

SDS-01

SOFTWARE DESIGN DESCRIPTION

ANDROID MOBILE BASED SHOES AND CARE SYSTEM

for:

Shoes and Care Business

Prepared by:


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		SDS-01		
		Revision		Date:

Change List

Revision	Description
A	Sequence diagram (the should be same with use case scenario)
B	References should refer to SKPL
C	Component diagram, see the video of component diagram
D	Document coverage, write based our topic
E	
F	
G	

INDEX Date	-	A	B	C	D	E	F	G

Pages Changes List

Page	Revision	Page	Revision
8	Fix the document coverage based on our topic		
11-31	Sequence diagram change match with use case scenario		
8	Make reference from our SKPL		
10	Fix the component diagram based on the video		

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1. 1. Preliminary

1.1 Purpose of Writing Document

This document Software Design Description (SDD) is a document that aims to describe in detail the software to be built. This document is used by software developers as a reference for developing software at a later stage.

Users of this document are used by developers of software and stakeholders involved in this system. With the drafting of this SDD document, it is expected that the development of software will be more conceptual and not cause ambiguity during development.

1.2 Document Coverage

The software " ANDROID MOBILE BASED SHOES AND CARE SYSTEM" which will be developed in this paper discusses the process Shoes and Care treatment that can be manage through the apps. By the apps which will be developed, it will be able to solve problems and as a tools to help in handling Shoes and Care business.

1.3 Definitions and Abbreviations

ABBREVIATIONS	DEFINITIONS
SDD	(Software Design Description) Documents that describe and describe in detail the design of software to be built.
SRS	(Software Requirement Specification) is a specification of the software that will be developed.
DBMS	(Database Management System) is an organizing system of database processing systems on computers.
XML	(Extensible Markup Language) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.
SQLite	Relational database management system (RDBMS) contained in a C library. In contrast to many other database management systems, SQLite is not a client-server database engine.
JavaScript	Scripting language, which is a language that does not require a compiler to run it, but it is enough with an interpreter
Java	General-purpose programming language that is class-based, object-oriented, and designed to have as few implementation dependencies as possible.
Android Studio	The official integrated development environment (IDE) for Google's Android

	operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development.
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1.4 References

1. Group-4 IF-42-INT.(2020).SRS Android Mobile Based Shoes and Care System

1.5 Systematic Discussion

This SDD document contains a description of the design of the Android Mobile Based Shoes and Care software that will be developed based on the SRS document. This SDD document will explain the details of software design so that it can be implemented. This document generally consists of four chapters with the following details:

A. Preliminary

Preliminary contains an explanation of the SDD document which includes the purpose of making this document, the scope of the problem solved by the software developed, the definitions and terms, references and efforts of the document.

B. Global Design Description

The description of the global design contains the design of the software that will be built including the design of the implementation environment, architectural description, and description of the components.

C. Detailed Design

The detailed design of this document contains the realization of use cases, designing class details, class diagram descriptions, algorithms / queries, statechart diagrams, interface design, and designing class persistence representations.

D. Usability Matrix

The usability matrix contains functional terms found in SRS documents.

2 Global Design Description

2.1 Design of the Implementation Environment

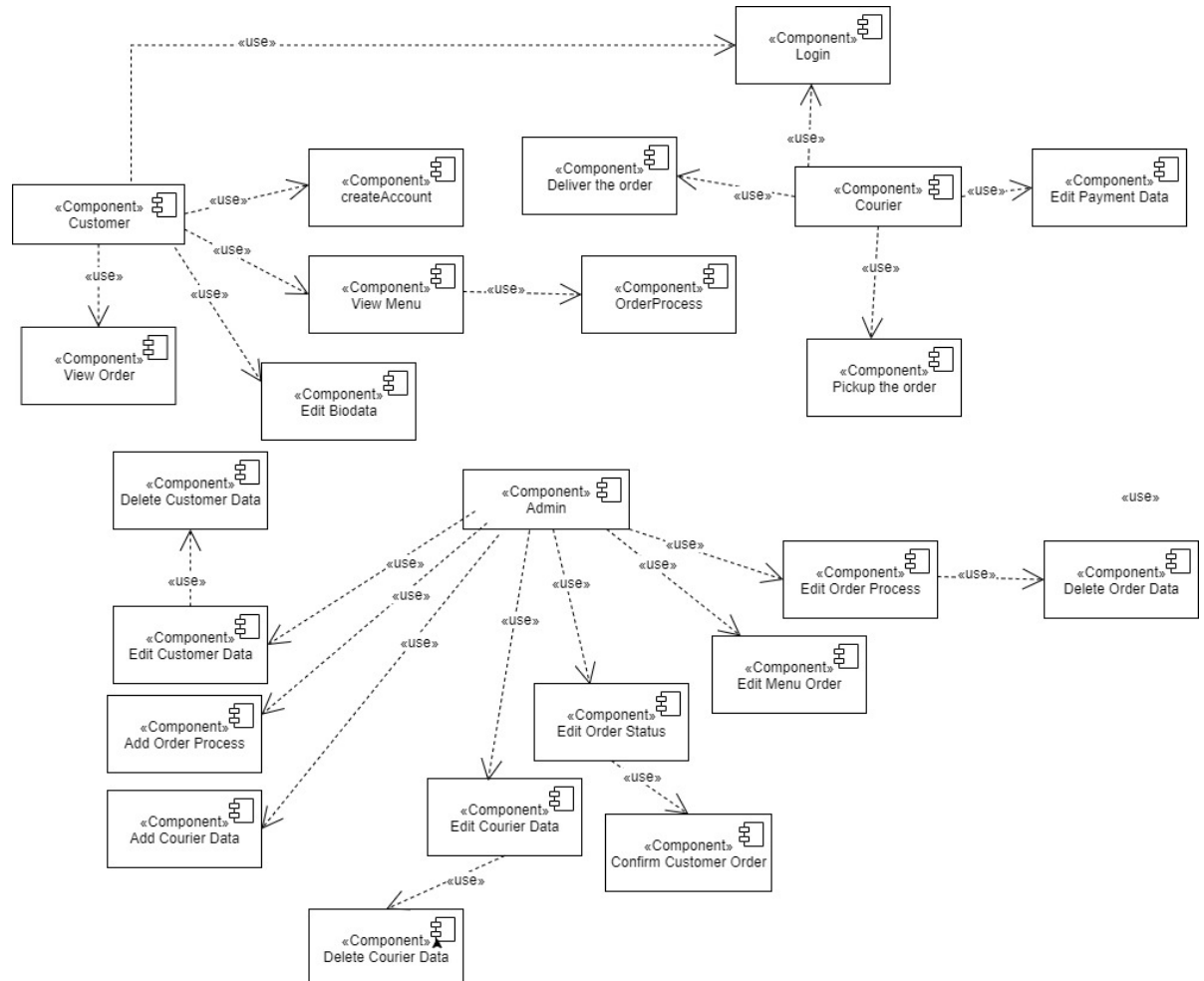
Design of Implementation for Shoes and Care application are :

1. Operation System : Android KitKat or above version
2. DBMS: SQLite
3. Development Tools: Android Studio, Github, NoxPlayer
4. Word Processor: MS Word Office 365
5. Programming Languages : Java, XML
6. Quad Core 1.2GHz CPU
7. 500MB storage free

8. 1GB RAM

2.2 Architectural Description

Architectural Description Is a description of the architecture or component that will be applied to the software “Shoes and Care” to facilitate developers in developing or implementing this software.



Picture 1 Architectural Description

2.3 Component Description

Table 1 Component Description Table

No	Nama Komponen	Explanation
1	Shoes and Care	The software that will be developed

2	Admin	The user of Shoes and Care application
3	Courier	The user of Shoes and Care application
4	Customer	The user of Shoes and Care application
5	Login	The menu for login so the user can access the features in the application based on each role
6	Create Account	Menu to register for customer
7	View Menu	Menu to view the Menu Order
8	View Order	Menu to view the order data
9	Order Process	Menu to make a new order
10	Confirm Order	Menu to confirm a new order from customer
11	Pick up The Order	Menu to manage the pickup time order
12	Deliver The Order	Menu to manage the deliver time order
13	Edit Payment Data	Menu to manage the payment and status paid or not of the order
14	Edit Biodata	Menu to edit customer personal data
15	Edit Menu Order	Menu to edit the menu order data
16	Edit order status	Menu to edit order status
17	Add Order Process	Menu to add new order process
18	Add Courier Data	Menu to add new courier
19	Edit Order Process	Menu to edit order data
20	Edit Courier Data	Menu to edit courier data
21	Edit Customer Data	Menu to edit Customer data
22	Delete Order Process	Menu to Delete order data
23	Delete Courier Data	Menu to Delete courier data
24	Delete Customer Data	Menu to Delete Customer data

3 Detailed Design

3.1 Realization Use Case

3.1.1 Use Case Create Account Customer

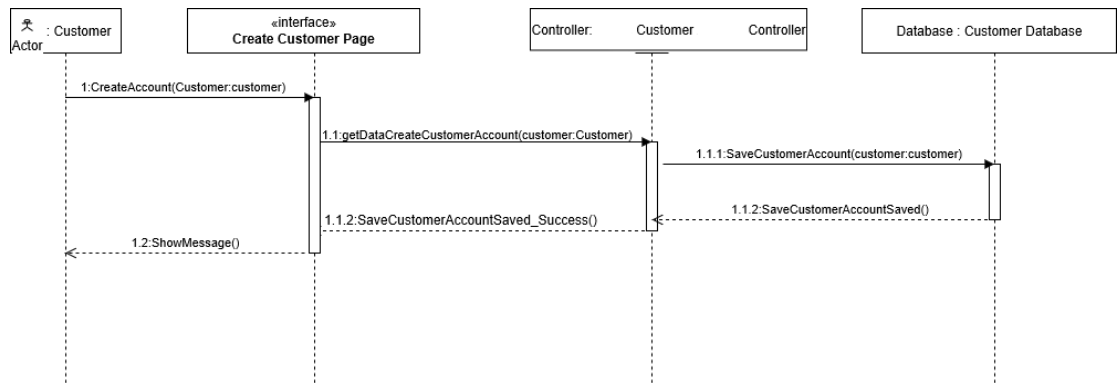
3.1.1.1 Class Identification

Table 3 Create Account Customer Class Identification Table

No	Design Class Name	Class Type
1.	Customer	Actor
2.	Create Customer Page	Boundary
3.	Customer Controller	Cotroller
4.	Customer	Database

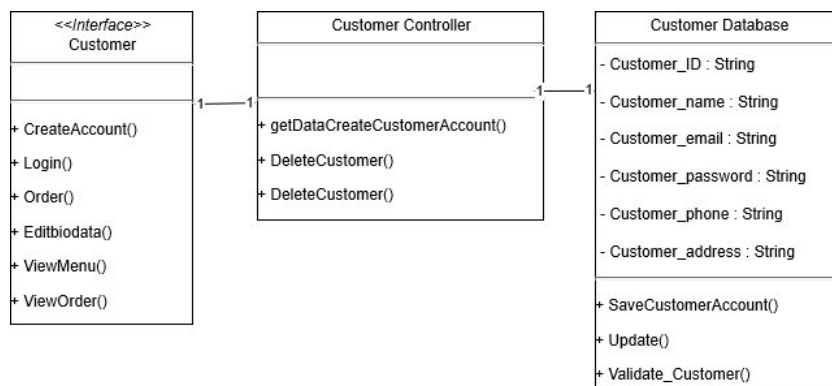
3.1.1.2 Sequence Diagram

Picture 4 Sequence Diagram Create Account Customer



3.1.1.3 Class Diagram

Picture 5 Class Diagram Create Account Customer.



3.1.2 Use Case Login

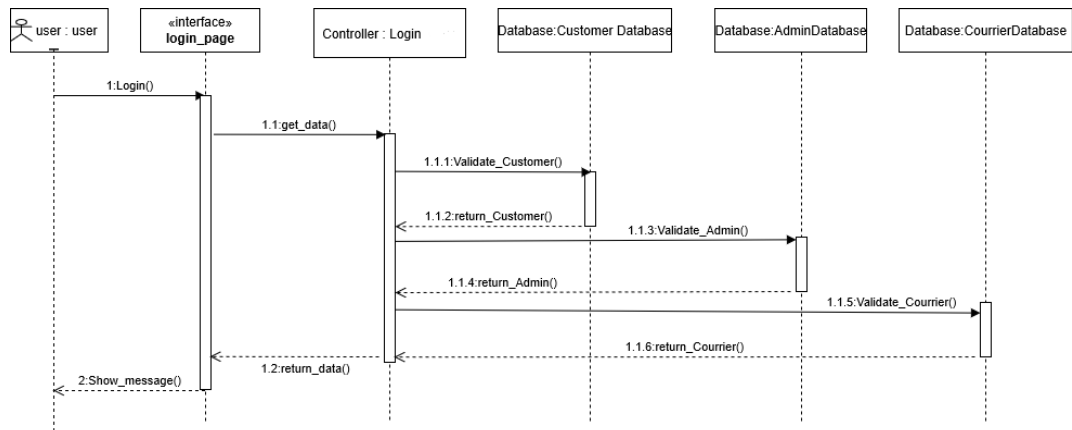
3.1.2.1 Class Identification

Table 3 Login Class Identification Table

No	Design Class Name	Class Type
1.	Customer, Admin, Courier	Actor
2.	Login_page	Boundary
3.	Login	Controller
4.	Customer, Admin, Courier	Database

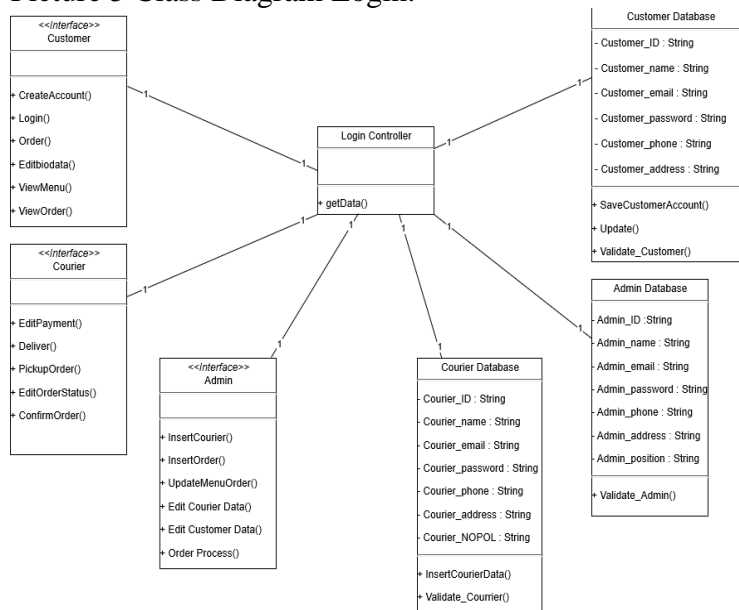
3.1.2.2 Sequence Diagram

Picture 4 Sequence Diagram Login.



3.1.2.3 Class Diagram

Picture 5 Class Diagram Login.



3.1.3 Use Case View Menu

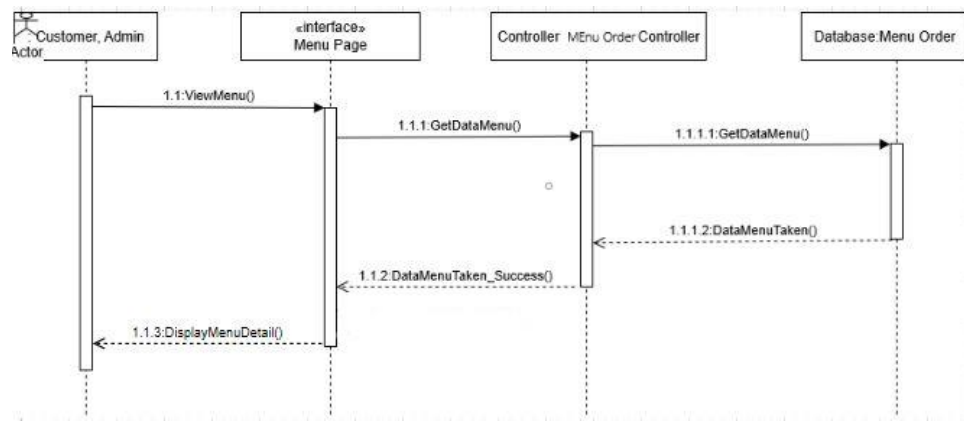
3.1.3.1 Class Identification

Table 3 View Menu Class Identification Table

No	Design Class Name	Class Type
1.	Customer, Admin	Actor
2.	Menu Page	Boundary
3.	MenuOrder Controller	Controller
4.	Menu Order	Database

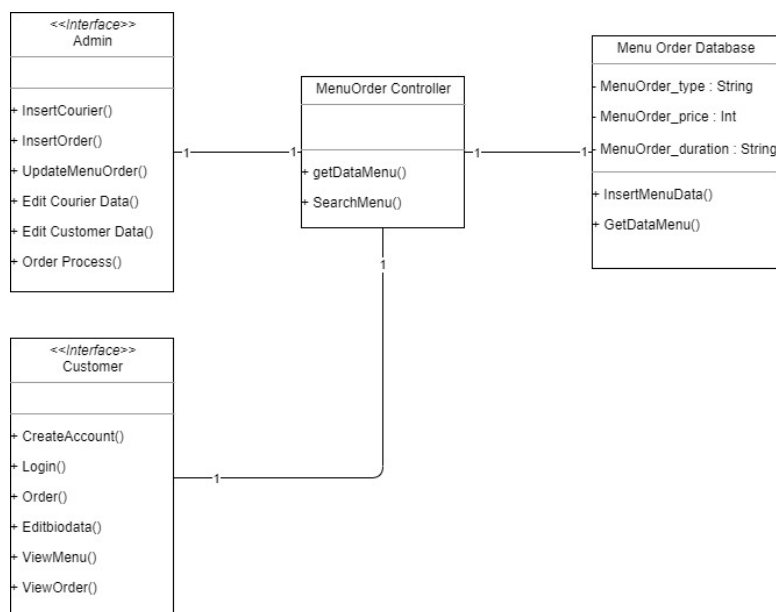
3.1.3.2 Sequence Diagram

Picture 4 Sequence Diagram View Menu.



3.1.3.3 Class Diagram

Picture 5 Class Diagram View Menu.



3.1.4 Use Case Order Process

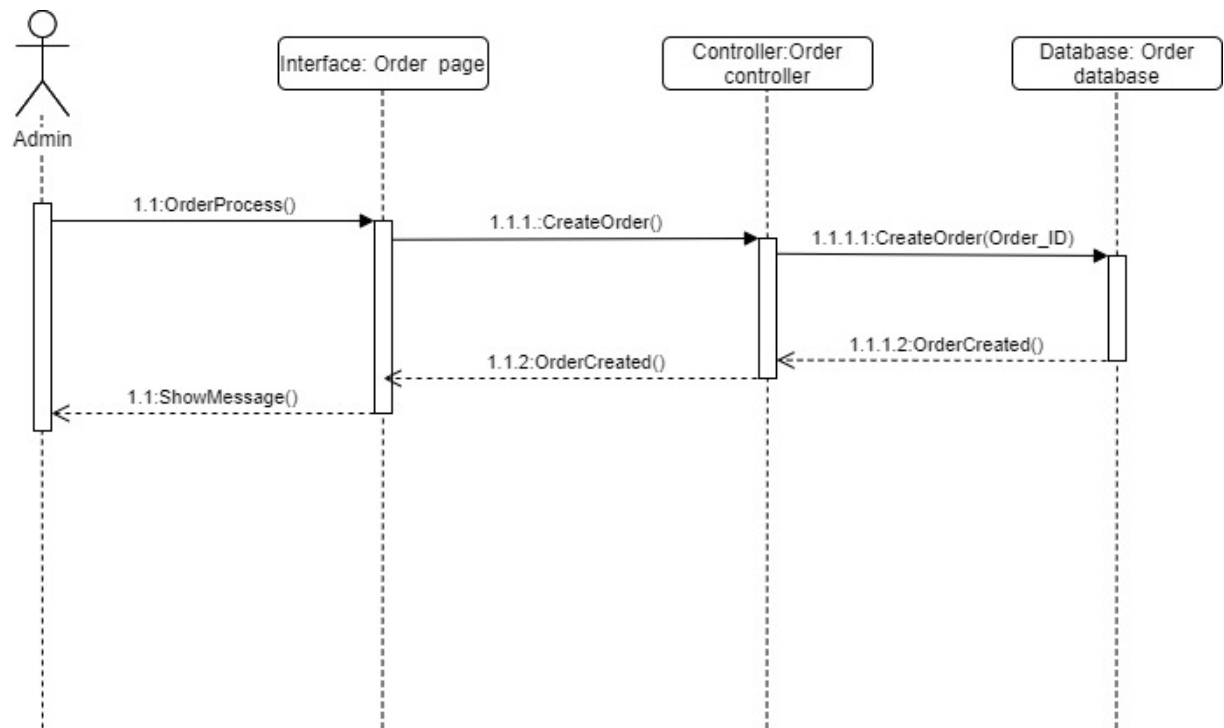
3.1.4.1 Class Identification

Table 3 Order Process Class Identification Table

No	Design Class Name	Class Type
1.	Customer	Actor
2.	Order Page	Boundary
3.	Order controller	Controller
4.	Order database	Database

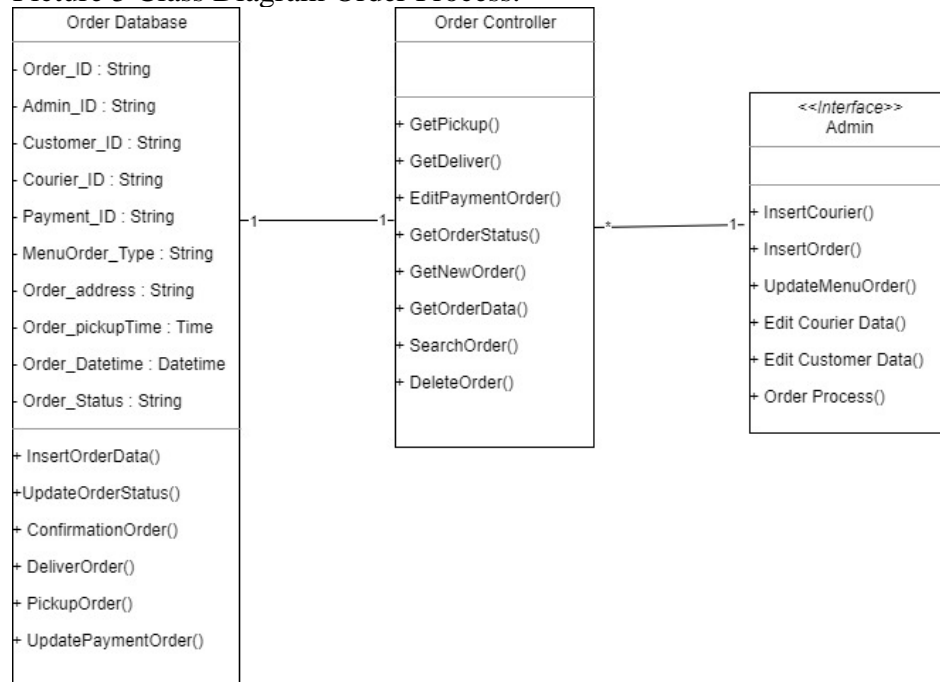
3.1.4.2 Sequence Diagram

Picture 4 Sequence Diagram Order Process.



3.1.4.3 Class Diagram

Picture 5 Class Diagram Order Process.



3.1.5 Use Case Edit Biodata

3.1.5.1 Class Identification

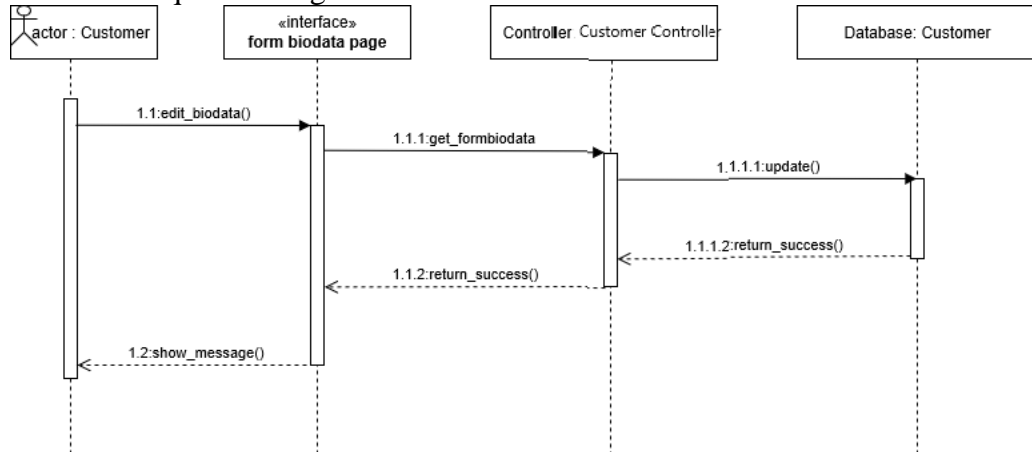
Table 3 Edit Biodata Identification Table

No	Design Class Name	Class Type
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1.	Customer	Actor
2.	Form biodata Page	Boundary
3.	Customer Controller	Controller
4.	Customer	Database

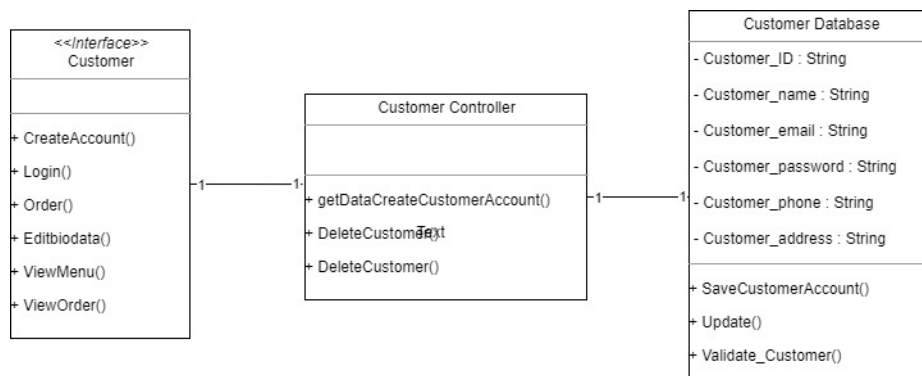
3.1.5.2 Sequence Diagram

Picture 4 Sequence Diagram Edit Biodata.



3.1.5.3 Class Diagram

Picture 5 Class Diagram Edit Biodata.



3.1.6 Use Case View Order

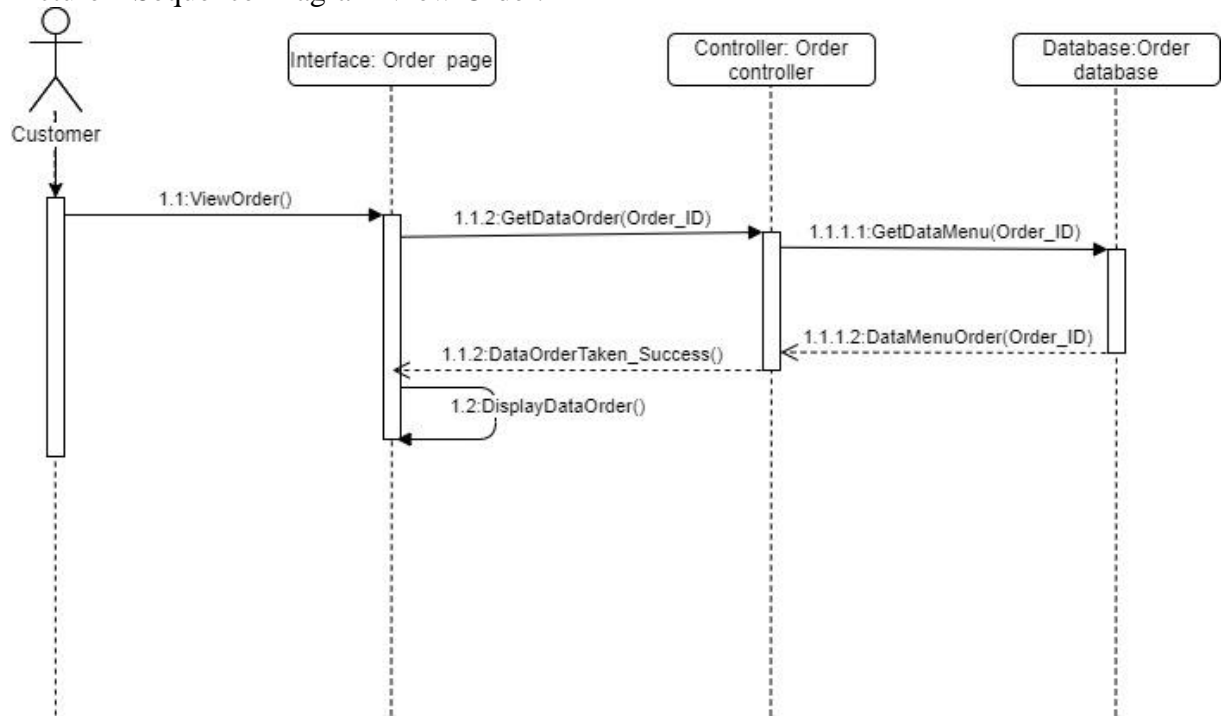
3.1.6.1 Class Identification

Table 3 View Order Class Identification Table

No	Design Class Name	Class Type
1.	Customer	Actor
2.	Order Page	Boundary
3.	Order Controller	Controller
4.	Order Database	Database

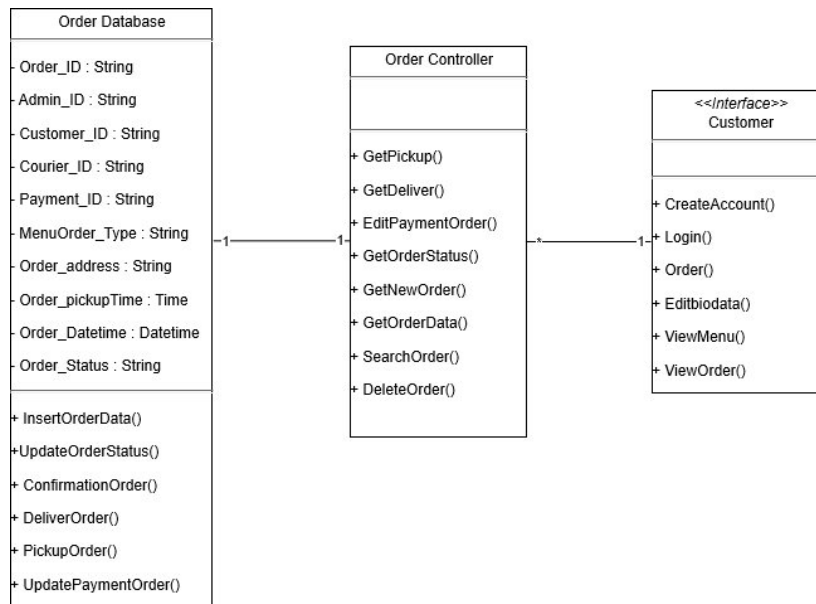
3.1.6.2 Sequence Diagram

Picture 4 Sequence Diagram View Order.



3.1.6.3 Class Diagram

Picture 5 Class Diagram View Order



3.1.7 Use Case Confirm Order

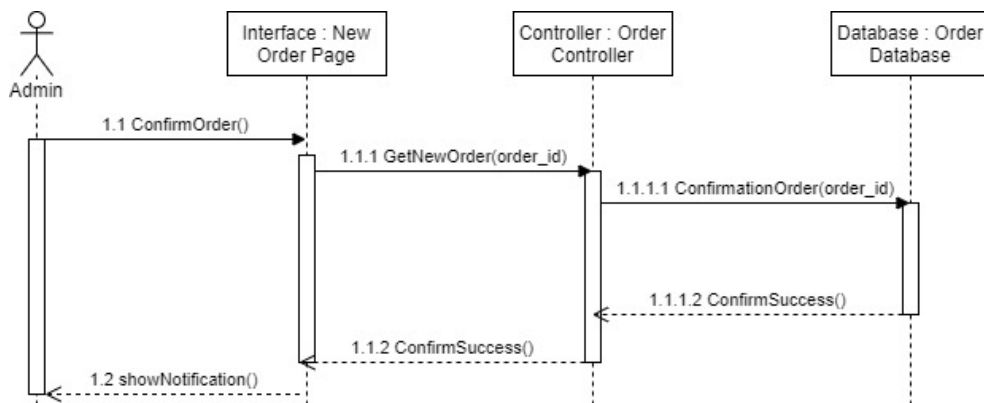
3.1.7.1 Class Identification

Table 3 Confirm Order Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	New Order Page	Boundary
3.	Order Controller	Controller
4.	Order	Database

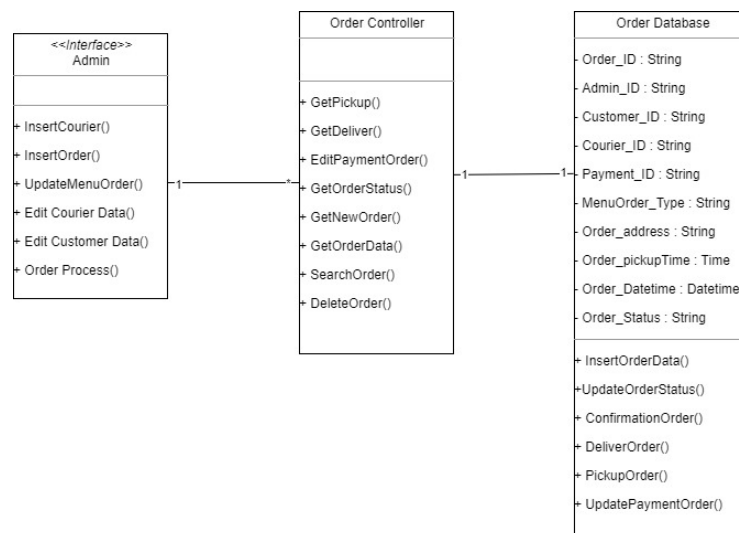
3.1.7.2 Sequence Diagram

Picture 4 Sequence Diagram Confirm Order.



3.1.7.3 Class Diagram

Picture 5 Class Diagram Confirm Order.



3.1.8 Use Case Add Order

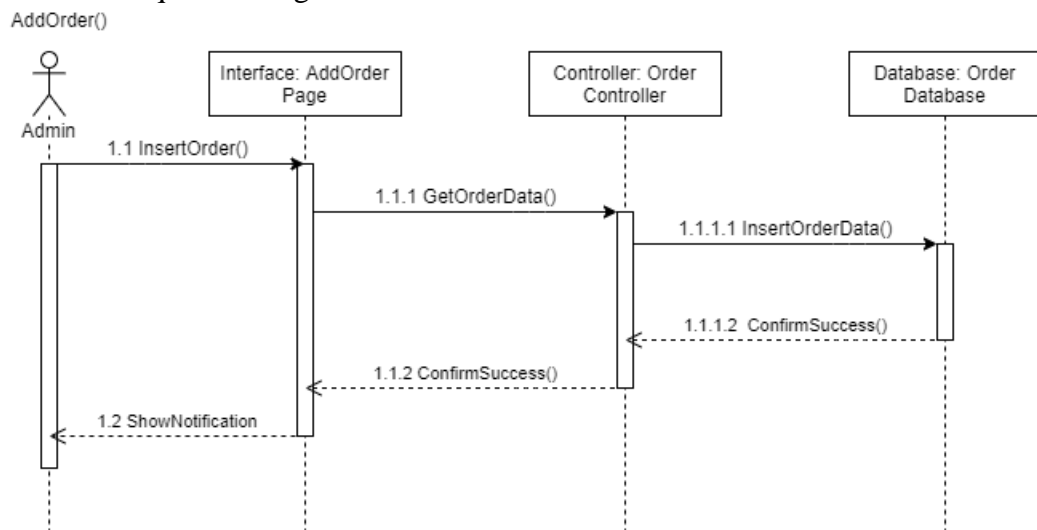
3.1.8.1 Class Identification

Table 3 Add Order Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	AddOrder Page	Boundary
3.	Order Controller	Controller
4.	Order	Database

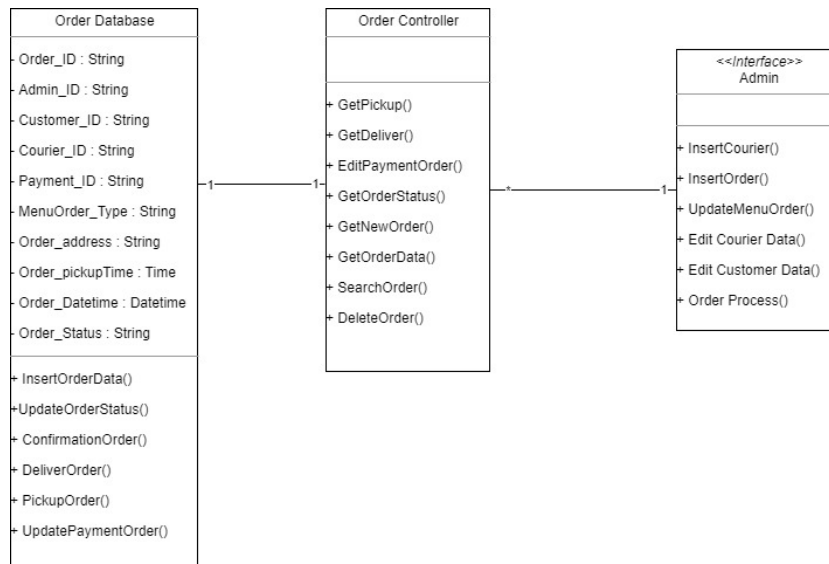
3.1.8.2 Sequence Diagram

Picture 4 Sequence Diagram Edit Order Status.



3.1.8.3 Class Diagram

Picture 5 Class Diagram Edit Payment.



3.1.9 Use Case Add Courier

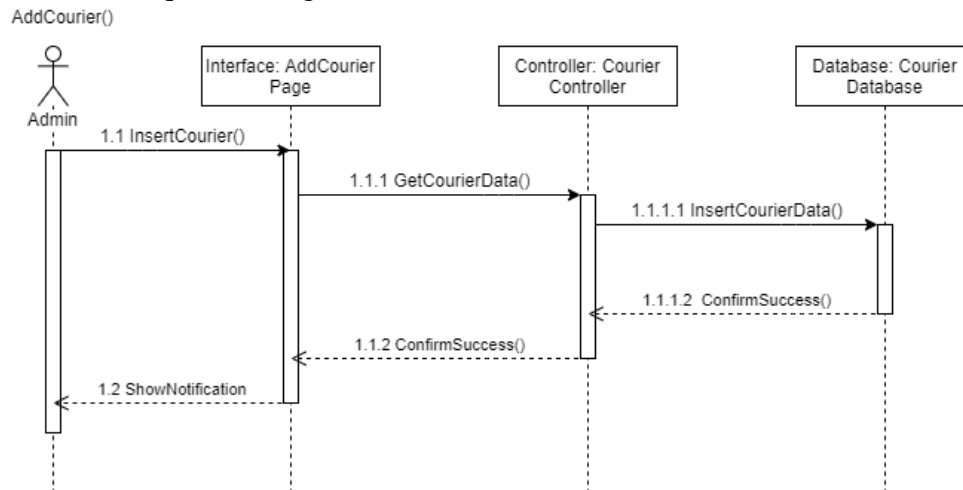
3.1.9.1 Class Identification

Table 3 Add Courier Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	AddCourier Page	Boundary
3.	Courier Controller	Controller
4.	Courier	Database

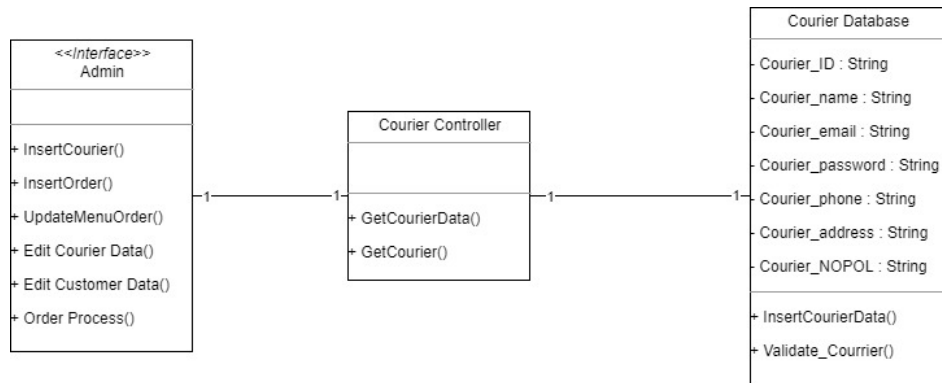
3.1.9.2 Sequence Diagram

Picture 4 Sequence Diagram Edit Order Status.



3.1.9.3 Class Diagram

Picture 5 Class Diagram Edit Payment.



3.1.10 Use Case Edit Courier Data

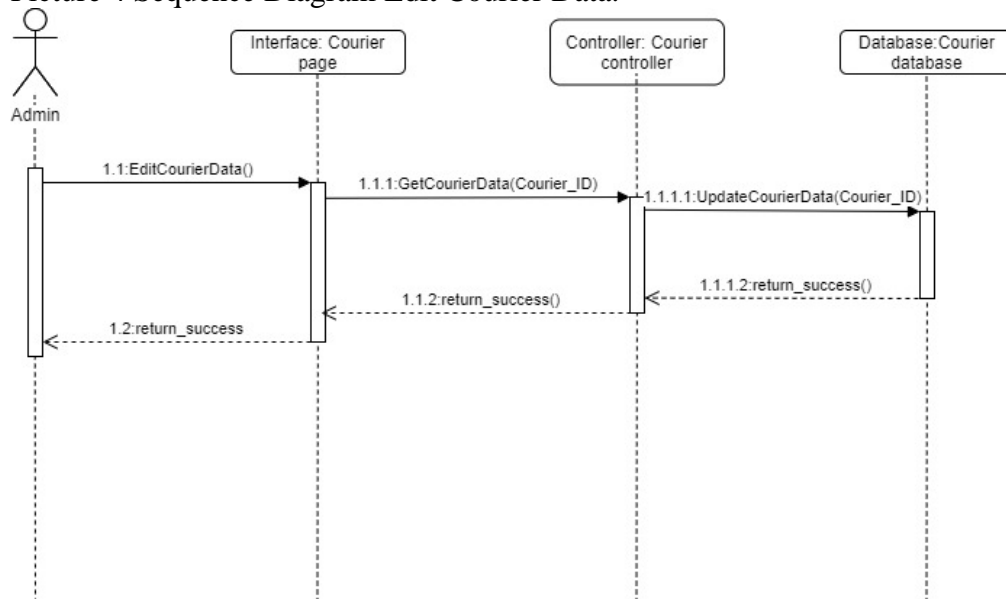
3.1.10.1 Class Identification

Table 3 Edit Courier Data Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	Courier Page	Boundary
3.	Courier Controller	Controller
4.	Courier Database	Database

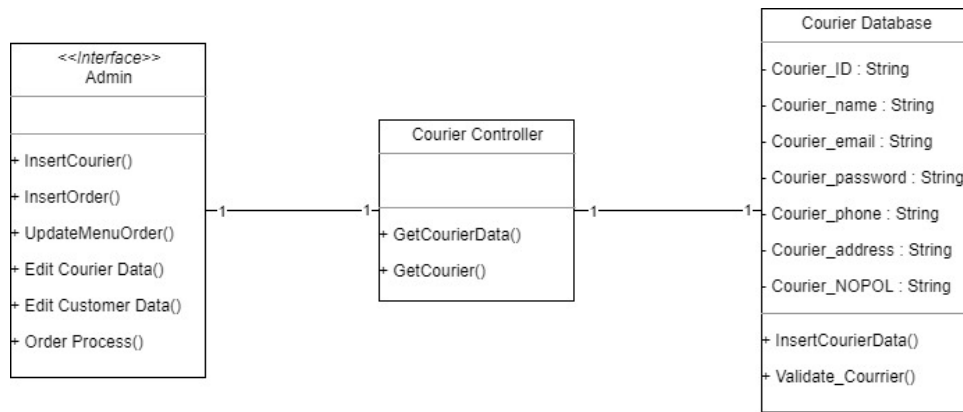
3.1.10.2 Sequence Diagram

Picture 4 Sequence Diagram Edit Courier Data.



3.1.10.3 Class Diagram

Picture 5 Class Diagram Edit Courier Data.



3.1.11 Use Case Edit Customer Data

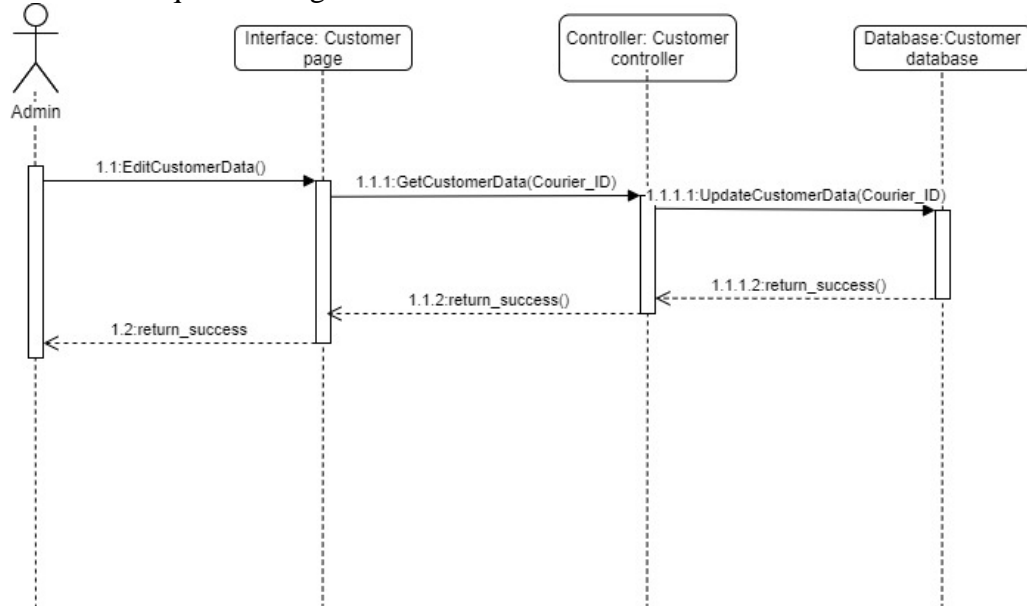
3.1.11.1 Class Identification

Table 3 Edit Customer Data Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	Customer page	Boundary
3.	Customer Controller	Controller
4.	Customer Database	Database

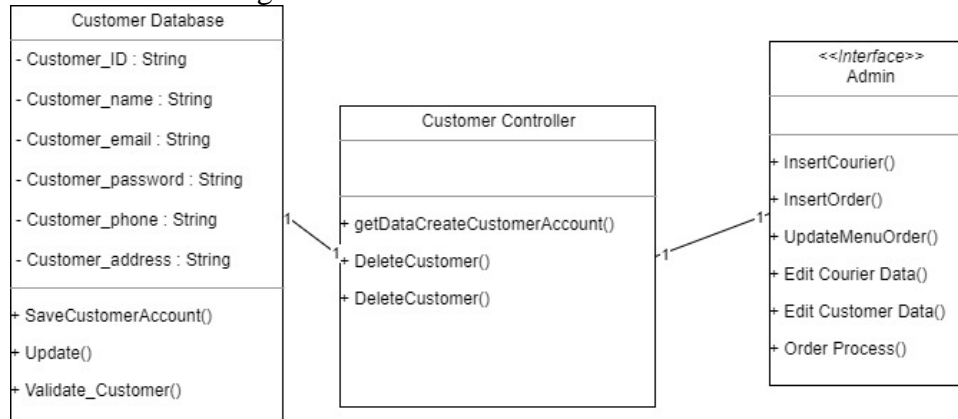
3.1.11.2 Sequence Diagram

Picture 4 Sequence Diagram Edit Customer Data.



3.1.11.3 Class Diagram

Picture 5 Class Diagram Edit Customer Data.



3.1.12 Use Case Edit Order

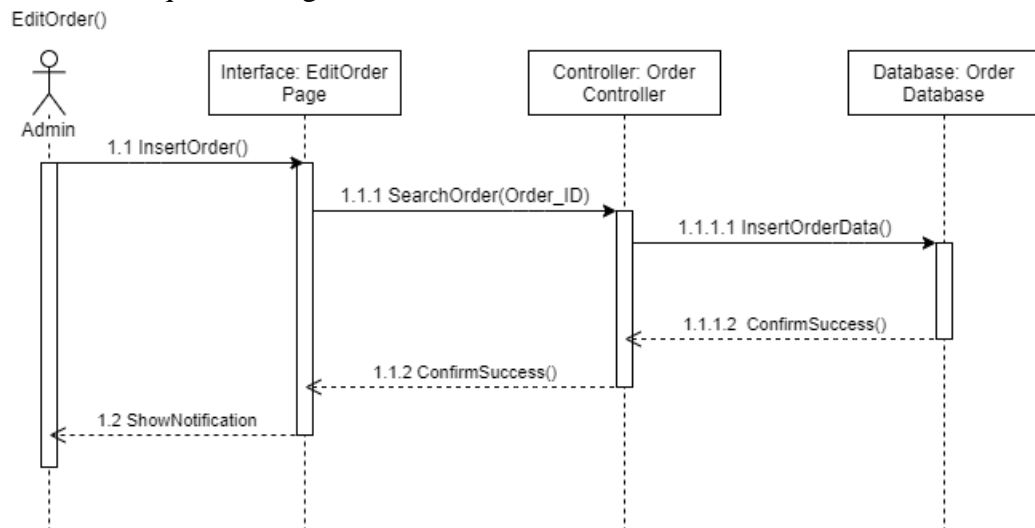
3.1.12.1 Class Identification

Table 3 Edit Order Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	EditOrder Page	Boundary
3.	Order Controller	Controller
4.	Order	Database

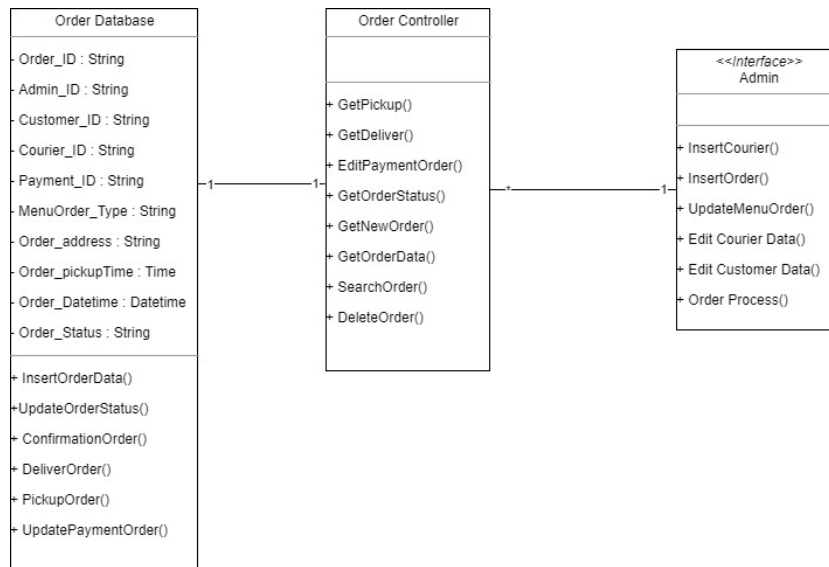
3.1.12.2 Sequence Diagram

Picture 4 Sequence Diagram Edit Order Status.



3.1.12.3 Class Diagram

Picture 5 Class Diagram Edit Payment.



3.1.13 Use Case Edit Menu Order

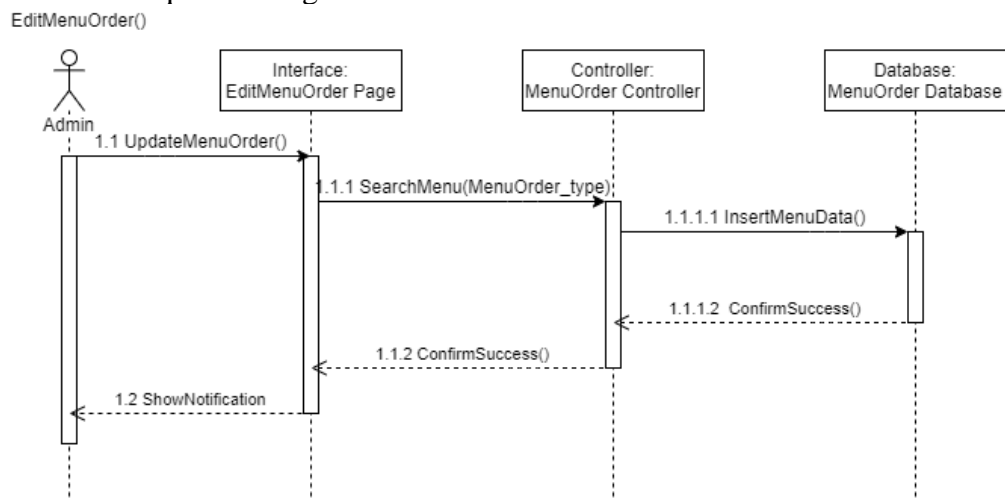
3.1.13.1 Class Identification

Table 3 Edit Menu Order Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	EditMenuOrder Page	Boundary
3.	MenuOrder Controller	Controller
4.	MenuOrder	Database

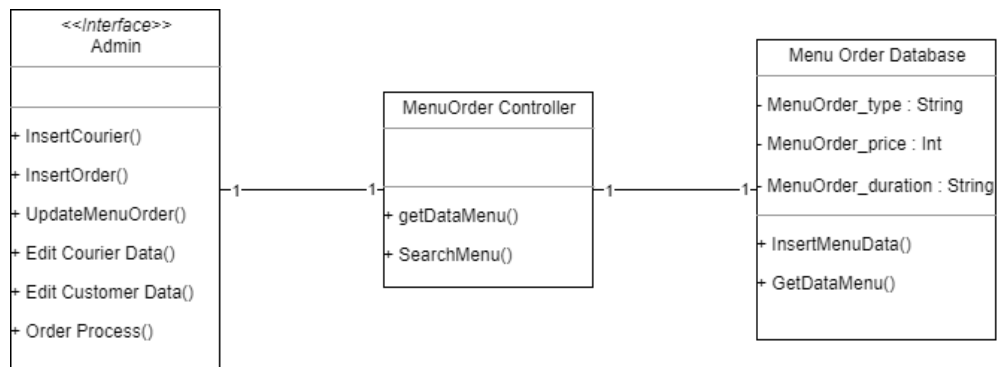
3.1.13.2 Sequence Diagram

Picture 4 Sequence Diagram Edit Menu Order.



3.1.13.3 Class Diagram

Picture 5 Class Diagram Edit Menu Order.



3.1.14 Use Case Edit Order Status

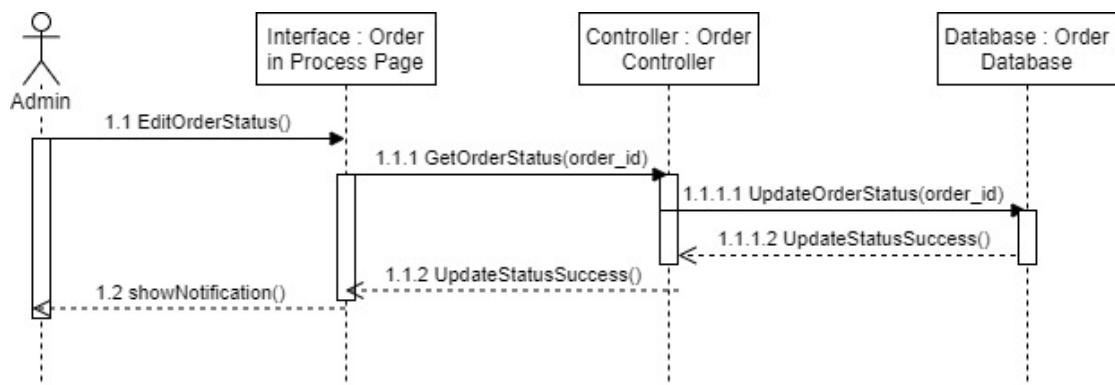
3.1.14.1 Class Identification

Table 3 Edit Order Status Class Identification Table

No	Design Class Name	Class Type
1.	Courier	Actor
2.	Order Payment Time Page	Boundary
3.	Order Controller	Controller
4.	Order	Database

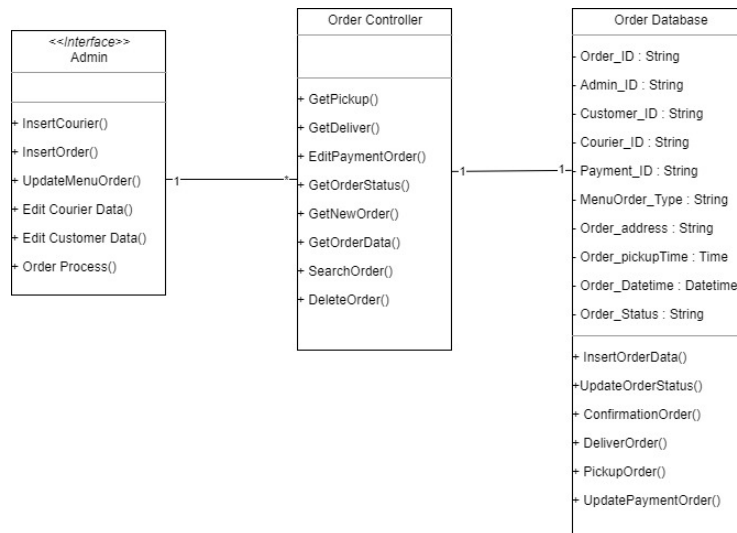
3.1.14.2 Sequence Diagram

Picture 4 Sequence Diagram Edit Order Status.



3.1.14.3 Class Diagram

Picture 5 Class Diagram Edit Order Status.



3.1.15 Use Case Delete Courier

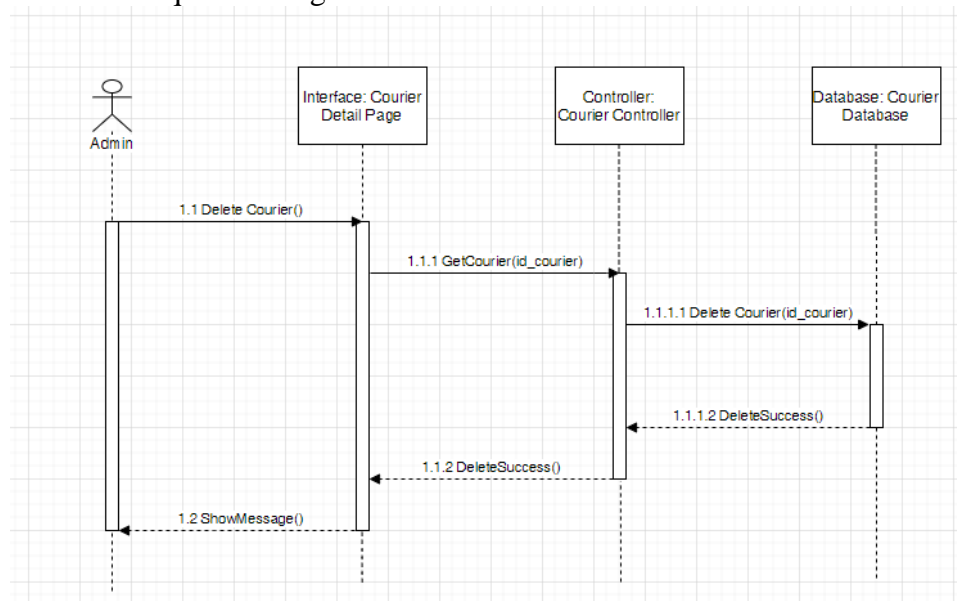
3.1.15.1 Class Identification

Table 3 Edit Menu Order Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	Courier Page	Boundary
3.	Courier Controller	Controller
4.	Courier Database	Database

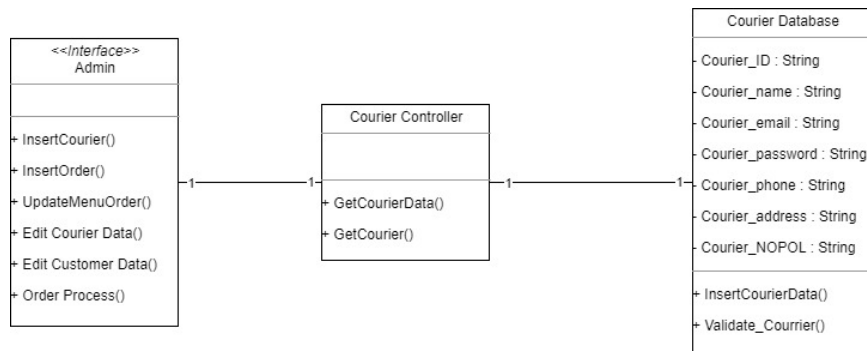
3.1.15.2 Sequence Diagram

Picture 4 Sequence Diagram Delete Courier



3.1.15.3 Class Diagram

Picture 5 Class Diagram Delete Courier



3.1.16 Use Case Delete Order

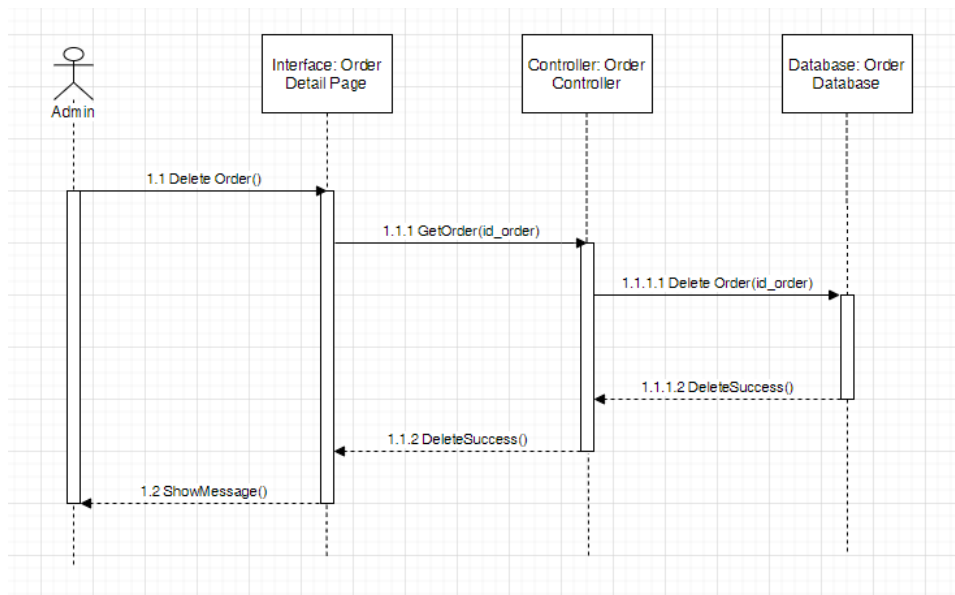
3.1.16.1 Class Identification

Table 3 Delete Order Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	Order Page	Boundary
3.	Order Controller	Controller
4.	Order Database	Database

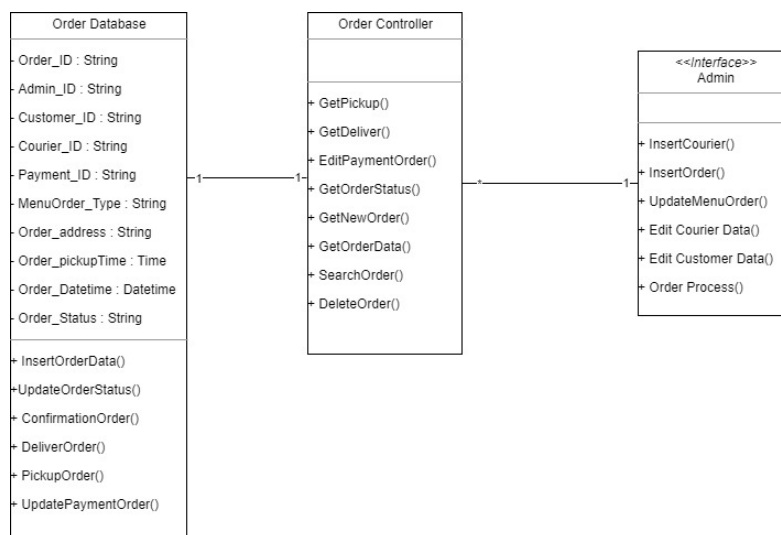
3.1.16.2 Sequence Diagram

Picture 4 Sequence Diagram Delete Order



3.1.16.3 Class Diagram

Picture 5 Class Diagram Delete Order



3.1.17 Use Case Delete Customer

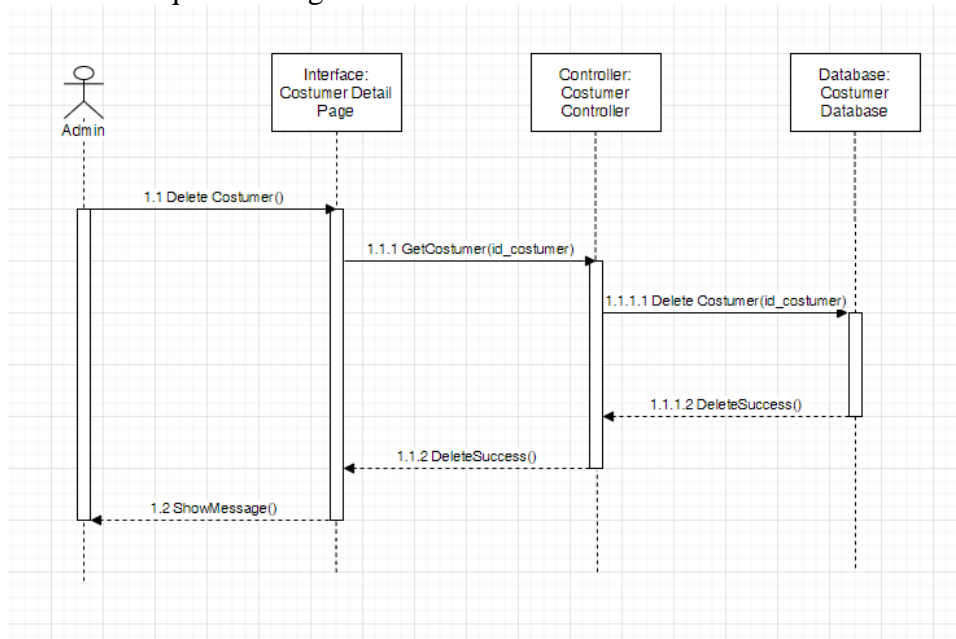
3.1.17.1 Class Identification

Table 3 Delete Customer Class Identification Table

No	Design Class Name	Class Type
1.	Admin	Actor
2.	Costumer Page	Boundary
3.	Costumer Controller	Controller
4.	Couier Database	Database

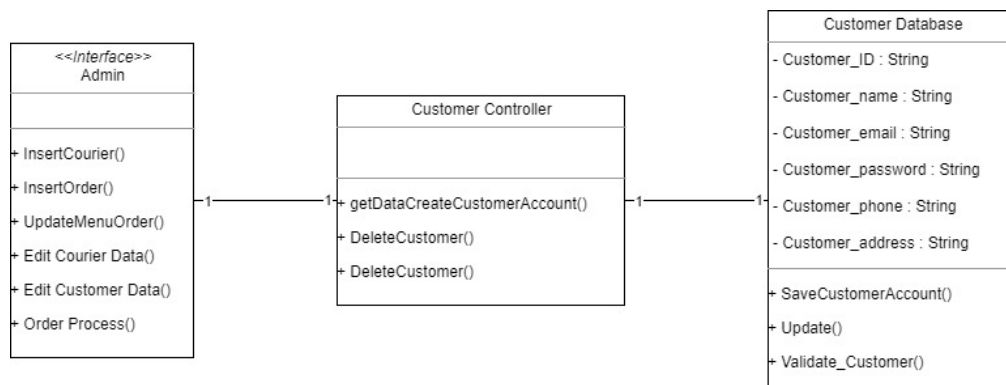
3.1.17.2 Sequence Diagram

Picture 4 Sequence Diagram Delete Customer



3.1.17.3 Class Diagram

Picture 5 Class Diagram Delete Costumer



3.1.18 Use Case Pick up The Order

3.1.18.1 Class Identification

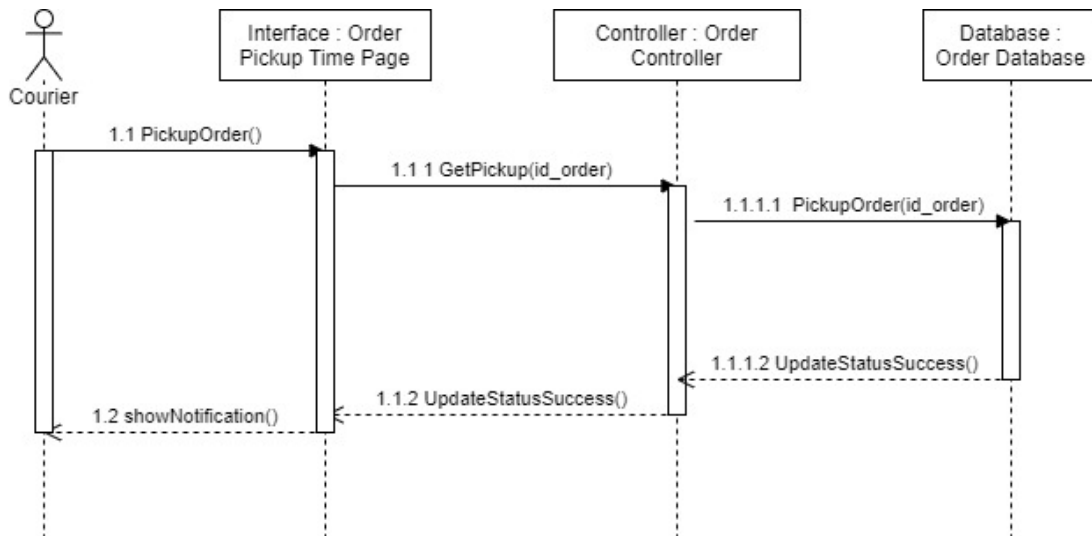
Table 2 Pickup The Order Class Identification Table

No	Design Class Name	Class Type
1.	Courier	Actor
2.	Order Pickup Time Page	Boundary
3.	Order Controller	Controller

4.	Order	Database
----	-------	----------

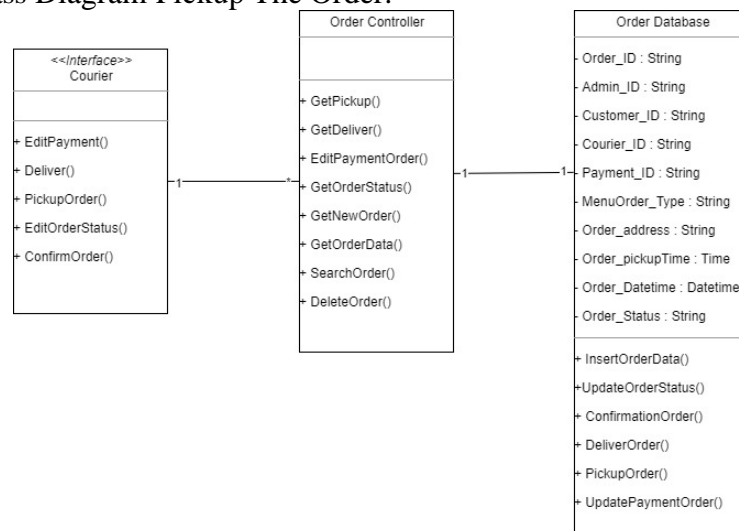
3.1.18.2 Sequence Diagram

Picture 3 Sequence Diagram Pick up The Order.



3.1.18.3 Class Diagram

Picture 4 Class Diagram Pickup The Order.



3.1.19 Use Case Deliver The Order

3.1.19.1 Class Identification

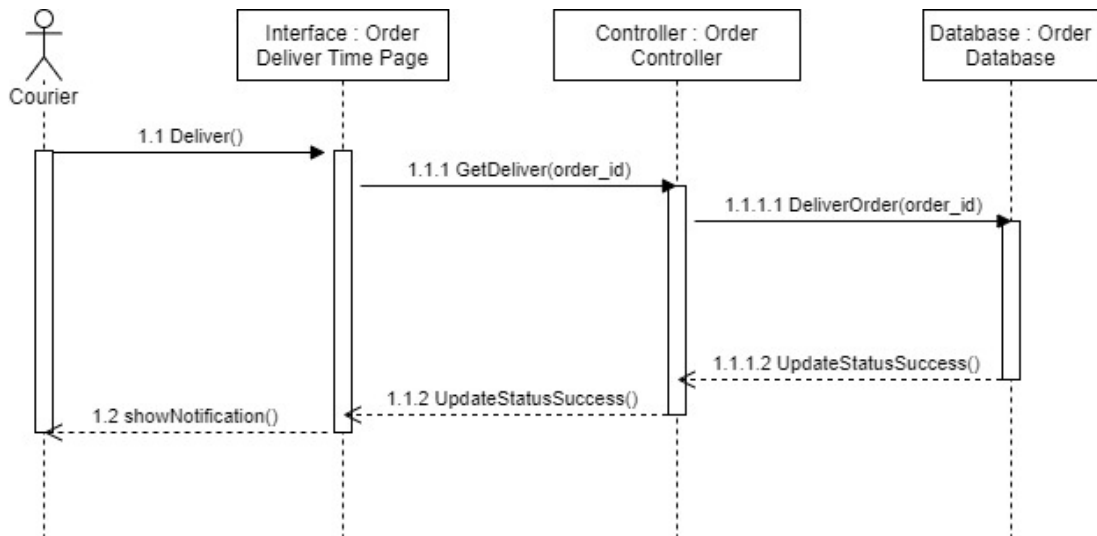
Table 3 Pickup The Order Class Identification Table

No	Design Class Name	Class Type
1.	Courier	Actor
2.	Order Deliver Time Page	Boundary
3.	Order Controller	Controller

4.	Order	Database
----	-------	----------

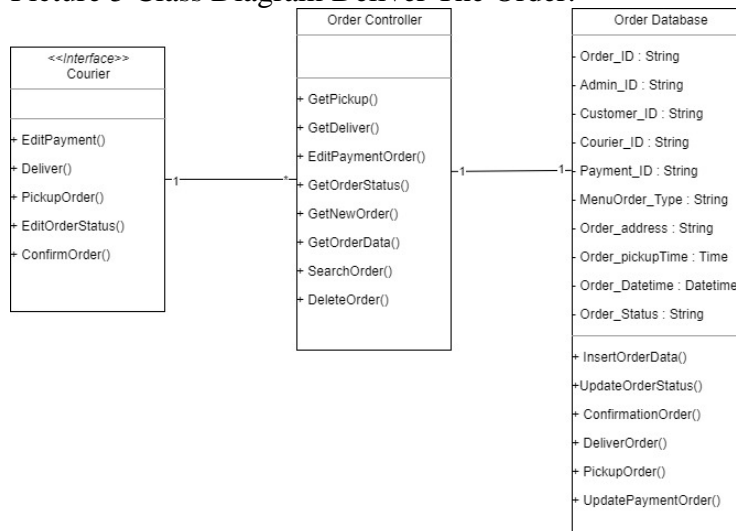
3.1.19.2 Sequence Diagram

Picture 4 Sequence Diagram Deliver The Order.



3.1.19.3 Class Diagram

Picture 5 Class Diagram Deliver The Order.



3.1.20 Use Case Edit Payment

3.1.20.1 Class Identification

Table 3 Edit Payment Class Identification Table

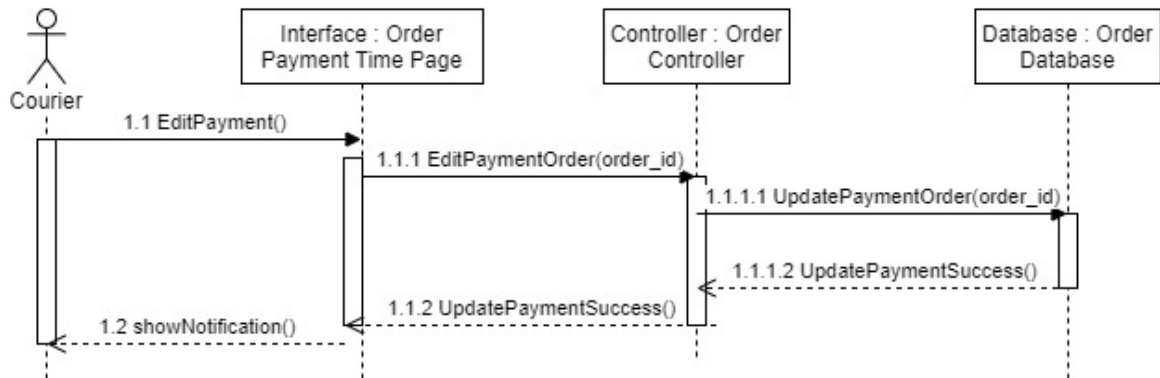
No	Design Class Name	Class Type
1.	Courier	Actor
2.	Order Payment Time Page	Boundary
3.	Order Controller	Controller

4.	Order	Database
----	-------	----------

3.1.20.2 Sequence Diagram

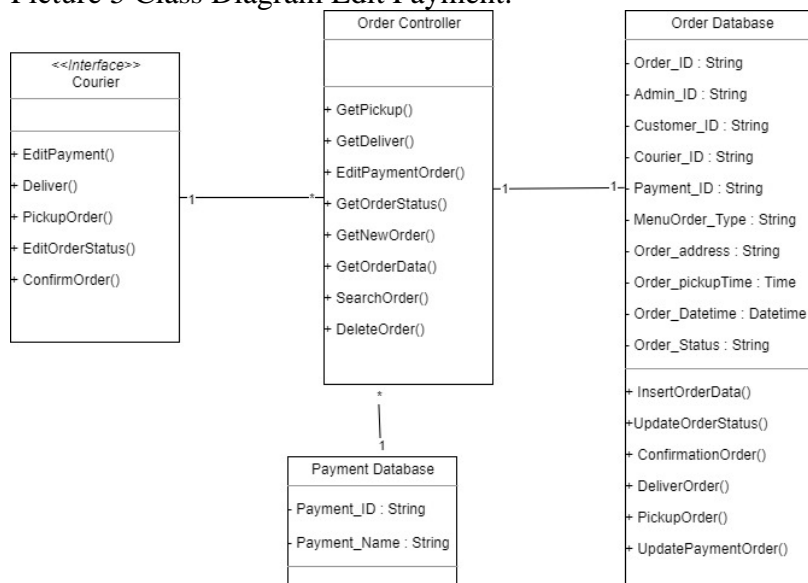
Picture 4 Sequence Diagram Edit Payment.

EditPayment()



3.1.20.3 Class Diagram

Picture 5 Class Diagram Edit Payment.



3.2 Design Class Detail

Table 3 Design Class Detail Table

No	Design Class Name	Name of Related Analysis Class
1.	Admin	Admin
2.	Customer	Customer
3.	Courier	Courier
4.	Customer Database	Database
5.	Admin Database	Database

6.	Courier Database	Database
7.	Order Database	Database
8.	MenuOrder Database	Database
9.	Payment Database	Database
10.	Order Controller	Controller
11.	Courier Controller	Controller
12.	Menu Order Controller	Controller
13.	Customer Controller	Controller
14.	Login Controller	Controller

3.2.1 Admin Class

Admin Class Table

Operation Name	Visibility (private, public)	Explanation
InsertCourier()	Public	Inserting courier data
InsertOrder()	Public	Inserting order data
UpdateMenuOrder()	Public	Inserting Menu Order that want to update and the update
OrderProcess()	Public	Inserting new Order to database
EditOrderStatus()	Public	Updating order status in database
ConfirmOrder()	Public	Updating status in database become 'accepted'
Add Order()	Public	Inserting new Order to database
Edit Order()	Public	Updating order data in database
Edit Courier Data()	Private	Updating courier data in database
Edit Customer Data()	Private	Updating customer data in database
Add Courier()	Private	Inserting new courier to database
Attribute Name	Visibility (private, public)	Type

3.2.2 Customer Class

Customer Class Table

Operation Name	Visibility (private, public)	Explanation
CreateAccount()	Public	Creating Account and insert it into database

Login()	Public	Check email and password that match in database for login
Order()	Public	Inserting new Order to database
Editbiodata()	Public	Updating customer personal data in database
ViewMenu()	Public	Display Menu Order from database
ViewOrder()	Public	Display Order Data from database
Attribute Name	Visibility (private, public)	Type

3.2.3 Courier Class

Courier Class Table

Operation Name	Visibility (private, public)	Explanation
EditPayment()	Public	Updating order status into “deliver” in database
Deliver()	Public	Updating order status into “deliver” in database
PickupOrder()	Public	Updating order status into “pick up” in database
EditOrderStatus()	Public	Updating order status in database
ConfirmOrder()	Public	Updating order status into “accepted”
Attribute Name	Visibility (private, public)	Type

3.2.4 Customer Database Class

Courier Database Class Table

Operation Name	Visibility (private, public)	Explanation
SaveCustomerAccount()	Public	Storing Customer account into table customer
Update()	Public	To update the biodata of customer in table customer
Validate_Customer()	Public	Checking if user exists in table customer
Attribute Name	Visibility (private, public)	Type

Customer_ID	Private	String
Customer_name	Private	String
Customer_email	Private	String
Customer_password	Private	String
Customer_phone	Private	String
Customer_address	Private	String

3.2.5 Admin Database Class

Admin Database Class Table

Operation Name	Visibility (private, public)	Explanation
Validate_Admin()	Public	Checking if user exists in table admin
Attribute Name	Visibility (private, public)	Type
Admin_ID	Private	String
Admin_name	Private	String
Admin_email	Private	String
Admin_password	Private	String
Admin_phone	Private	String
Admin_address	Private	String
Admin_position	Private	String

3.2.6 Courier Database Class

Courier Database Class Table

Operation Name	Visibility (private, public)	Explanation
InsertCourierData()	Public	Inserting courier data to the database
Validate_Courrier()	Public	Checking if user exists in table courier
Attribute Name	Visibility (private, public)	Type
Courier_ID	Private	String
Courier_name	Private	String
Courier_email	Private	String
Courier_password	Private	String
Courier_phone	Private	String
Courier_address	Private	String
Courier_NOPOL	Private	String

3.2.7 Order Database Class

Order Database Class Table

Operation Name	Visibility (private, public)	Explanation
InsertOrderData()	Public	Inserting order data to the database
UpdateOrderStatus()	Public	Update order status in database
ConfirmationOrder()	Public	Confirm order data in database
DeliverOrder()	Public	Update order status into “deliv” in database
PickupOrder()	Public	Update order status into “pick up” in database
UpdatePaymentOrder()	Public	Update payment method into the chosen method and status into “paid”
Attribute Name	Visibility (private, public)	Type
Order_ID	Private	String
Admin_ID	Private	String
Customer_ID	Private	String
Courier_ID	Private	String
Payment_ID	Private	String
Order_address	Private	String
Order_pickupTime	Private	String
MenuOrder_Type	Private	String
Order_Datetime	Private	Datetime
Order_Status	Private	String

3.2.8 Menu Order Database Class

Menu Order Database Class Table

Operation Name	Visibility (private, public)	Explanation
InsertMenuData()	Public	Inserting menu data to database
GetDataMenu()	Public	Getting data from table menu order
Attribute Name	Visibility (private, public)	Type
MenuOrder_type	Private	String
MenuOrder_price	Private	Int
MenuOrder_duration	Private	String

3.2.9 Payment Database Class

Payment Database Class Table

Operation Name	Visibility (private, public)	Explanation
Attribute Name	Visibility (private, public)	Type
Payment_ID	Private	String
Payment_name	Private	String

3.2.10 Order Controller Class

Controller Class Table

Operation Name	Visibility (private, public)	Explanation
GetPickup()	Public	Get order data in database
GetDeliver()	Public	Get order data in database
EditPaymentOrder()	Public	Update payment data in database
GetOrderStatus()	Public	Get order status in database
GetNewOrder()	Public	Get new order data
GetOrderData()	Public	Receive Order Data that already inputed
GetOrder(id_order)	Private	Getting Order data from Order Database
SearchOrder()	Public	Search order data that already inputed
Attribute Name	Visibility (private, public)	Type

3.2.11 Courier Controller Class

Controller Class Table

Operation Name	Visibility (private, public)	Explanation
GetCourierData()	Public	Receive Courier Data that already inputed
GetCourier(id_courier)	Private	Getting Courier data from Courier Database
Attribute Name	Visibility (private, public)	Type

3.2.12 Customer Controller Class

Controller Class Table

Operation Name	Visibility (private, public)	Explanation
----------------	---------------------------------	-------------

GetDataCreateCustomerAccount(customer:Customer)	Public	Get the customer data when create account of customer
getData()	Public	To get the data that inputed by user when login
get_formbiodata()	Public	data from customer biodata
GetCostumer(id_costumer)	Private	Getting customer data from Database
Attribute Name	Visibility (private, public)	Type

3.2.13 Menu Order Controller Class

Controller Class Table

Operation Name	Visibility (private, public)	Explanation
GetDataMenu()	Public	Getting data from menu table
SearchMenu()	Public	Search menu order data that already inputed
Attribute Name	Visibility (private, public)	Type

3.2.14 Login Controller Class

Controller Class Table

Operation Name	Visibility (private, public)	Explanation
get_data()	Private	Getting Costumer Data from Database
Attribute Name	Visibility (private, public)	Type

3.3 Overall Class Diagram


```

Else if(query3 != null) then
    Session = login_customer
    Show homepage
Else
    Output('email or password is invalid')
    Show login page
endif

```

Query :

No Query	Query	Description
Q-001	select * from admin where admin_email = email and admin_password = password != null	If email and password exist in admin database will output true, false otherwise
Q-002	select * from courier where courier_email = email and courier_password = password != null	If email and password exist in courier database will output true, false otherwise
Q-003	select * from customer where customer_email = email and customer_password = password != null	If email and password exist in customer database will output true, false otherwise

3.4.2 Algorithm for Order

Class Name : Order
 Operation Name : Order Process
 Algorithm : Algo-002

```

Customer_ID = Session.id
Order_address = select customer_address from customer where customer_id = Session.id
Order_pickupTime = input
MenuOrder_Type = input
Order_Datetime = timestamp
Order_Status = 'new order' (default)
Courier_ID = random_in(select courier_id from courier)

Insert into order (customer_id, order_address, order_pickupTime, menuOrder_Type,
Order_dateTime, Order_Status, Courier ID) values(customer_id, order_address,
order_pickupTime, menuOrder_Type, Order_dateTime, Order_Status, Courier ID)

If(affected_rows > 0) then
    Output("Success")
    Show Order page
Else
    Output("Failed")
    Show Order Page
Endif

```

Query :

No Query	Query	Description
Q-004	select customer_address from customer where customer_id = Session.id	To get customer_address by customer_id that equal to Session.id from customer database
Q-005	select courier_id from courier	To get list of courier_id from courier database
Q-006	Insert into order (customer_id, order_address, order_pickupTime, menuOrder_Type, Order_dateTime, Order_Status, Courier ID)	To insert new order to order database

3.4.3 Algorithm for Admin and Order

Class Name : Admin and Order

Operation Name : Edit Order Status

Algorithm : Algo-003

```

Order_id = input
Admin_id = Session.id
Order_Status = input
Courier_id = input

If(courier_id == null) then
    Update order set admin_id = Admin_id, order_status = Order_Status where order_id = Order_id
Else
    Update order set admin_id = Admin_id, order_status = Order_Status, courier_id = Courier_id where order_id = Order_id

endif
If(affected_rows > 0) then
    Output("Success")
    Show Order page
Else
    Output("Failed")
    Show Order Page
Endif

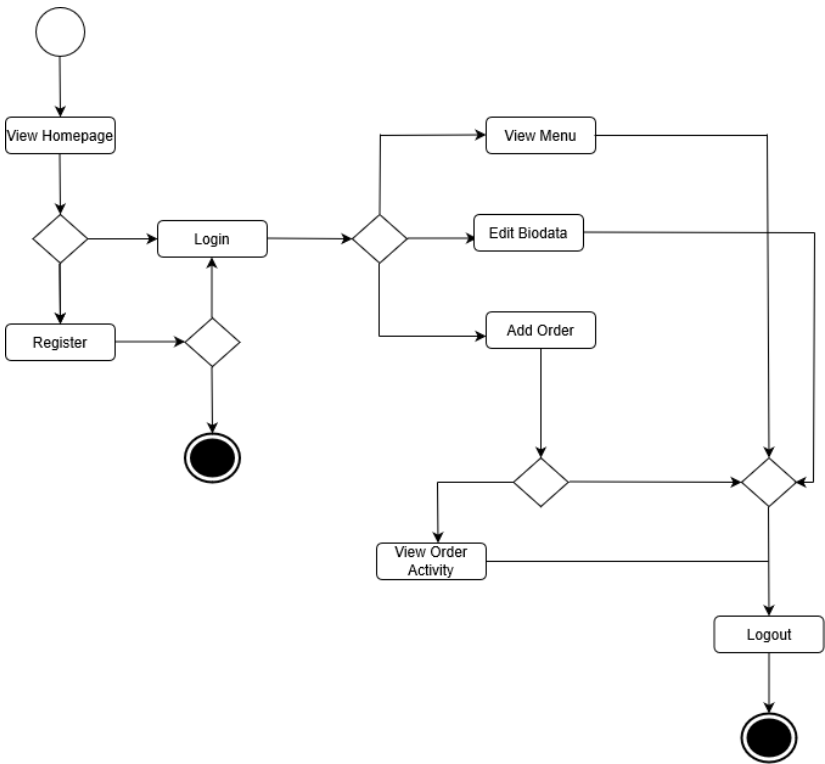
```

Query :

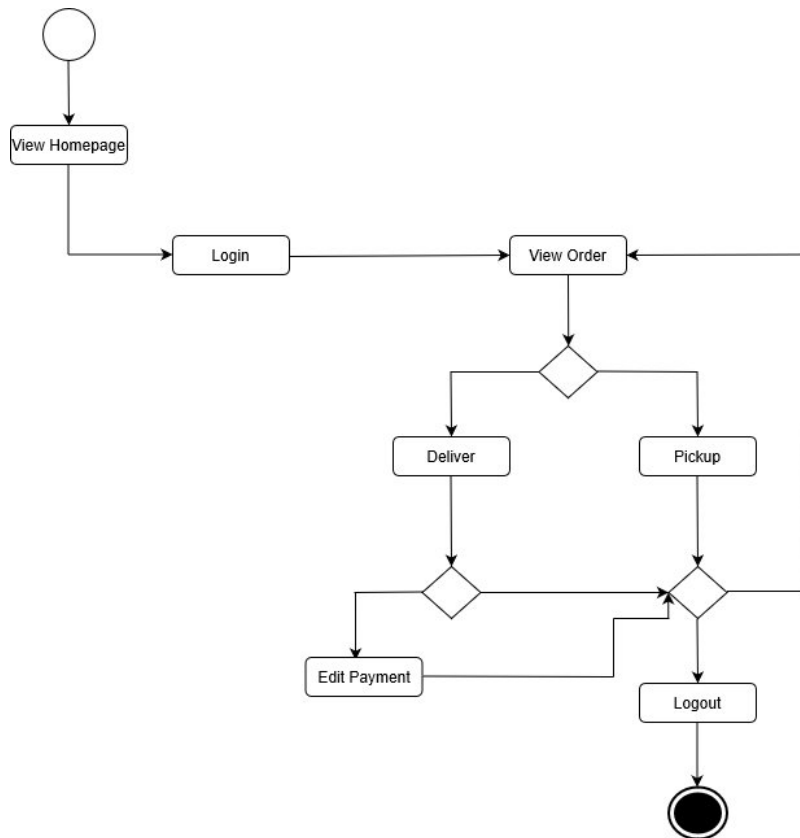
No Query	Query	Description
Q-007	Update order set admin_id = Admin_id, order_status = Order_Status where order_id = Order_id	To update admin_id and order_status in order database
Q-008	Update order set admin_id = Admin_id, order_status = Order_Status, courier_id = Courier_id where order_id = Order_id	To update admin_id, courier_id and order_status in order database

3.5 Statechart Diagram

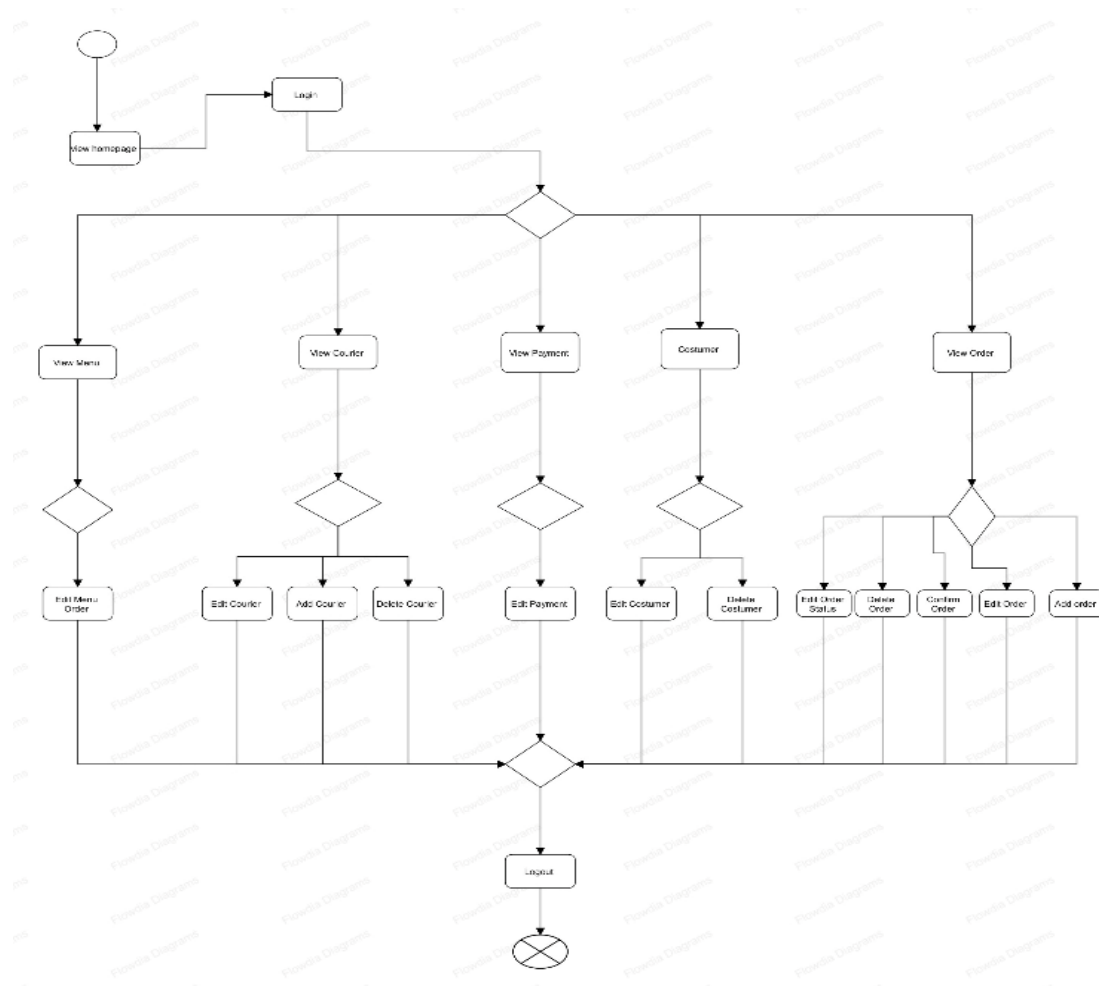
Customer:
Picture 3.5.1 Customer Statechart Diagram



Courier:
Picture 3.5.2 Courier Statechart Diagram



Admin:
Picture 3.5.3 Admin Statechart Diagram



3.6 Interface Design

Interface : Home Page

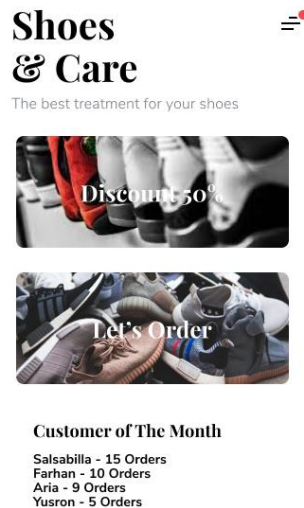


Table Navigation Table

Object_id	Type	Name	Explanation
Banner1	Panel Button	Banner 1	If clicked, redirect to Menu Order Page
Banner 2	Panel Button	Banner 2	If clicked, redirect to Menu Order Page

Interface : Menu Order Page

Menu Order

Shoes treatment is our expert



Pick Your Treatment

Yellowing - 3 Days - 30k
▼

09:00
▼

Address

Order

Table Navigation Table

Object_id	Type	Name	Explanation
BtnOrder	Button	Order	If clicked, it will redirect to confirmation order or to login (if don't login yet)
Menuorder_type	Dropwdow n	Type Menu Order	If clicked, it will show multiple type menu order
Pickup_time	Dropdown	Pickup Time	If clicked, it will show multiple pickup time
Pickup_address	Text Input	Pickup Address	To input the pickup address value

Interface : Register Page

Register

Already have an account?
Login Here.

Table Navigation Table

Object_id	Type	Name	Explanation
BtnSubmit	Button	Submit	If clicked, it will add data
Name	Text Input	Name	To input the name value
Email	Text Input	Email	To input the email value
Phone number	Text Input	Phone number	To input the phone number value
Address	Text Input	Address	To input the address value
Password	Text Input	Password	To input the password value

Interface : Login Page

Login

Login

Do not have an account?
Register Here.

Table Navigation Table

Object_id	Type	Name	Explanation
BtnLogin	Button	Login	If clicked, it will call function login to check it
Email	Text Input	Email	To input the email value
Password	Text Input	Password	To input the password value

Interface : My Account Page

My Account



ID #202023

Ignore it, if you don't want to change your password

Save

Table Navigation Table

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Object_id	Type	Name	Explanation
BtnSave	Button	Save	If clicked, it will save the account data
Name	Text Input	Name	To input the name value
Email	Text Input	Email	To input the email value
Phone number	Text Input	Phone number	To input the phone number value
Address	Text Input	Address	To input the address value
Password	Text Input	Password	To input the password value

Interface : My Order Page

My Order

▼ In Process

#202004182 - Yellowing 3 Days ▶

#202004183 - Regular 1 Days ▶

#202004183 - Regular 2 Days ▶

◀ 1 2 3 4 ▶

▼ Completed

#202003171 - Repair 5 Days ▶

#202002162 - Deep Clean 3 Days ▶

#202002162 - Deep Clean 3 Days ▶

◀ 1 2 3 4 ▶



Table Navigation Table

Object_id	Type	Name	Explanation
Pagination	Pagination	Pagination	To make a pagination of completed order list
Banner 1	Panel Button	Banner 1	If clicked, redirect to Menu Order
Detail	Button	Detail	If clicked, redirect to order detail

Interface : Order Detail Page

Order Detail

Order ID #202023

▼ Customer Data

Yusron Hanan
Cempaka Stree 2B Sumberkolak
+6282251461910

▼ Order Detail

Type : Yellowing - 3 Days
Price : Rp. 30.000
Datetime : 17/04/2020 at 06:13
Pickup Time : 09:00 by Courier #210
Deliver Time : 12:10 by Courier #212
Payment Method : Cash
Status : Completed

Table Navigation Table

Object_id	Type	Name	Explanation

Interface : Order List Page for Courier

Order List

▼ Pickup Time

Yusron - Cempaka Street 2B ▶
Salsa - PBB Blok E No 12 ▶
Aria - Setiyabudi Street No 19 ▶

◀ 1 2 3 4 ▶

▼ Deliver Time

#202003171 - Buah Batu Street 8 ▶
#202002162 - Sukapura No 2E2 ▶
#202002162 - Sukabirus H17 ▶

◀ 1 2 3 4 ▶

Table Navigation Table

Object_id	Type	Name	Explanation
Pagination	Pagination	Pagination	To make a pagination of completed order list

Detail	Button	Detail	If clicked, redirect to order detail
--------	--------	--------	--------------------------------------

Interface : Order Detail Page for Courier and Admin

Order Detail



Edit

Order ID #202023

▼ Customer Data

Yusron Hanan
Cempaka Stree 2B Sumberkolak
Cempaka Stree 2B Sumberkolak
+6282251461910

▼ Order Detail

Type : Yellowing - 3 Days
Price : Rp. 30.000
Datetime : 17/04/2020 at 06:13
Pickup Time : 09:00 by Courier #002
Deliver Time : 12:10 by Courier #007
Payment Method : Cash
Status : Completed

Table Navigation Table

Object_id	Type	Name	Explanation
Edit	Button	Edit	If clicked, redirect to edit order form

Interface : Edit Order Page (For Courier)

Edit Order



ID #009

Cash ▼

Deliver ▼

Save

Table Navigation Table

Object_id	Type	Name	Explanation
-----------	------	------	-------------

Payment_name	Dropdown	Login	Dropdown input of payment name
Status	Dropdown	Email	Dropdown input of order status
BtnSave	Button	Save	If clicked, it will save the data

Interface : Customer List Page for Admin

Customer List

No	Email	Name	Phone	Action

◀ 1 2 3 4 ▶

Table Navigation Table

Object_id	Type	Name	Explanation
CustomerTable	Table	Customer Table	Display information about Customer Data
Pagination	Pagination	Pagination	To make a pagination of completed order list

Interface : Courier List Page for Admin

Courier List

Add

No	Email	Name	Phone	Action

◀ 1 2 3 4 ▶

Table Navigation Table

Object_id	Type	Name	Explanation
CourierTable	Table	Courier Table	Display information about Courier Data
btnAdd	Button	Add	If clicked, redirect to add form page
Pagination	Pagination	Pagination	To make a pagination of completed order list

Interface : Order List Page for Admin

Order List

Add

Keyword 🔍 Filter Status ▼

No	Name	Type	Status	Action

◀ 1 2 3 4 ▶

Table Navigation Table

Object_id	Type	Name	Explanation
OrderTable	Table	Order Table	Display information about Order Data

btnAdd	Button	Add	If clicked, redirect to add form page
Pagination	Pagination	Pagination	To make a pagination of completed order list
keyword	Text Input	Keyword	To input keyword value
Filter_status	Dropdown	Filter Status	Dropdown value of Order Status

Interface : Menu Order List Page for Admin

Menu Order List

No	Type	Duration	Price	Action

Table Navigation Table

Object_id	Type	Name	Explanation
MenuOrderTable	Table	Menu Order Table	Display information about Menu Order Data

Interface : Payment Method List Page for Admin

Payment Method List



No	Name	Action

Table Navigation Table

Object_id	Type	Name	Explanation
PaymentMethodTable	Table	Payment Method Table	Display information about Payment Method Data

Interface : Edit Payment Method Page for Admin

Edit Payment Method



ID #01

Cash

Save

Table Navigation Table

Object_id	Type	Name	Explanation
BtnSave	Button	Save	If clicked, it will save the data
PaymentName	Text Input	Payment Name	To input the payment name value

Interface : Edit Menu Order Page for Admin

Edit Menu Order



ID #03

Yellowing

3 Days

30.000

Save

Table Navigation Table

Object_id	Type	Name	Explanation
BtnSave	Button	Save	If clicked, it will save the data
Type	Text Input	Type	To input the type value
Duration	Text Input	Duration	To Input the duration value
Price	Text Input	Price	To Input the price value

Interface : Edit Customer Page for Admin

Edit Customer



Delete

ID #202023

Farhan Audianto

farhan@gmail.com

+6282254678907

Address

Save

Table Navigation Table

Object_id	Type	Name	Explanation
BtnSave	Button	Save	If clicked, it will save the data
Name	Text Input	Name	To input the name value
Email	Text Input	Email	To input the email value

Phone number	Text Input	Phone number	To input the phone number value
Address	Text Input	Address	To input the address value
Password	Text Input	Password	To input the password value
BtnDelete	Button	Delete	If clicked, it will Delete the data

Interface : Add Courier Page for Admin

Add Courier



Table Navigation Table

Object_id	Type	Name	Explanation
BtnAdd	Button	Add	If clicked, it will Add the data
Name	Text Input	Name	To input the name value
Email	Text Input	Email	To input the email value
Phone number	Text Input	Phone number	To input the phone number value
Address	Text Input	Address	To input the address value
Nopol	Text Input	Nopol	To input the police license value
Password	Text Input	Password	To input the password value

Interface : Edit Courier Page for Admin

Edit Courier



Delete

ID #009

Sutejo

sutejo@gmail.com

+628211111117

Address

D 4455 AE

Save

Table Navigation Table

Object_id	Type	Name	Explanation
BtnSave	Button	Save	If clicked, it will save the data
Name	Text Input	Name	To input the name value
Email	Text Input	Email	To input the email value
Phone number	Text Input	Phone number	To input the phone number value
Address	Text Input	Address	To input the address value
Nopol	Text Input	Nopol	To input the police license value
Password	Text Input	Password	To input the password value
BtnDelete	Button	Delete	If clicked, it will Delete the data

Interface : Add Order Page for Admin

Add Order



by

Add

Table Navigation Table

Object_id	Type	Name	Explanation
BtnAdd	Button	Add	If clicked, it will add the data
Menuorder_type	Dropwdown	Type Menu Order	If clicked, it will show multiple type menu order
Pickup_time	Dropdown	Pickup Time	If clicked, it will show multiple pickup time
Pickup_address	Text Input	Pickup Address	To input the pickup address value
Id_customer	Text Input	ID Customer	To input the id customer value
Pickup_courier	Dropdown	Pickup Courier	If clicked, it will show multiple pickup courier

Interface : Edit Order Page for Admin

Edit Order



by

by

Delete

Save

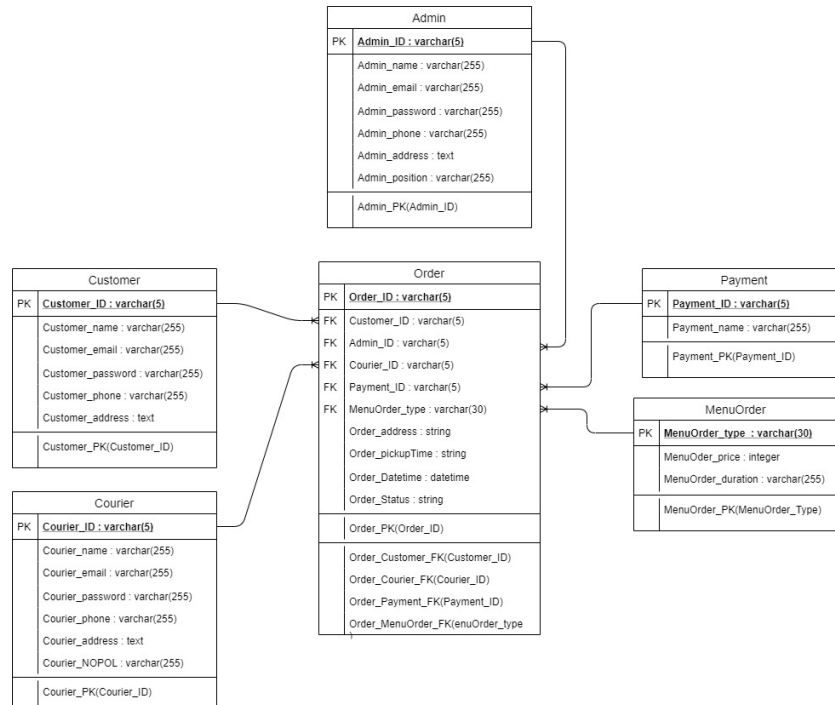
Table Navigation Table

Object_id	Type	Name	Explanation
-----------	------	------	-------------

BtnSave	Button	Save	If clicked, it will save the data
Menuorder_type	Dropwdown	Type Menu Order	If clicked, it will show multiple type menu order
Pickup_time	Dropdown	Pickup Time	If clicked, it will show multiple pickup time
Pickup_address	Text Input	Pickup Address	To input the pickup address value
Id_customer	Text Input	ID Customer	To input the id customer value
Pickup_courier	Dropdown	Pickup Courier	If clicked, it will show multiple pickup courier
Datetime	Date	Datetime	To input the datetime value
Deliver_time	Dropdown	Deliver Time	If clicked, it will show multiple Deliver time
Deliver_courier	Dropdown	Deliver Courier	If clicked, it will show multiple Deliver courier
Payment_method	Dropdown	Payment Method	If clicked, it will show multiple Payment Method
Order_Status	Dropdown	Order Status	If clicked, it will show multiple Order Status
BtnDelete	Button	Delete	If clicked, it will Delete the data

3.7 Design of Class Persistence Representation

Picture 50 Design of Class Persistence Representation



4 Usability Matrix

Table 6 Usability Matrix Table

Number	Requirement Code	Function	Description
1.	FR-01	Create Account	This function is used by user to make account to access the application.
2.	FR-02	Login	This function is used by the user to log in to the application.
3.	FR-03	View Menu	This function is used by the user to view and choose the list treatment of the application
4.	FR-04	Order Process	This function is used by the user to order the shoes treatment
5.	FR-05	Edit Biodata	This function is used by the user to edit the personal data that user want
6.	FR-06	View Order	This function is used by the user to view the user's order
7.	FR-07	Confirm User Order	This function is used by the user to confirm the order
8.	FR-08	Add Order Process	This function is used by the user to add the new order process in offline store
9.	FR-09	Add Courier Data	This function is used by the user to add the data for the courier for courier log in to the application
10.	FR-10	Edit Courier Data	This function is used by the user to edit the data fot the courier
11.	FR-11	Edit User Data	This function is used by the user to edit the current data that user want
12.	FR-12	Edit Order Process	This function is used by the user to edit the current order process
13.	FR-13	Edit Menu Order	This function is used by the user to edit or update list of Shoes treatment
14.	FR-14	Edit Order Status	This function is used by the user to edit the order status

15.	FR-15	Delete Courier Data	This function is used by the user to delete the courier
16.	FR-16	Delete Order Process	This function is used by the user to delete the order
17.	FR-17	Delete User Data	This function is used by the user to delete the data
18.	FR-18	Pickup The Order	This function is used by the user to change the order activities status in to "Process/Pickup"
19.	FR-19	Deliver The Order	This function is used by the user to change the order activities status in to "Delivered"
20.	FR-20	Edit Payment Data	This function is used by the user to edit the payment method