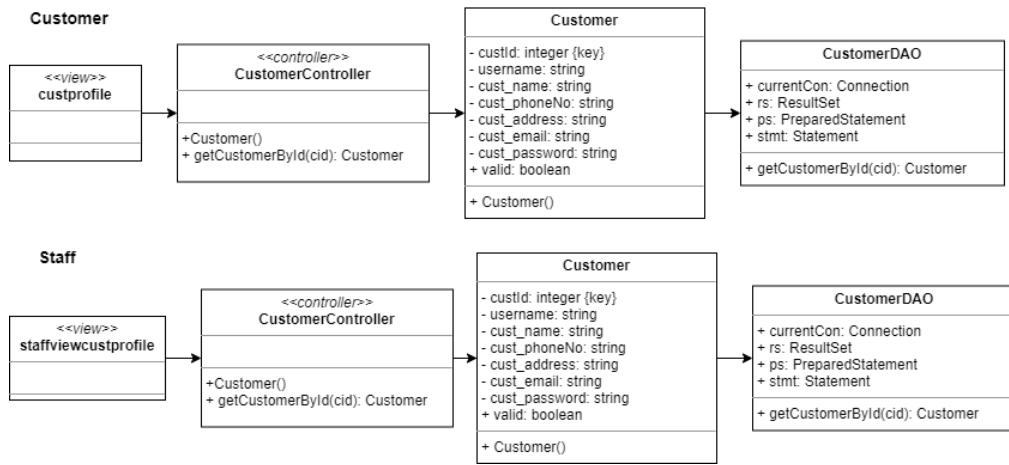


Staff



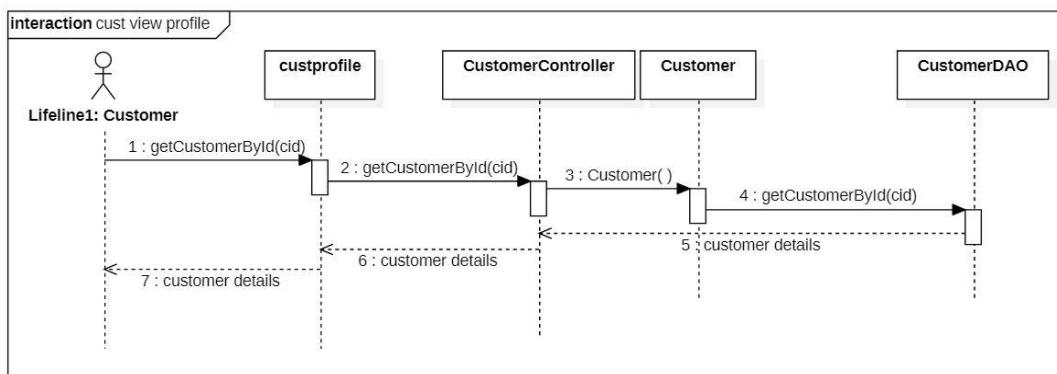
8.9 Use Case View Customer Profile

8.9.1 Detail Class Diagram

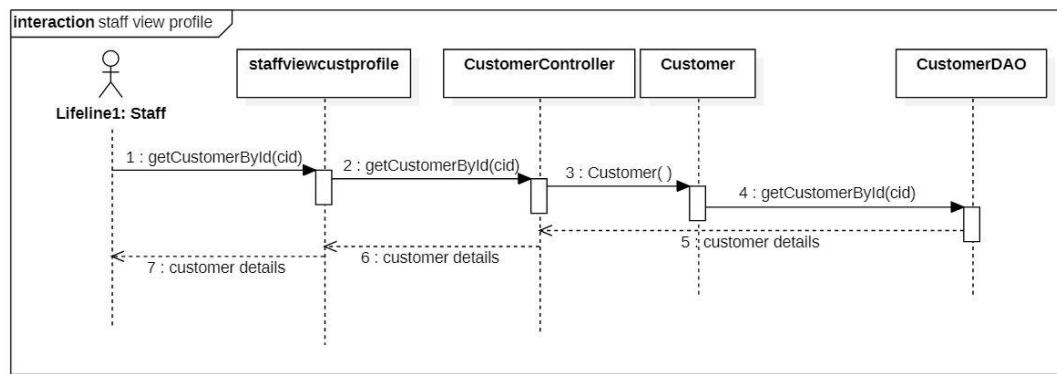


8.9.2 Multilayer Sequence Diagram

Customer

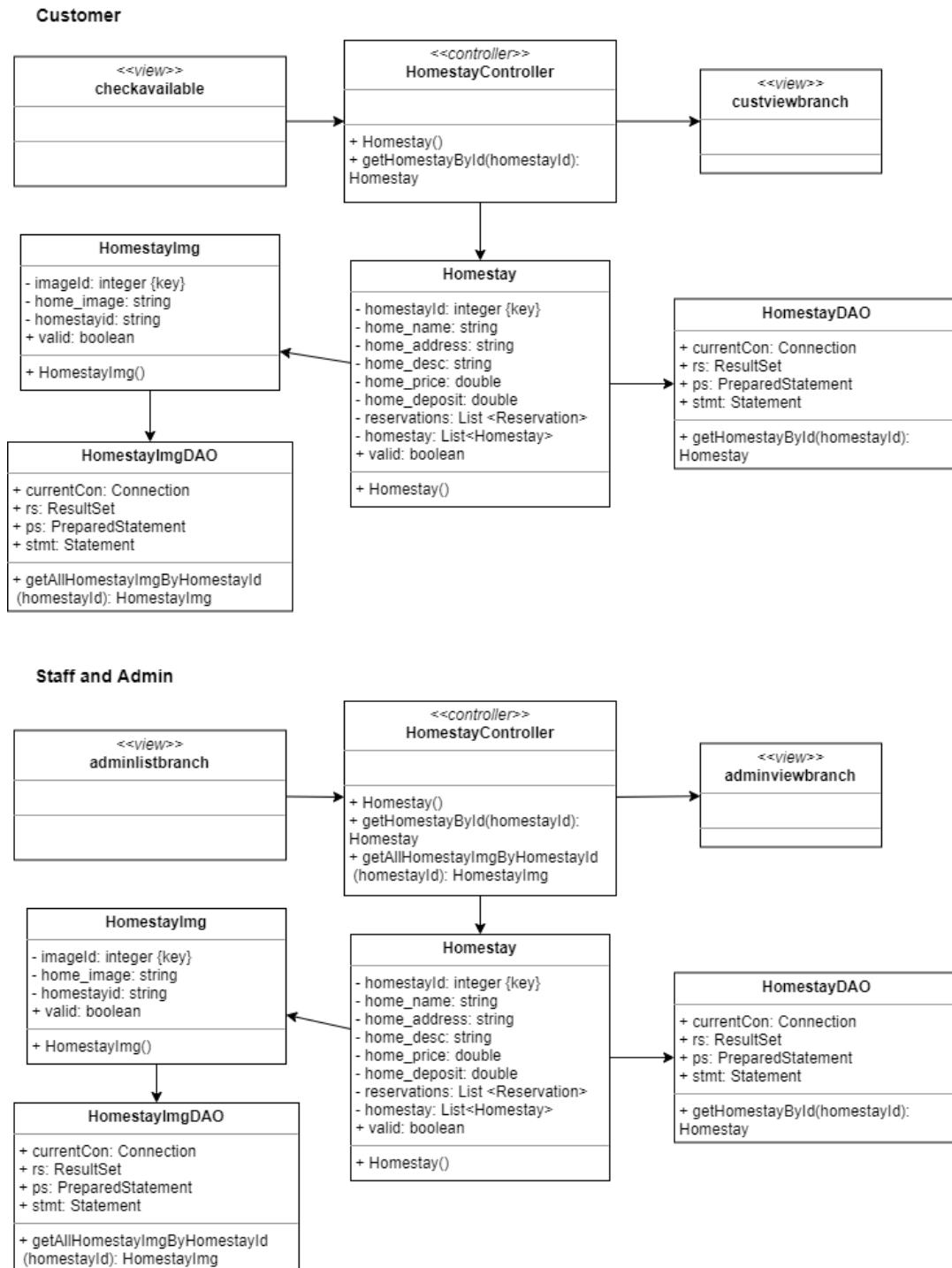


Staff



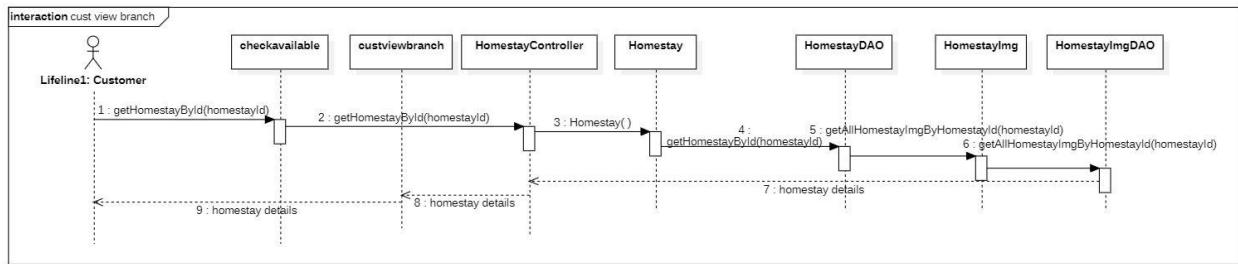
8.10 Use Case View Branch Homestay

8.10.1 Detail Class Diagram

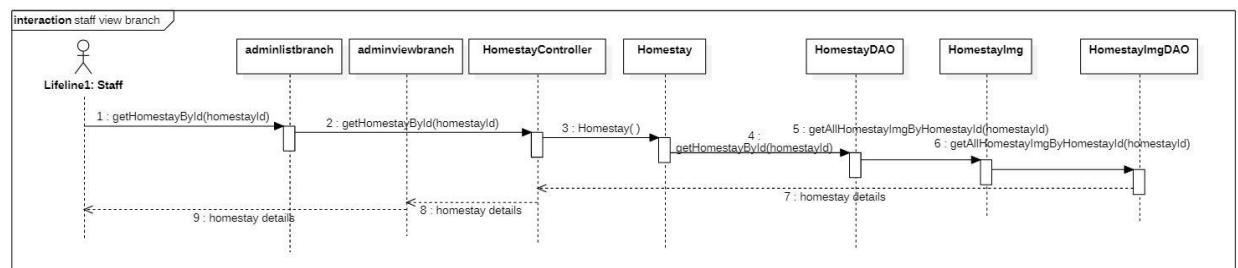


8.10.2 Multilayer Sequence Diagram

Customer

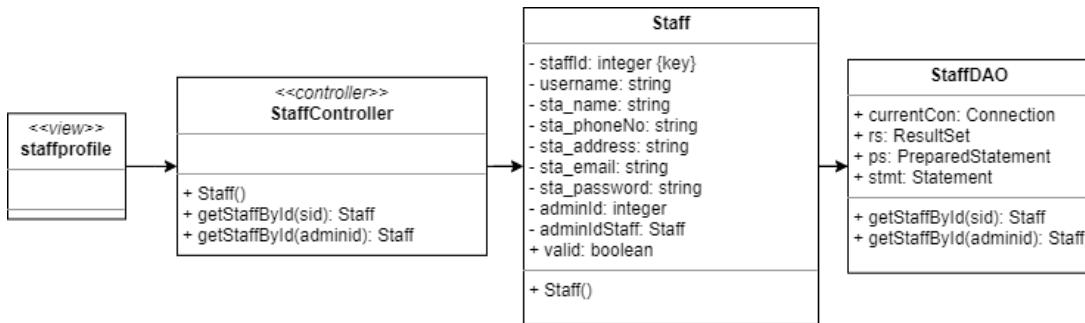


Staff

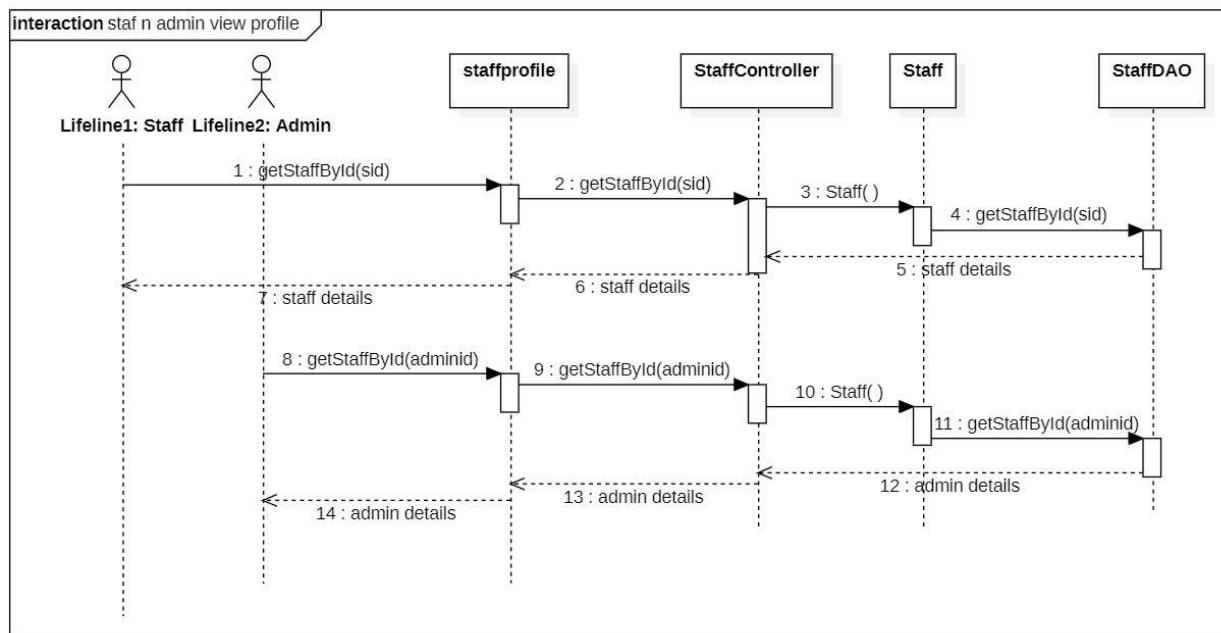


8.11 Use Case View User Profile

8.11.1 Detail Class Diagram

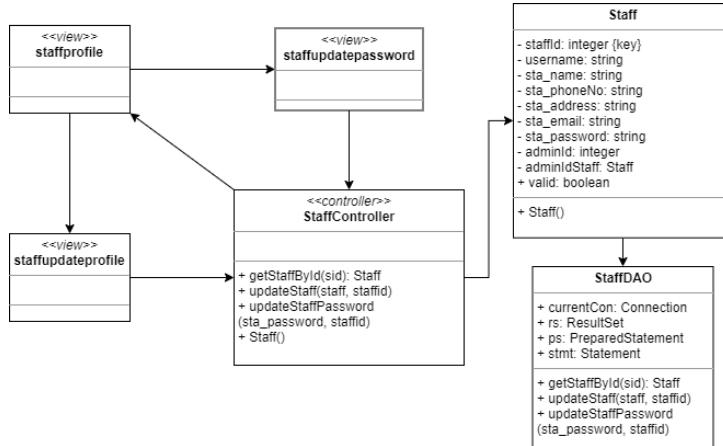


8.11.2 Multilayer Sequence Diagram

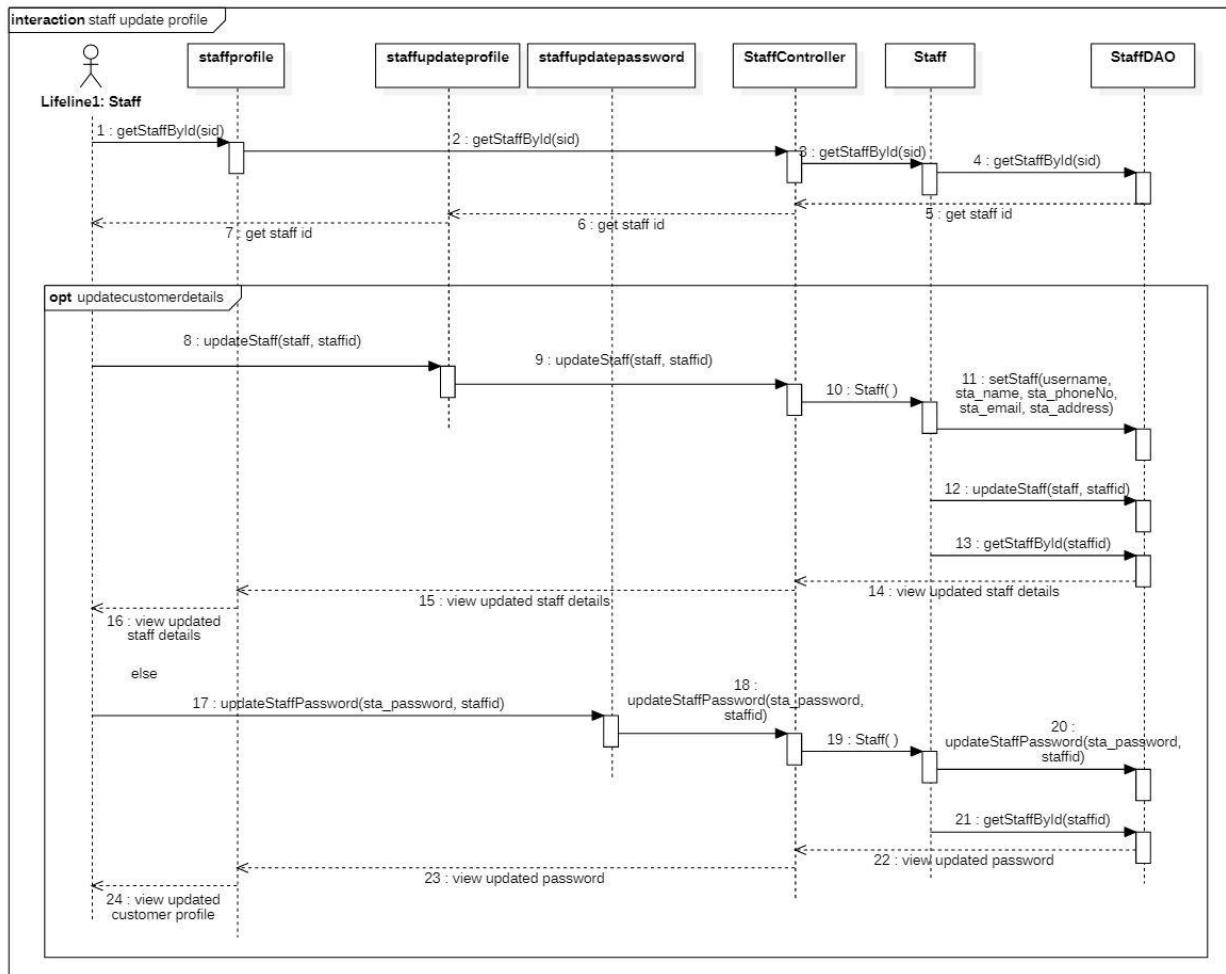


8.12 Use Case Update User Profile

8.12.1 Detail Class Diagram

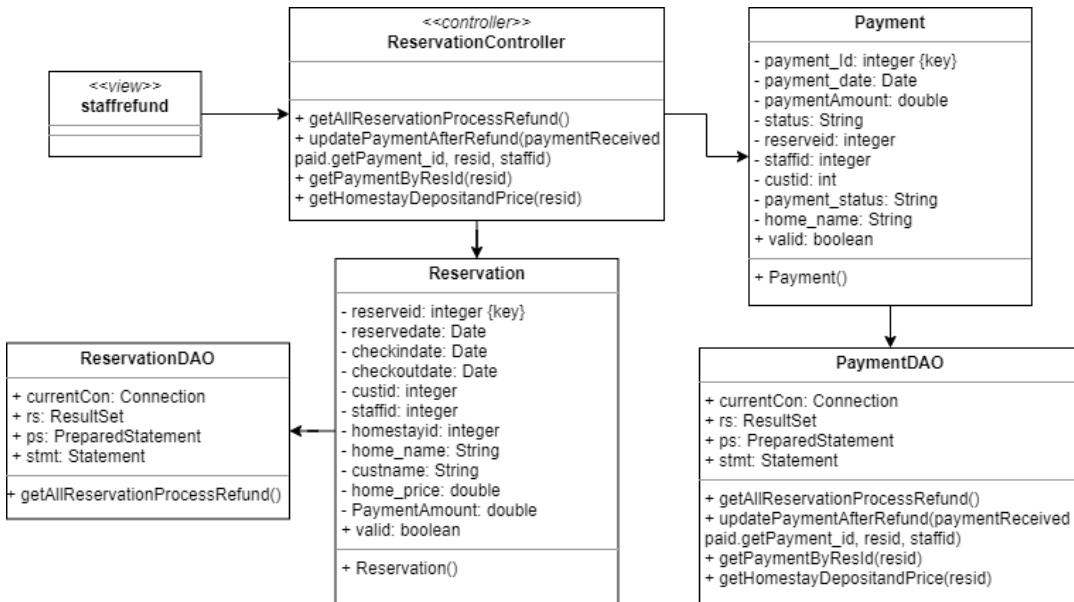


8.12.2 Multilayer Sequence Diagram

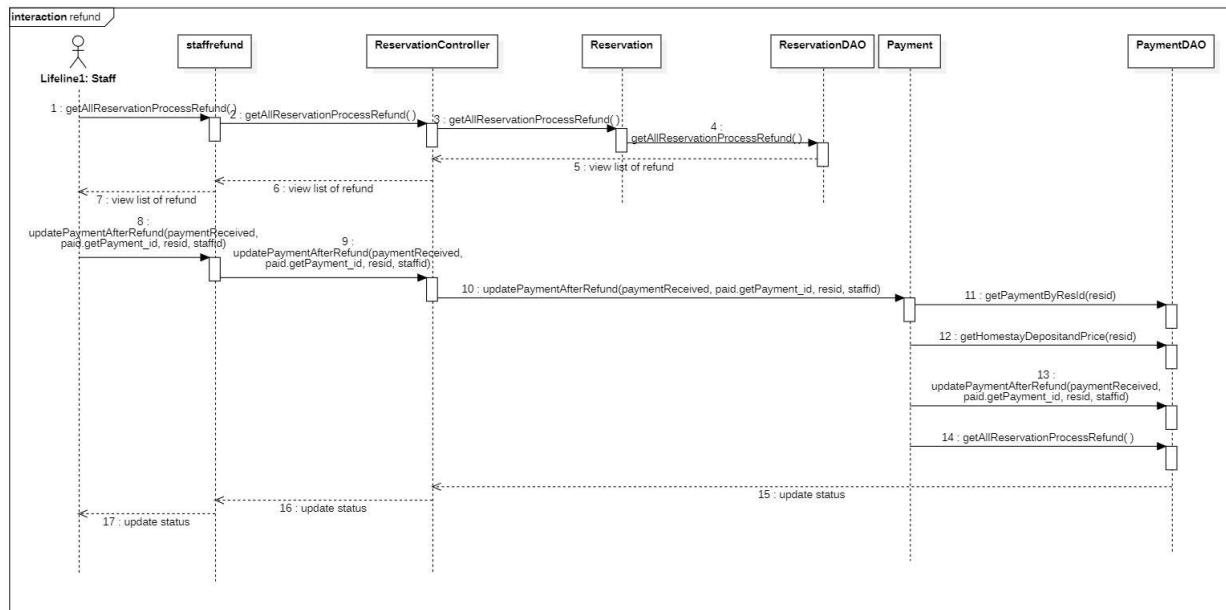


8.13 Use Case Refund

8.13.1 Detail Class Diagram

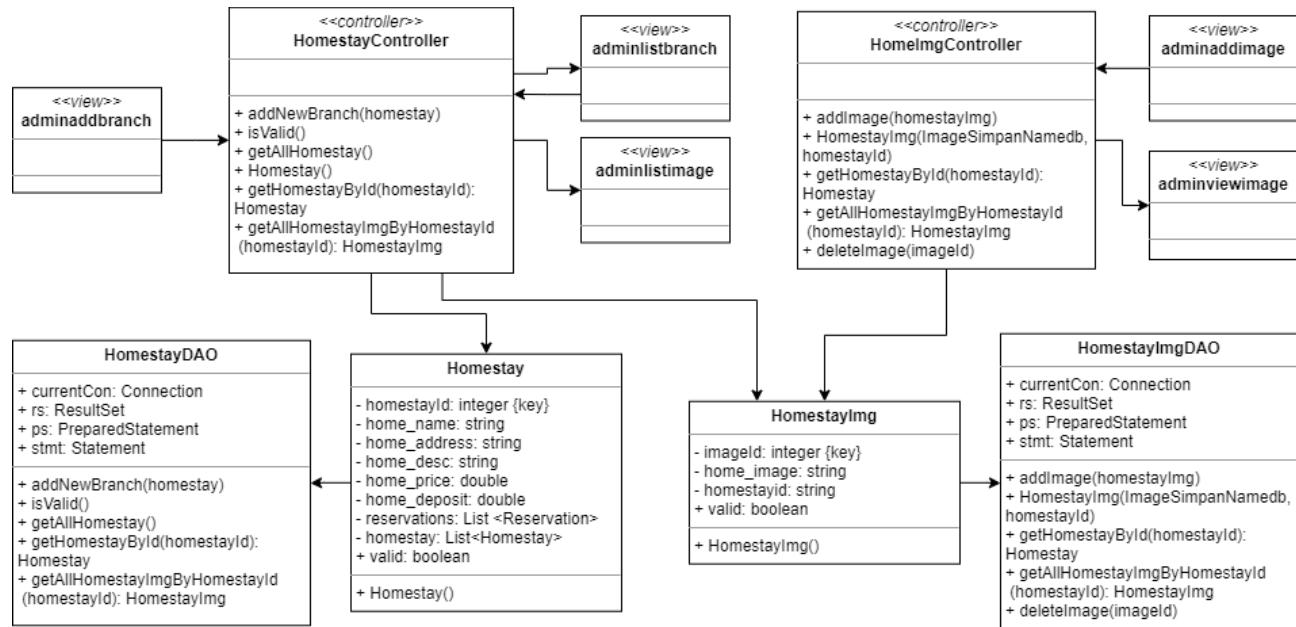


8.13.2 Multilayer Sequence Diagram

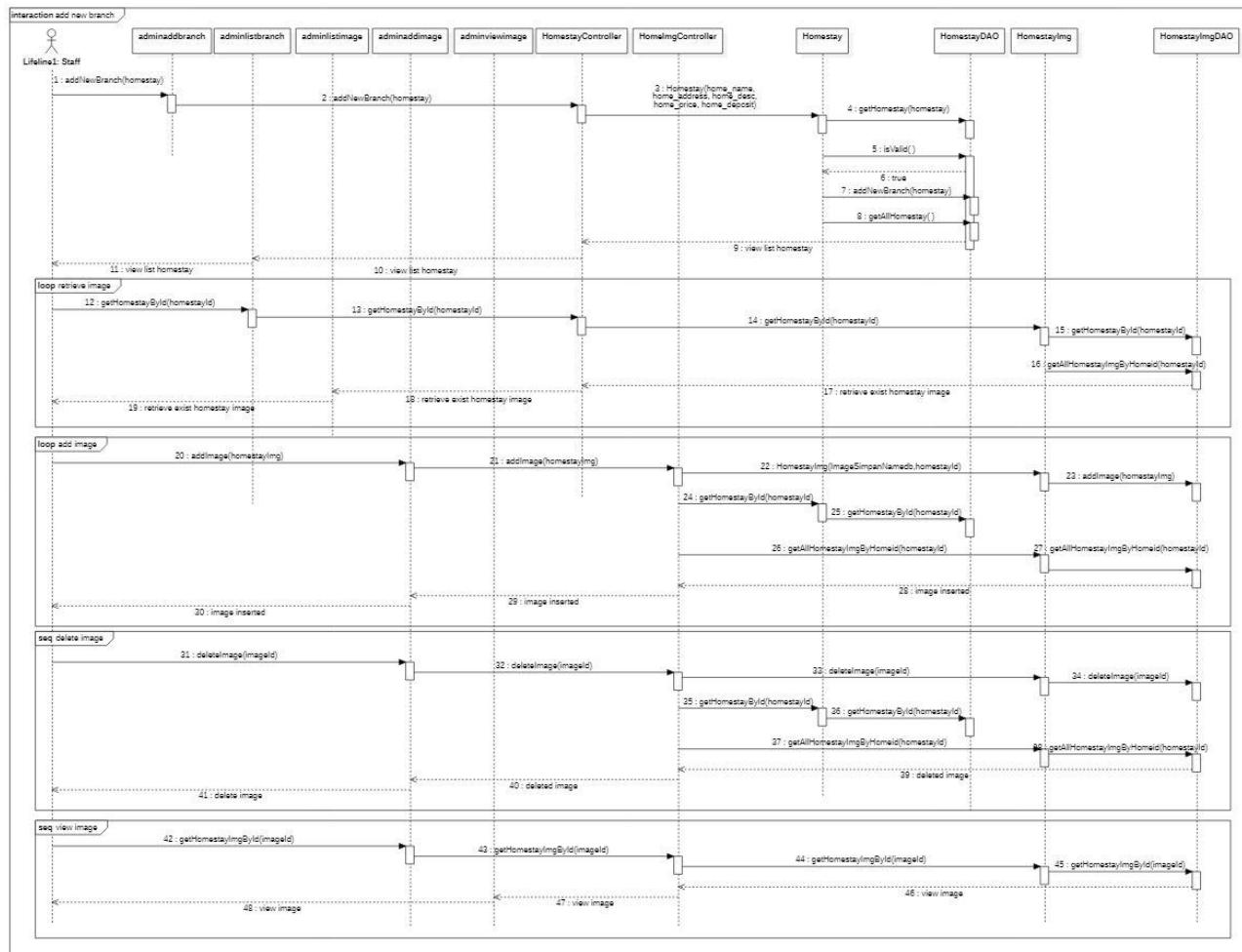


8.14 Use Case Add New Branch

8.14.1 Detail Class Diagram

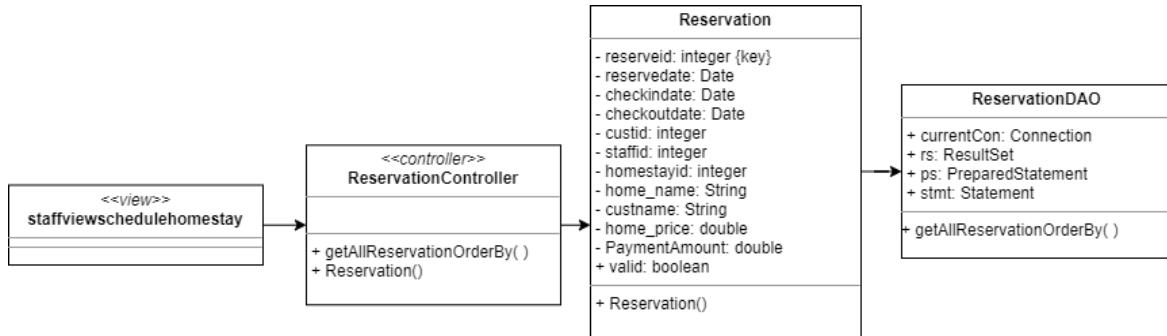


8.14.2 Multilayer Sequence Diagram

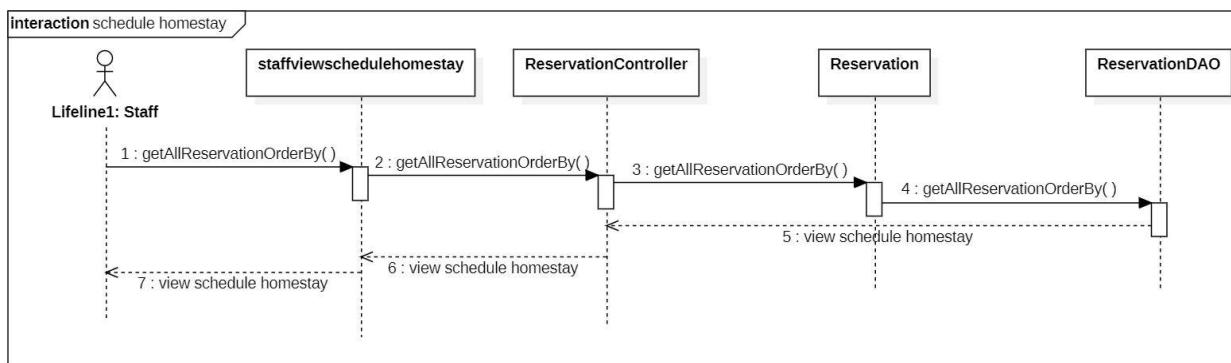


8.15 Use Case View Schedule Homestay

8.15.1 Detail Class Diagram

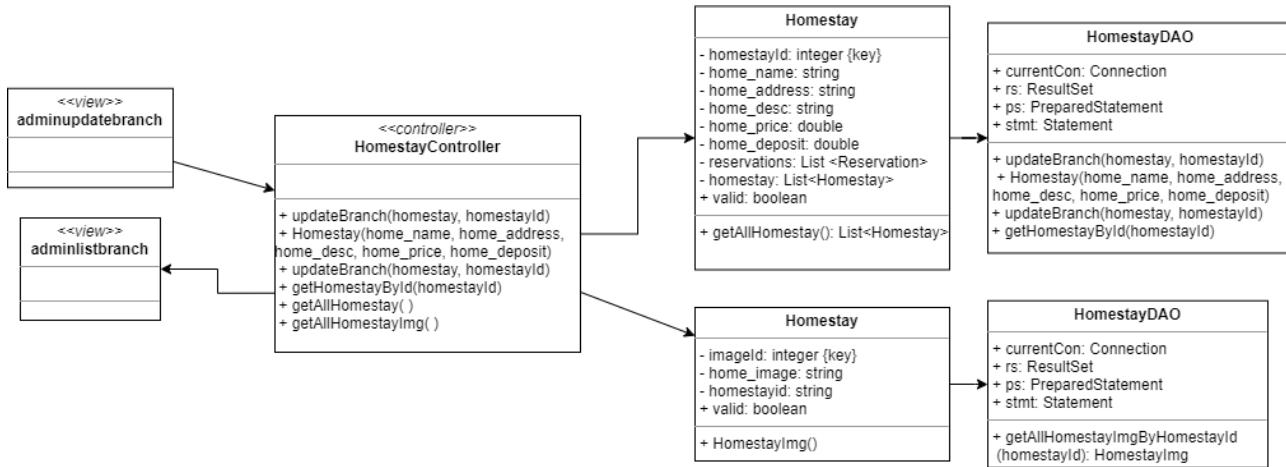


8.15.2 Multilayer Sequence Diagram

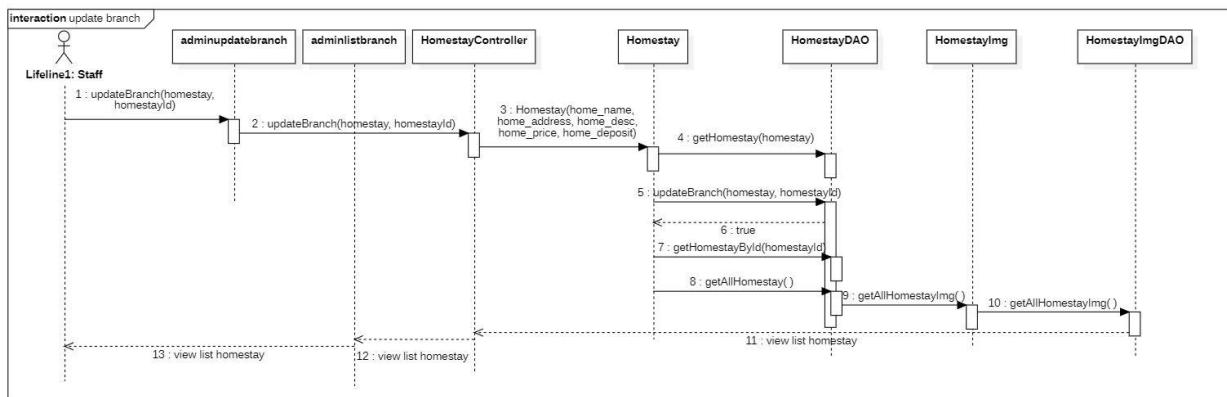


8.16 Use Case Update Branch

8.16.1 Detail Class Diagram

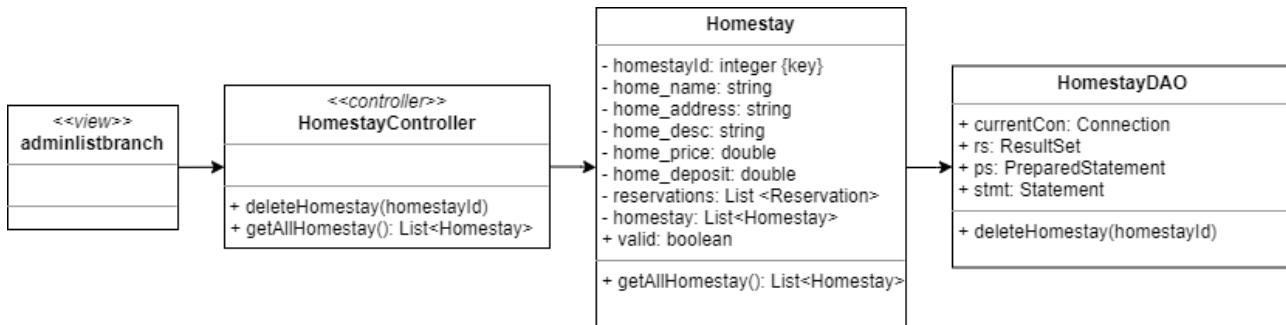


8.16.2 Multilayer Sequence Diagram

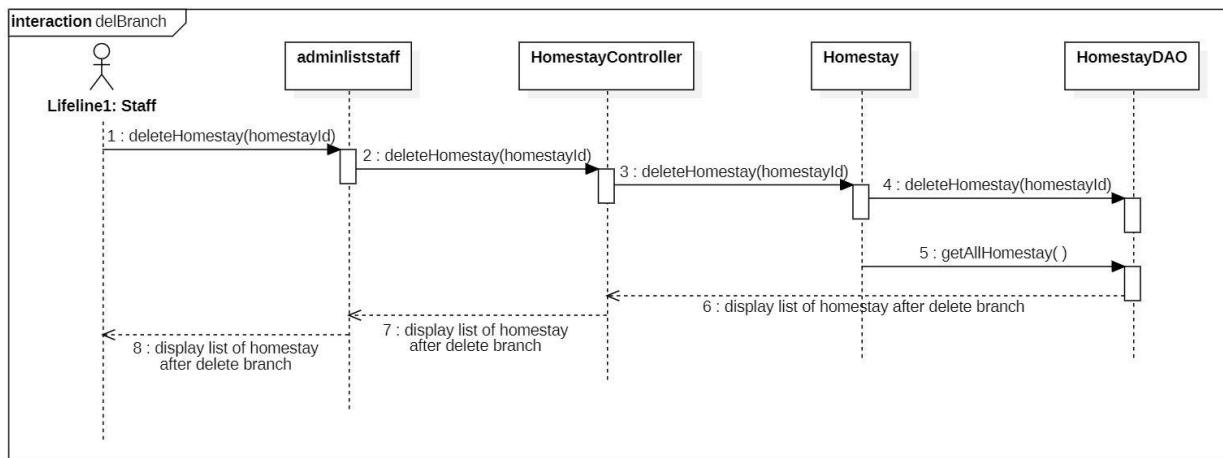


8.17 Use Case Delete Branch

8.17.1 Detail Class Diagram

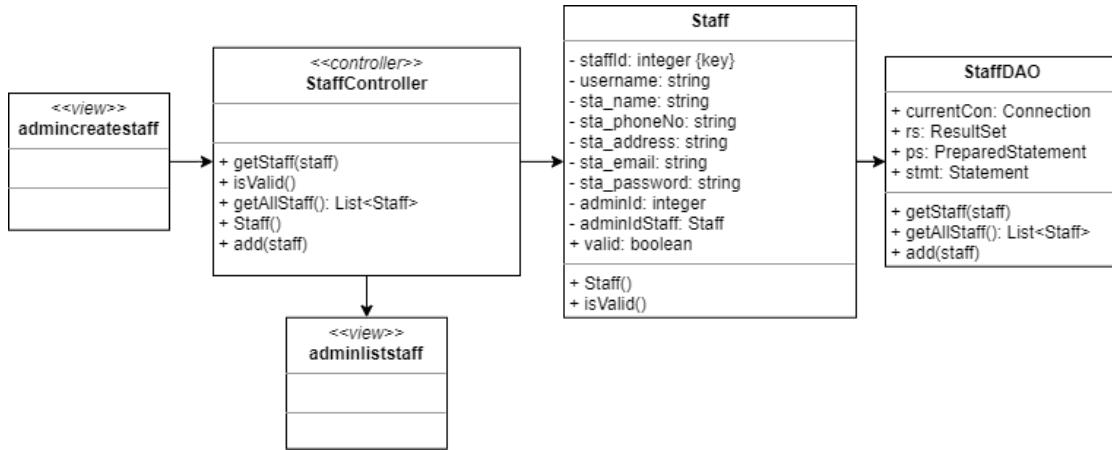


8.17.2 Multilayer Sequence Diagram

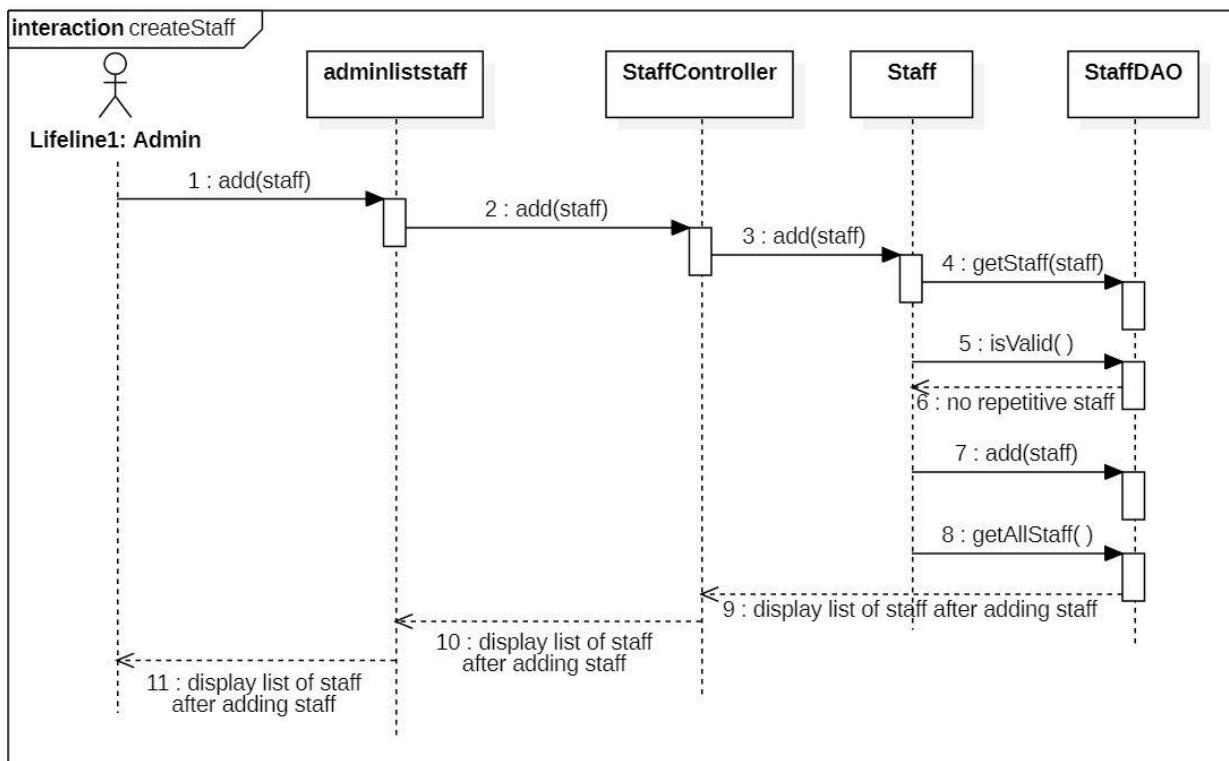


8.18 Use Case Create Staff Profile

8.18.1 Detail Class Diagram

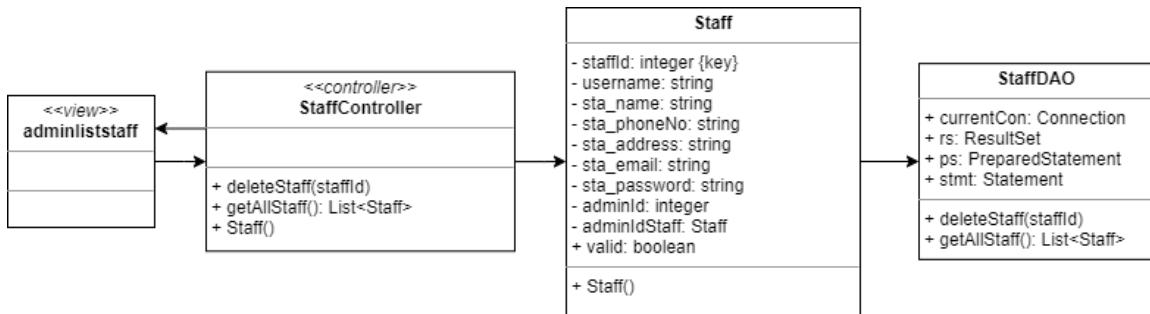


8.18.2 Multilayer Sequence Diagram

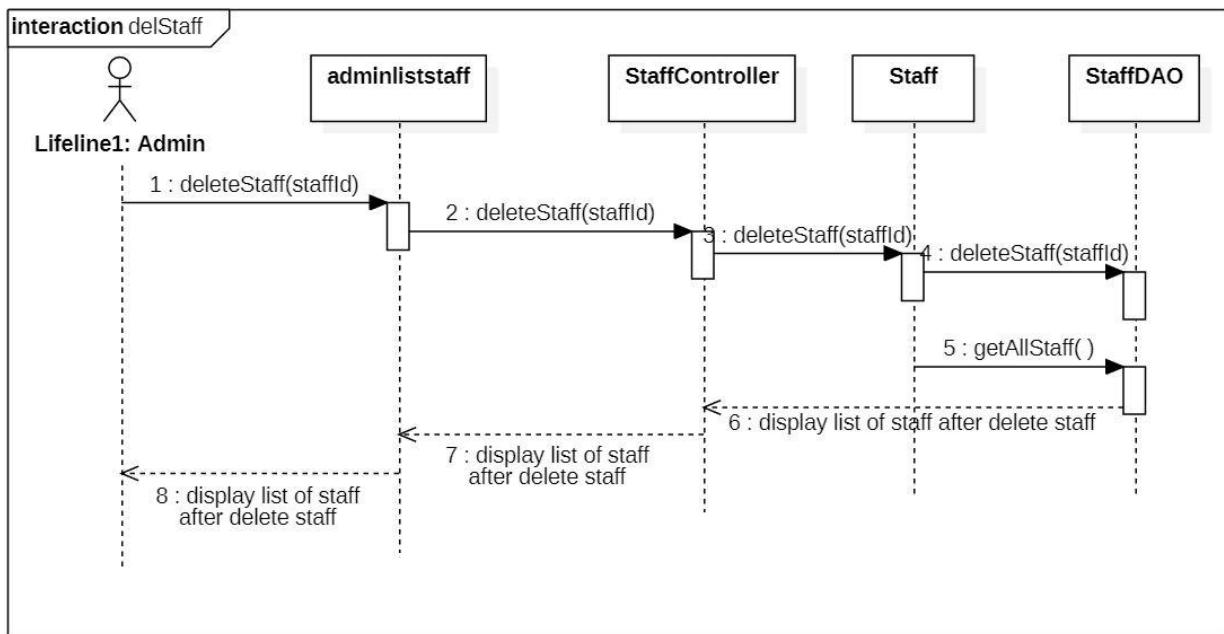


8.19 Use Case Delete Staff Profile

8.19.1 Detail Class Diagram

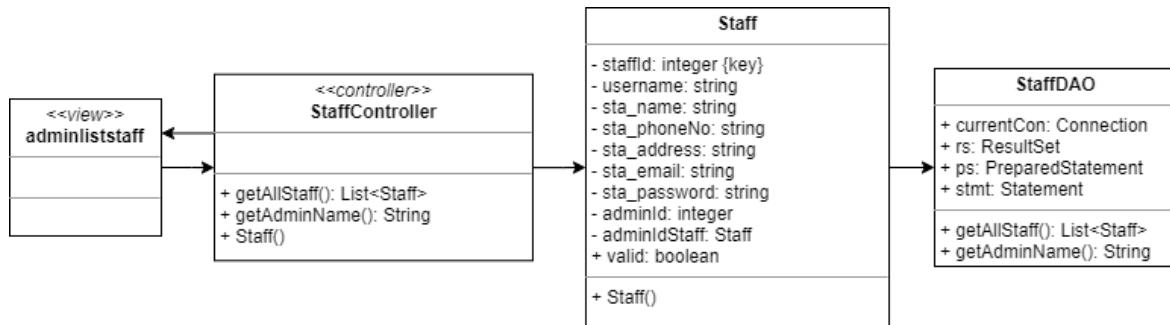


8.19.2 Multilayer Sequence Diagram



8.20 Use Case View List Staff Profile

8.20.1 Detail Class Diagram



8.20.2 Multilayer Sequence Diagram

