UTM

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FACULTY OF ENGINEERING

SCHOOL OF COMPUTING

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SECD2613 SYSTEM ANALYSIS AND DESIGN

SECTION 08

FINAL PROJECT REPORT

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1.0 Introduction

The title that we have proposed for our project is the bus rental service system. We know that UTM students have always actively participated in events or activities to improve themselves. However, there is always one issue that lingers when organising or attending an event, which is transportation problems. Therefore, to solve this issue, we proposed that a bus rental service system should be implemented to allow the students to rent the bus for activity purposes effortlessly.

JMY Transport is a company that registered under Suruhanjaya Syarikat Malaysia (SSM) located at Pontian, Johor, Malaysia. They provide bus, van rental and shuttle services with experienced drivers throughout peninsular Malaysia, Singapore and Thailand. The buses available for rent come in four different sizes, which are 19-seater, 25-seater, 40-seater and 44-seater; while for the vans, the sizes available are 10-seater, 12-seater, 14-seater and 16-seater. Besides, they also provide MPV rental service which is available in two sizes: 7-seater and 10-seater.

Apart from that, they have a website powered by Google which contains limited details such as pictures of the buses or vans they provide, testimonials received from their customers, contact information, address and operation hours. They also manage Facebook and Instagram pages to update on their current services provided and photos taken during their customers' trips regularly as a sign of appreciation. Even though this company does not locate inside University Technology Malaysia (UTM), there are still students who rent buses or vans from them sometimes, mainly for activity purposes.

The current system that they are using is a manual record system. In most cases, customers will contact them via WhatsApp for inquiries to place and confirm orders. Then, they will record the order details using diaries or google calendar after they have confirmed the orders with their customers. They accept several payment methods like cash payment, online transfer and cheque payment, in which the online transfer and cheque payment will be based on the bank statement. Basically, they record everything manually on papers.

1.1 Problem Definition

JMY Transport uses a manual record system to store customers' data and order details. Since they record everything on paper, they might face problems when tracing the previous orders made by customers due to misplacement or damaging documents. Besides, it is also inconvenient to check and confirm every payment from the customers based on the bank statements if they use online transfer and cheque payment. They need to be precise when recording the orders in order to avoid errors. This can be inefficient specifically when making reports. Adding to that, using paper is bad for the environment.

1.2 Issues

1. The current system still requires the staff to record the order in papers/dairies, which is quite inconvenient and time-consuming.
2. The staff need to check and confirm the payment from customers manually based on their bank statements if the customers are using online transfer or cheque payment.
3. The data might get lost easily and it is hard to trace the previous records sometimes.
4. The staff also need to make sure their phones are always on so that they will not miss any orders or inquiries.
5. Their website contains only limited information.

1.3 Objectives

1. To design a simple and automated system to ease their transactions.
2. To allow the users to book or rent the bus online.
3. To provide different payment methods to the customers, such as making payment via e-Wallet.

1.4 Requirements

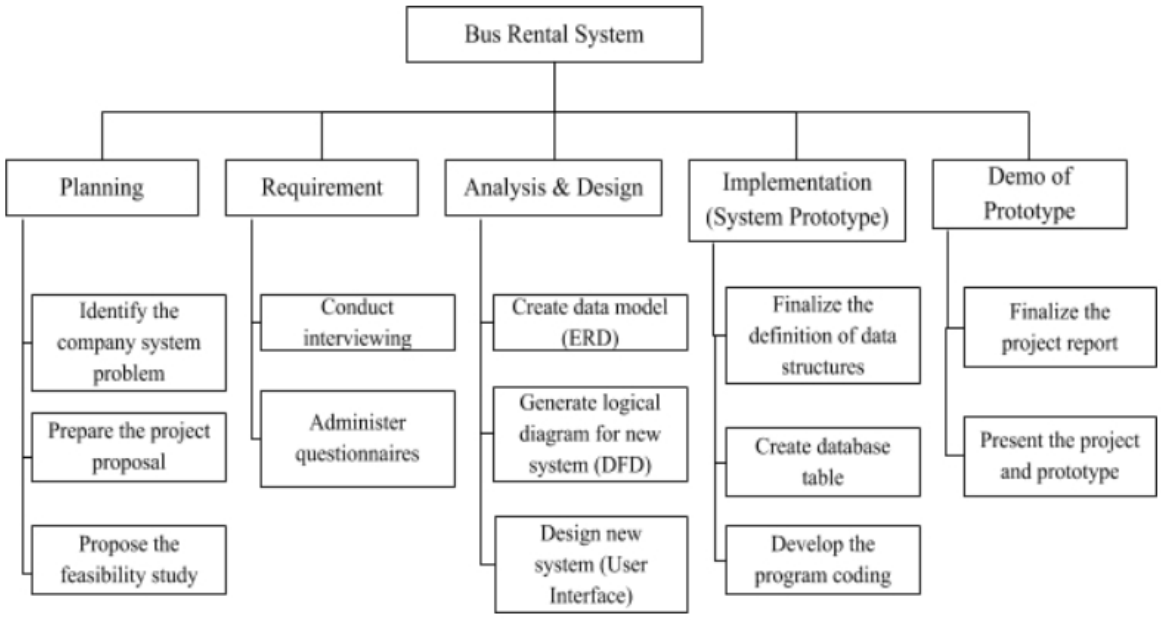
1. The system must be secure and protect users privacy
2. The system should be simple and neat
3. The system should be organized and provide ease for the customers

1.5 Constraints

1. The coverage area of the system is restricted to state near to Johor only
2. The users is restricted to resident of state near to Johor only

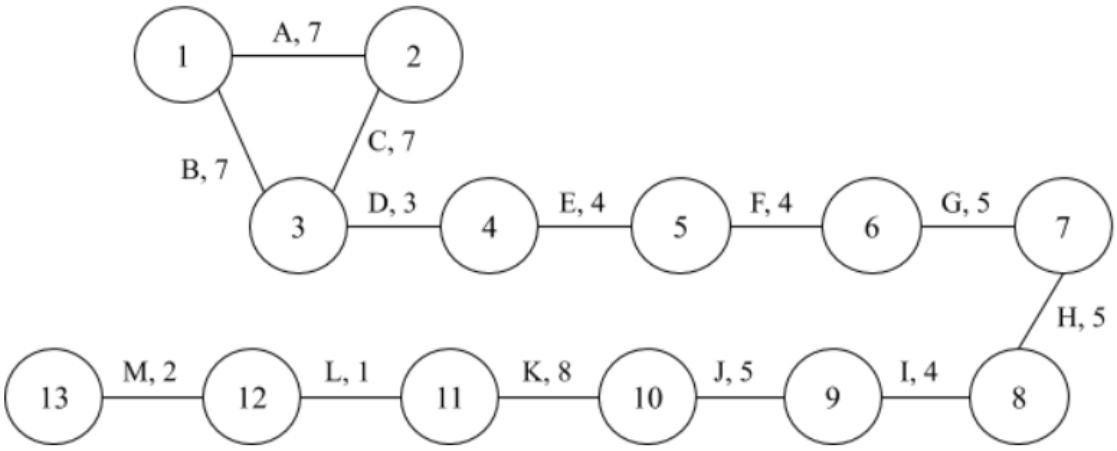
2.0 Project Planning Report

2.1 Work Breakdown Structure (WBS)



2.2 PERT Chart (based on WBS)

Activity	Predecessor	Duration
A Identify the company system problem	NONE	7
B Prepare the project proposal	NONE	7
C Propose the feasibility study	A	7
D Conduct interviewing	B,C	3
E Administer questionnaires	D	4
F Create data model (ERD)	E	4
G Generate logical diagram for new system (DFD)	F	5
H Design new system (User Interface)	G	5
I Finalize the definition of data structures	H	4
J Create database table	I	5
K Develop the program coding	J	8
L Finalize the project report	K	1
M Present the project and prototype	L	2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A, 7
B, 7
C, 7
D, 3
E, 4
F, 4
G, 5
H, 5
I, 4
J, 5
K, 8
L, 1
M, 2

2.3 Gantt Chart

JMY Project Planner

PERIOD(DAYS)

TASK	PLAN START	PLAN DURATION	START	END
PLANNING				
Prepare Project Proposal	1	7	14/11/2020	20/11/2020
Read Company Report	1	7	14/11/2020	20/11/2020
Proposed an operational feasibility study	8	7	21/11/2020	27/11/2020
Requirement : Gather Information				
Conduct Interview	15	2	28/11/2020	29/11/2020
Administer questionaires	17	3	30/11/2020	2/12/2020
Analysis & Design				
Generate Model (Diagram)	22	4	5/12/2020	9/12/2020
Generate Logical Diagram for new system(DFD)	26	5	10/12/2020	14/12/2020
Design Interface(GUI)	31	5	15/12/2020	19/12/2020
Implementation (System Prototype)				
Finalize definition of data structures	36	4	20/12/2020	23/12/2020
Create database tables	40	5	24/12/2020	28/12/2020
Implement the program coding	45	8	29/12/2020	5/1/2021
Demo of to-be system prototype				
Present the project	53	1	6/1/2020	6/1/2020
Finalise project report	54	2	7/1/2020	8/1/2020

3.0 Information Gathering Report

3.1 Interview

The interview structure that we used is pyramid structure which starts with the closed questions and working toward open-ended questions. This structure begins with very detailed, often closed questions which are from specific to general questions and expands by allowing open-ended questions and more generalized responses. It is useful if interviewees need to be warmed up to the topic or seem reluctant to address the topic.

Type of questions	**Interview questions**	
Introduction	**Interviewer:**	Good afternoon, Mr Iskandar Nordin, the owner of JMY Transport in Johor. Sorry for disturbing you. My name is Chiam Wooi Chin, UTM student. My group members and I are second-year students from School of Computing and we were doing a database and system analysis group project which has the objectives of analysing problems and proposing solutions to develop an improved current system. Thus, we have chosen your bus rental company as our case study and we have some questions for you.
	Interviewee:	Thanks for choosing my company as your case study. I will try my best to answer your questions and provide my company's information based on your questions.

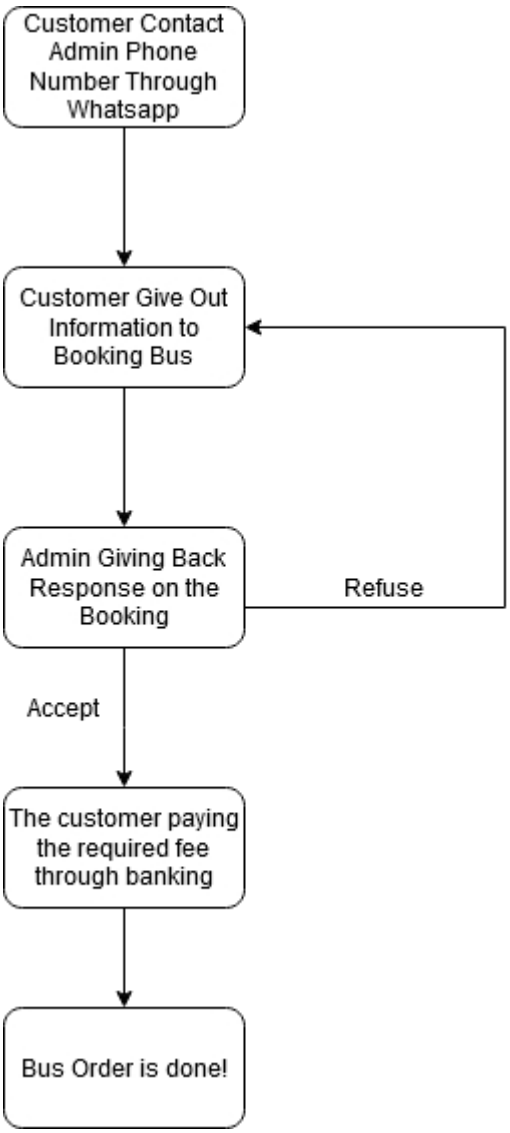
Closed-ended	**Interviewer:**	Thank you, Mr Iskandar, without further ado, let us start our first question. Can I know, **who are your customers usually and they rent the bus for what purpose?**
	Interviewee:	My customers usually come from Johor to rent the bus for the travel purpose and there are also UTM students who rent the bus for activity use and school trips.
Closed- ended	**Interviewer:**	Alright Mr Iskandar. Then, **how do your company record the order information of customers and the sales of the company?**
	Interviewee:	My company records the order information of customers by using WhatsApp's chat and the record book manually. The sales of the company are recorded by the cash resit, online payment or cheque of the company. Mostly, my company is using cash resit to do the payment of the bus rental.
Closed-ended probe	**Interviewer:**	**Do you think your company's sales level is progressing? Explain why.**

	Interviewee:	My company's sales level is progressing before this year due to many people and students have rented the bus for travel and trip. However, since this year the COVID-19 and Malaysia movement control order (MCO) in our country, my company has also been affected by this situation, so my company's sales level has dropped during this outbreak in this year.
Open-ended	**Interviewer:**	Sorry to hear that, Mr Iskandar. **What are the problems you are experiencing with your company's current system?**
	Interviewee:	There are some problems that my company experienced with the existing system. First, the current system still requires the staff to record the customer order in papers, which is quite inconvenient and time-consuming. Besides, the staff need to check and confirm the payment from customers manually based on their bank statements if the customers are using online transfer or cheque payment. The data might get lost easily and it is hard to trace the previous records sometimes. Due to the order by phone or message, the staff also need to make sure their phones are always on so that they will not miss any orders or inquiries.
Open-ended	**Interviewer:**	These problems really make your company's current system complicated and troublesome. Mr Iskandar, my last questions, **how do you expect the system to be if we propose a new system for your company?**

	Interviewee:	I am very appreciative for hearing this suggestion from you. First, I expect the new system is designed as a simple and automated system to ease the transactions. Besides, I would like the new system to allow the users to book or rent the bus online instead of using phone or message. I also prefer the system provide different payment methods to the customers, such as making payment via e-Wallet. These might help reduce the workload and increase work efficiency of the staff so that my company system will be more efficient and productive.
	Interviewer:	Mr Iskandar, the opinion of yours, marks the end of this interview session. I am grateful for interviewing with you today. You have given me a clear overview of your company system. Thank you for making time with me for this interview.
	Interviewee:	Thank you also for interviewing me and giving me the opportunity to express my bus rental company. It was a great honour to be used as case study of your project.

4.0 Requirement Analysis (based from AS-IS analysis)

4.1 Current business process (scenarios, workflow)



4.2 Functional Requirement (input, process and output)

Functional Requirement	Description
FR1	A customer should be able to book a bus
FR2	A customer should be able to pay order fee
FR3	A customer should be able to choose the type of vehicle that wants to book
FR4	An admin should be able to generate order for customer
FR5	An admin should be able to insert new bus

4.3 Non-functional Requirement (performance and control)

Non-Functional Requirement	Description
Security	The data of the customer is not leaked
Usability	The system is easy to use
Capability	The system can definitely get the tasks done

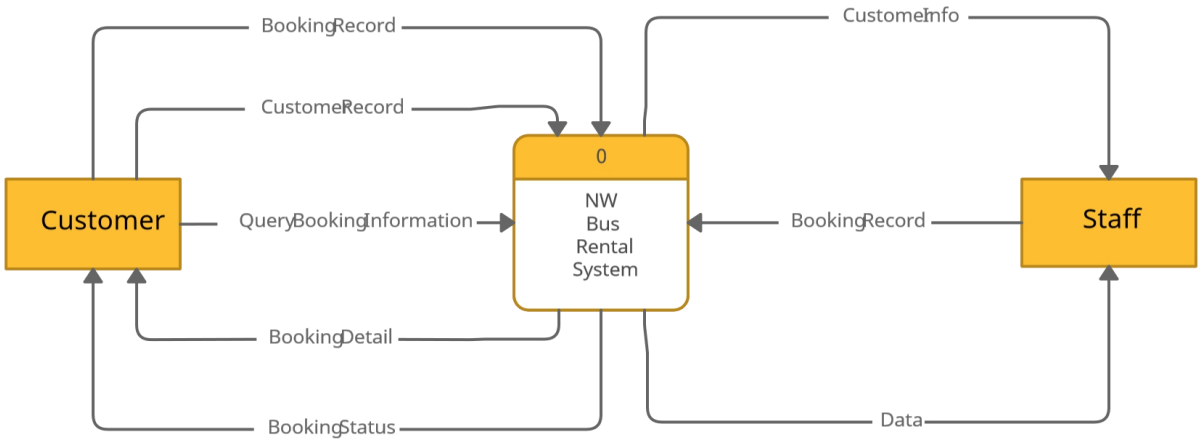
4.4 Data requirement (based from input and output in 4.2 for DB design)

Input & Output	Description
Staff/Admin	- Information regarding to the admin
Customer	- Simple information about the customer used to booking a bus
Bus	- Detailed information about a bus which included the plate number,model and etc.
BookingOrder	- Information is generated whenever a customer booking a bus
Order	- Information is generated whenever an Admin approved on the customer booking order
Payment	- Information is generated when a customer has paid for the order.

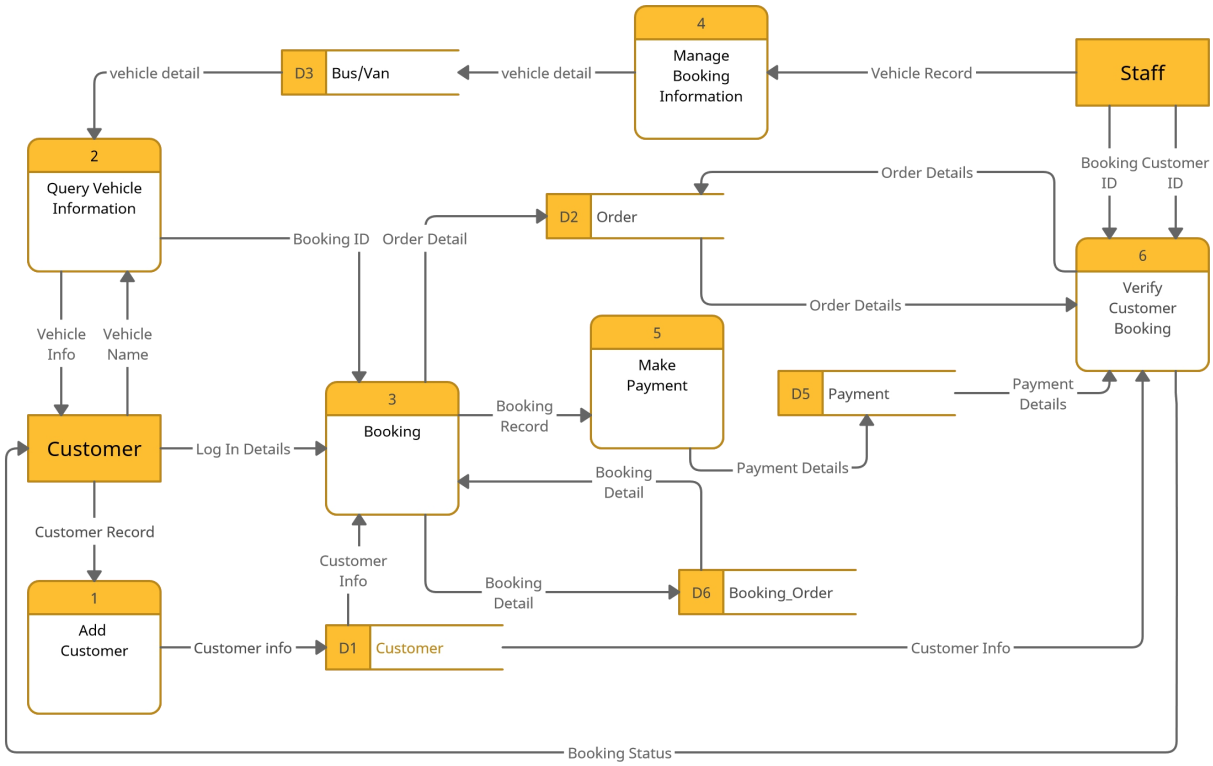
5.0 System Analysis and Specification

5.1 Data Flow Diagram (DFD)

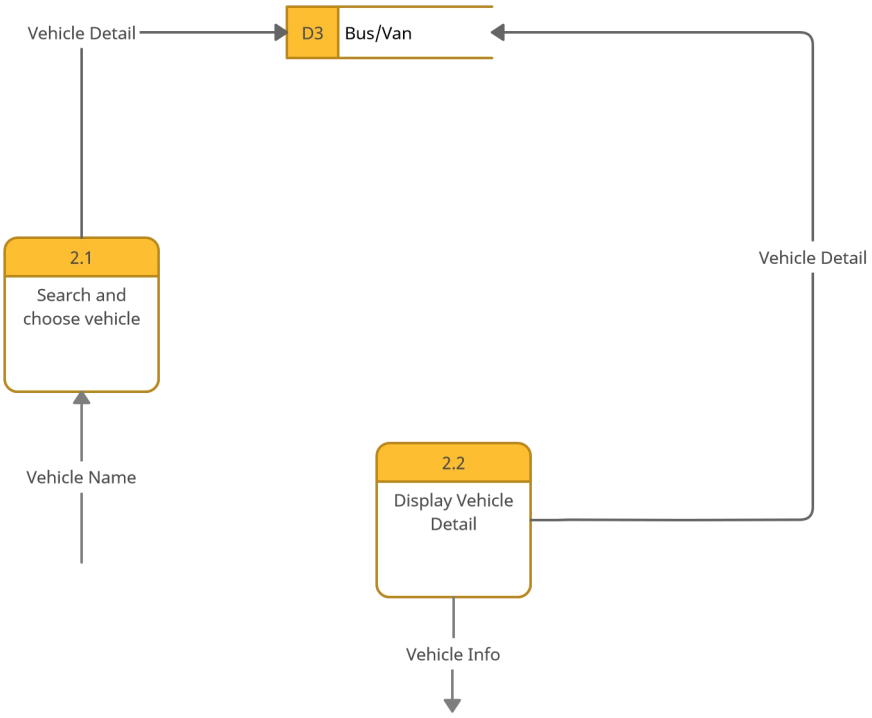
5.1.1 Context Diagram



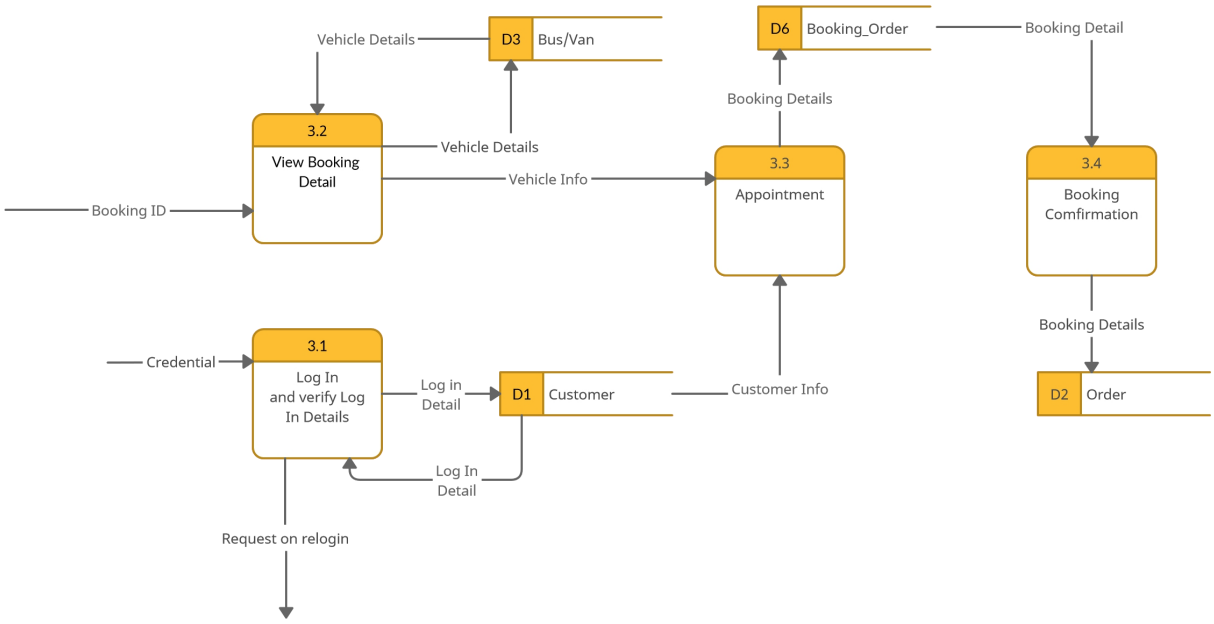
5.1.2 Diagram 0



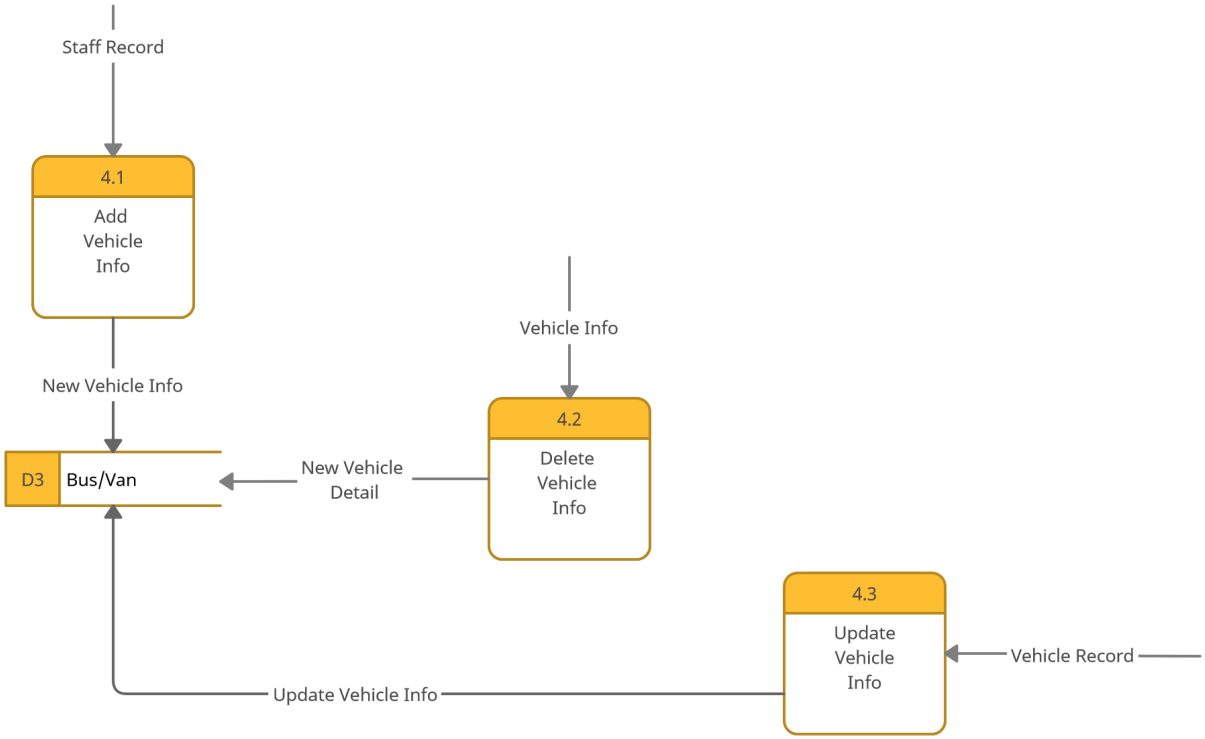
5.1.3 Child Diagram of Process 2



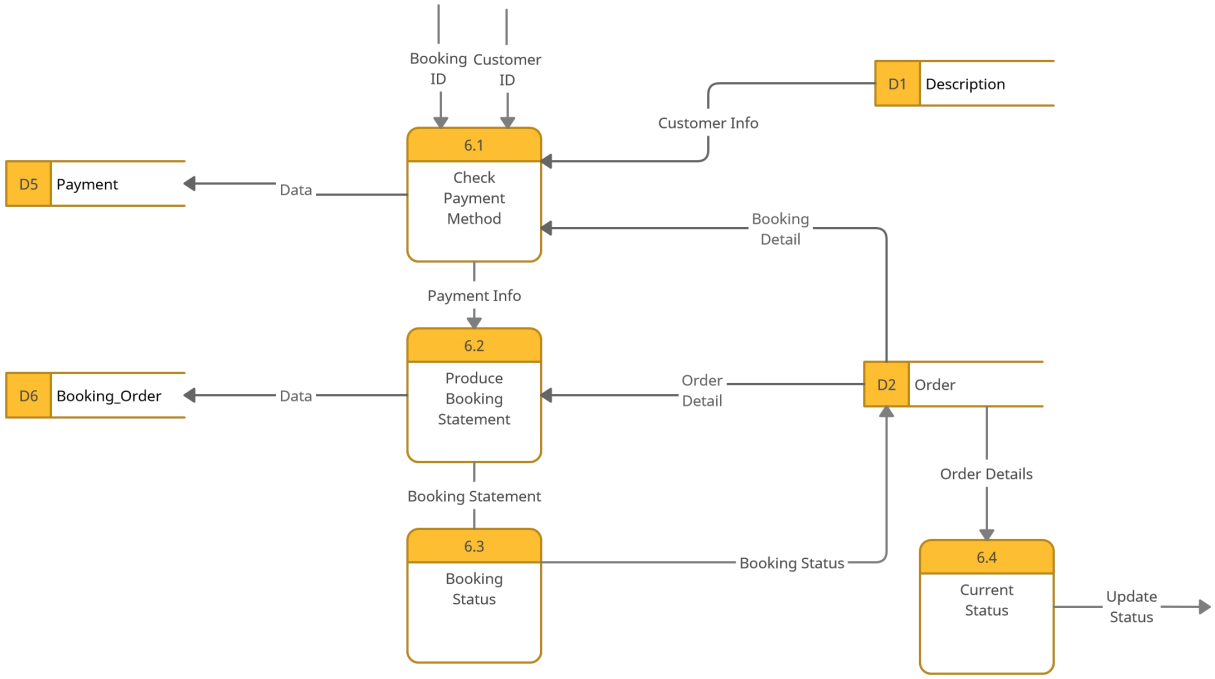
5.1.4 Child Diagram of Process 3



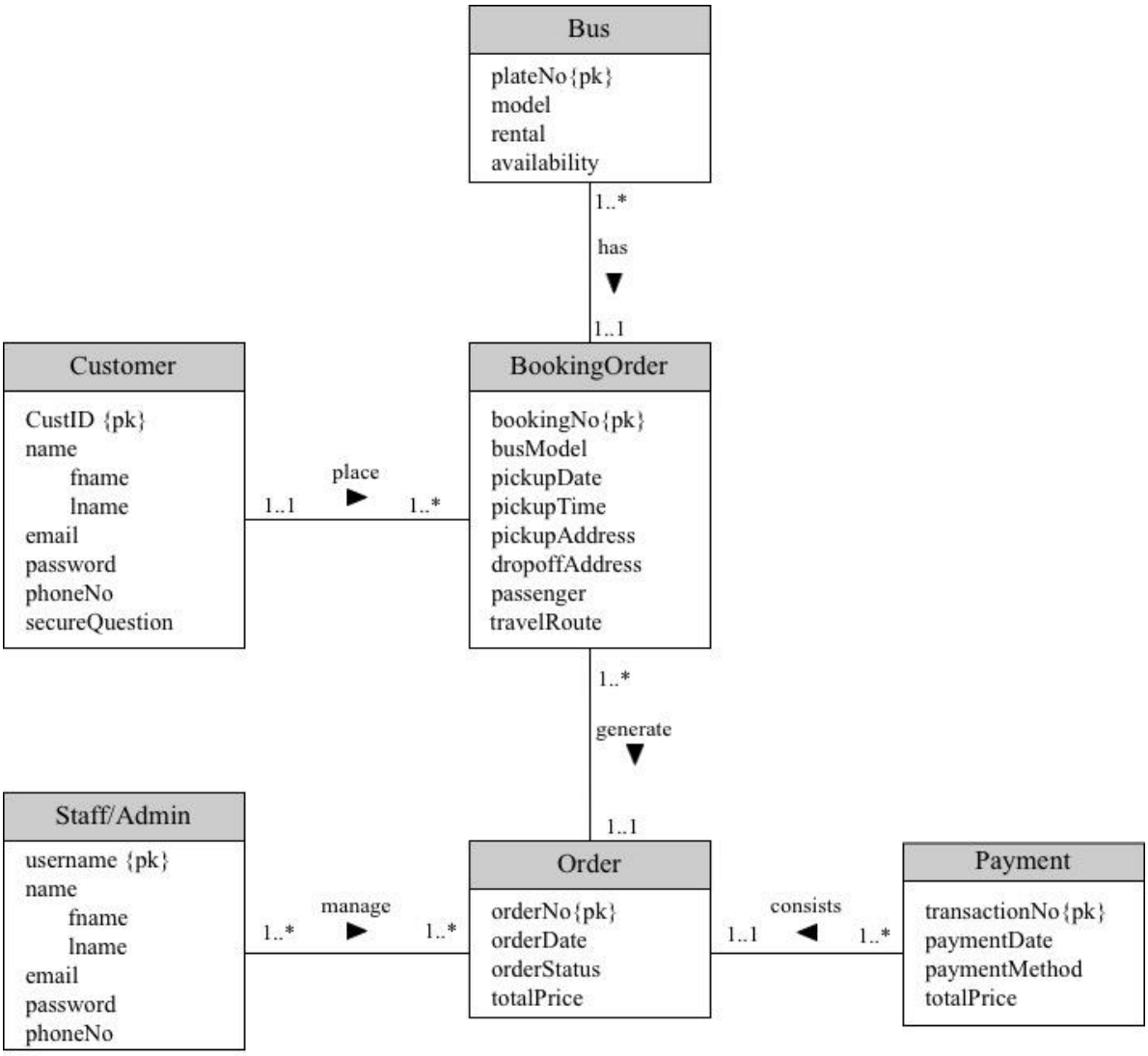
5.1.5 Child Diagram of Process 4



5.1.6 Child Diagram of Process 6



5.2 ERD (based from 5.1)



5.3 Data Dictionary (based from 5.2)

Entity Name	Attributes	Description	Data Type & Length	Nulls	Multi -valued
Staff/Admin	username	Uniquely identifies a staff/admin	20 variable characters	NO	NO
	name				
	fname	First name of staff/admin	20 variable characters	NO	NO
	lname	Last name of staff/admin	20 variable characters	NO	NO
	email	Email address of staff/admin	50 variable characters	NO	NO
	password	Password for the account	20 variable characters	NO	NO
	phoneNo	Phone number of staff/admin	Integer	NO	NO
Customer	CustID	Uniquely identifies a customer	8 variable characters	NO	NO
	name				
	fname	First name of customer	20 variable characters	NO	NO
	lname	Last name of customer	20 variable characters	NO	NO
	email	Email address of customer	50 variable characters	NO	NO
	password	Password for the account	20 variable characters	NO	NO
	phoneNo	Phone number of customer	Integer	NO	NO
	secureQuestion	Security question to be answered by customer	20 variable characters	NO	NO
Bus	plateNo	Uniquely identifies a bus	7 variable characters	NO	NO
	model	Model of bus	50 variable characters	NO	NO
	rental	Rental price of bus	Decimal	NO	NO
	availability	Availability of bus	15 variable characters	NO	NO

BookingOrder	bookingNo	Uniquely identifies a BookingOrder	20 variable characters	NO	NO
	busModel	Model of bus rented	20 variable characters	NO	NO
	pickupDate	Date of pick up	15 variable characters	NO	NO
	pickupTime	Time of pick up	10 variable characters	NO	NO
	pickupAddress	Location of pick up point	120 variable characters	NO	NO
	dropoffAddress	Location of drop off point	120 variable characters	YES	NO
	passenger	Number of passengers	Integer	NO	NO
	travelRoute	Travel route	500 variable characters	NO	NO
Order	orderNo	Uniquely identifies an order	20 variable characters	NO	NO
	orderDate	Order date of an order	15 variable characters	NO	NO
	orderStatus	Order status of an order	15 variable characters	NO	NO
	totalPrice	The total price of the order	Decimal	NO	NO
Payment	transactionNo	Uniquely identifies a payment	20 variable characters	NO	NO
	paymentDate	Date of the payment made	Date	NO	NO
	paymentMethod	Method of the payment made	15 variable characters	YES	NO
	totalPrice	The total price of the payment	Decimal	NO	NO

5.4 Process Specification (from processes in 5.1)

PROCESS 1 ADD CUSTOMER

DO WHILE Customer register

IF Customer add their record

THEN Move Customer Info to customer data

ELSE

Subtract Customer Info from customer data

END IF

END DO

PROCESS 2 QUERY VEHICLE INFORMATION

PROCESS 2.1 SEARCH AND CHOOSE VEHICLE

DO WHILE Vehicle is bus

IF Vehicle Name is Bus 19 Seated

THEN Move Vehicle Detail to bus data

ELSE IF Vehicle Name is Bus 25 Seated

THEN Move Vehicle Detail to bus data

ELSE IF Vehicle Name is Bus 40 Seated

THEN Move Vehicle Detail to bus data

ELSE

Subtract Vehicle Detail from bus data

END IF

END DO

PROCESS 2.2 DISPLAY VEHICLE DETAILS

DO WHILE Vehicle is bus

IF Vehicle Name is Bus 19 Seated

THEN Display Vehicle Detail from bus data

Customer get the Vehicle Info

ELSE IF Vehicle Name is Bus 25 Seated

THEN Display Vehicle Detail from bus data

Customer get the Vehicle Info

ELSE IF Vehicle Name is Bus 40 Seated

THEN Display Vehicle Detail from bus data

Customer get the Vehicle Info

ELSE

Do not display Vehicle Detail from bus data

Customer cannot get the Vehicle Info

END IF

END DO

PROCESS 3 BOOKING

PROCESS 3.1 LOGIN AND VERIFY LOG IN DETAILS

DO WHILE Customer is credential

IF Customer log in

Move Log in Detail to customer data

Log in Detail move from customer data for verify

THEN IF Log in Detail verify

THEN customer successfully log in

ELSE

Request on relogin to customer

END IF

ELSE

Subtract Log in Details from customer data

END IF

END DO

PROCESS 3.2 VIEW BOOKING DETAILS

DO WHILE Customer book the bus

IF Customer has booking ID

Move Vehicle Detail to bus data

Vehicle Detail move from bus data for customer to view

THEN IF Customer successfully view the booking detail

THEN Move Vehicle Info to make booking appointment

ELSE

Cannot make booking appointment

END IF

ELSE

Subtract Vehicle Detail from bus data

END IF

END DO

PROCESS 3.3 APPOINTMENT

DO WHILE Customer log in

IF Customer view booking detail

Move Booking Detail to booking order data

Customer Info move from customer data

ELSE

Subtract Booking Detail from booking order data

END IF

END DO

PROCESS 3.4 BOOKING CONFIRMATION

DO WHILE Customer confirm book the bus

IF Customer make booking appointment

Booking Detail move from booking order data

Move Booking Detail to order data

ELSE

Subtract Booking Detail from order data

END IF

END DO

PROCESS 4 MANAGE BOOKING INFORMATION

PROCESS 4.1 ADD VEHICLE INFO

```
DO WHILE Staff manage bus
    IF Staff add bus record
        Move New Vehicle Info to bus data
    ELSE
        Subtract New Vehicle Info from bus data
    END IF
END DO
```

PROCESS 4.2 DELETE VEHICLE INFO

```
DO WHILE Staff manage bus
    IF Staff delete bus record
        Move New Vehicle Detail to bus data
    ELSE
        Subtract New Vehicle Detail from bus data
    END IF
END DO
```

PROCESS 4.3 UPDATE VEHICLE INFO

```
DO WHILE Staff manage bus
    IF Staff update bus record
        Move Update Vehicle Info to bus data
    ELSE
        Subtract Update Vehicle Info from bus data
    END IF
END DO
```

PROCESS 5 MAKE PAYMENT

```
DO WHILE Customer book the vehicle
    IF Customer confirm booking
```

THEN Move Payment Detail to payment data

ELSE

Subtract Payment Detail from payment data

END IF

END DO

PROCESS 6 VERIFY CUSTOMER BOOKING

PROCESS 6.1 CHECK PAYMENT METHOD

IF Staff has customer's booking ID and customer ID

Customer Info move from description data

Booking Detail move from order data

Move Data to payment data

ELSE

Subtract Data from payment data

END IF

PROCESS 6.2 PRODUCE BOOKING STATEMENT

IF Staff checked payment

Order Detail move from order data

Move Data to booking order data

ELSE

Subtract Data from booking order data

END IF

PROCESS 6.3 BOOKING STATUS

IF Staff has booking statement

Move Booking Status to order data

ELSE

Subtract Booking Status from order data

END IF

PROCESS 6.4 CURRENT STATUS

IF booking status update

    Order Detail move from order data

    Customer get update status

ELSE

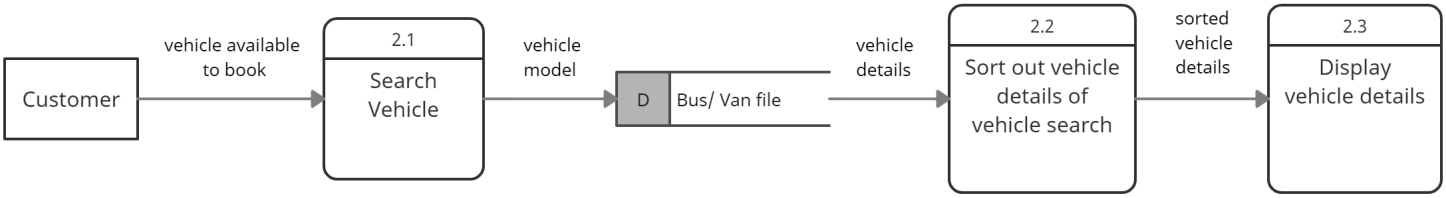
    Customer cannot get update status

END IF

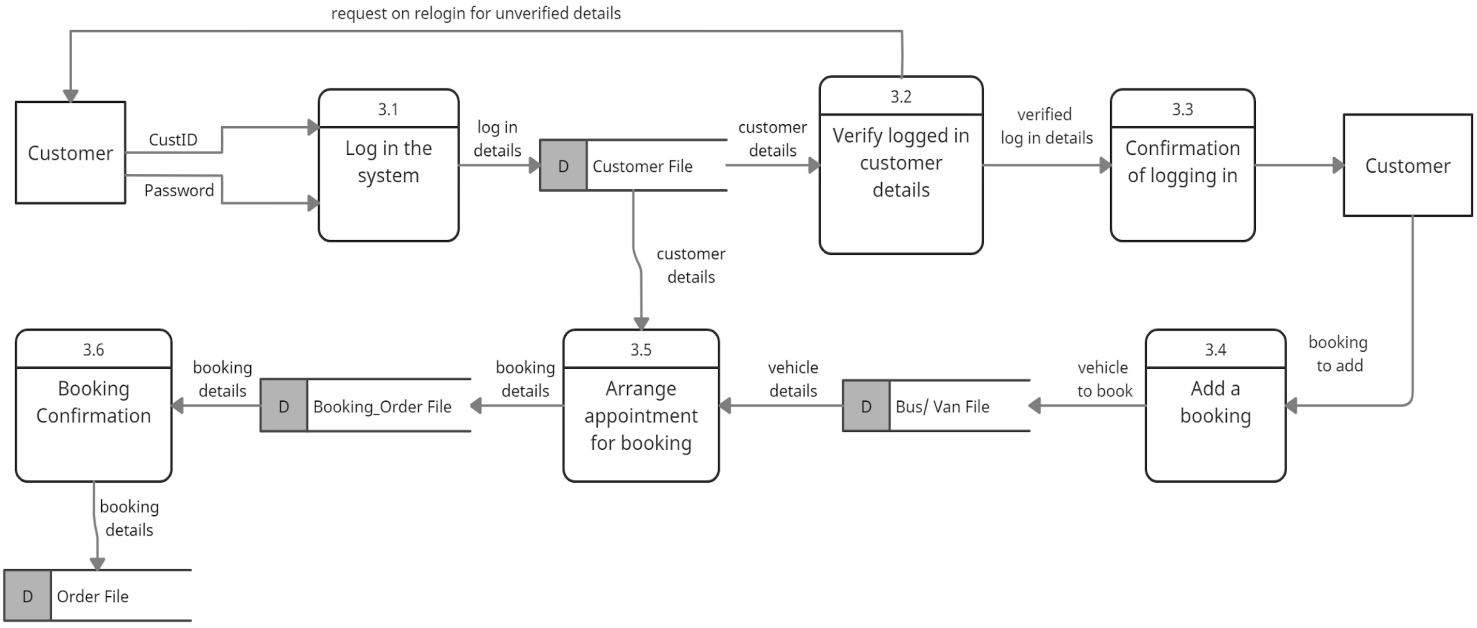
6.0 System Design

6.1 Physical DFD of the To-Be system

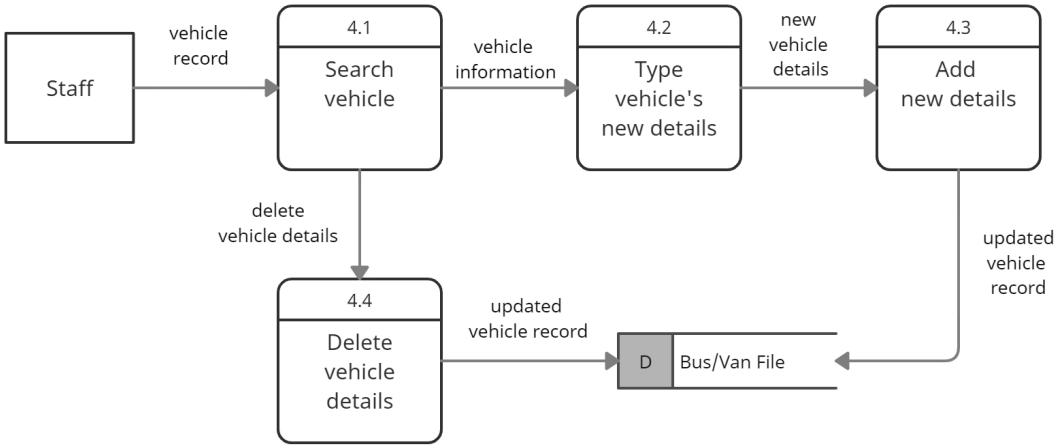
6.1.1 Physical DFD of Child Diagram for Process 2



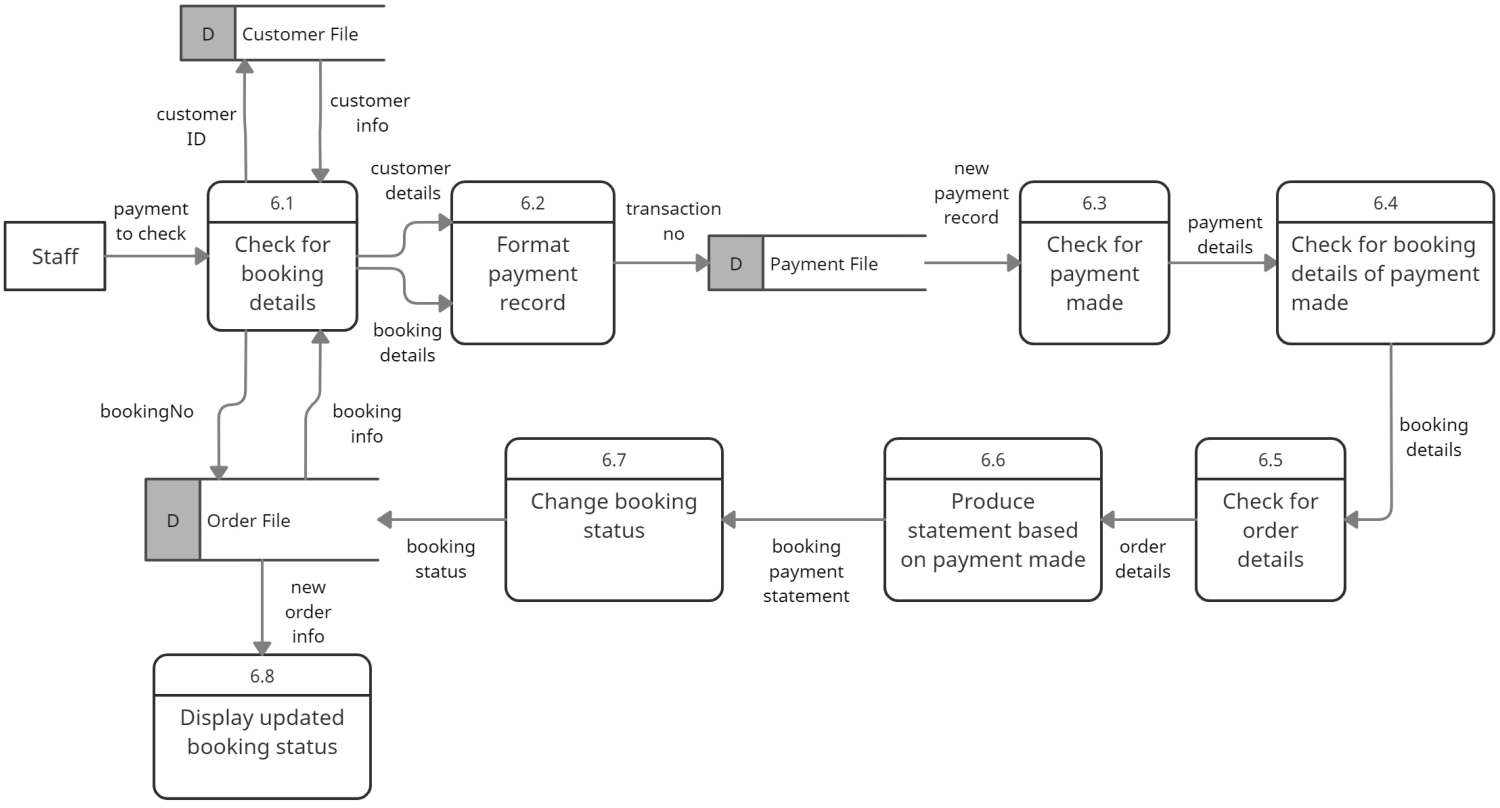
6.1.2 Physical DFD of Child Diagram for Process 3



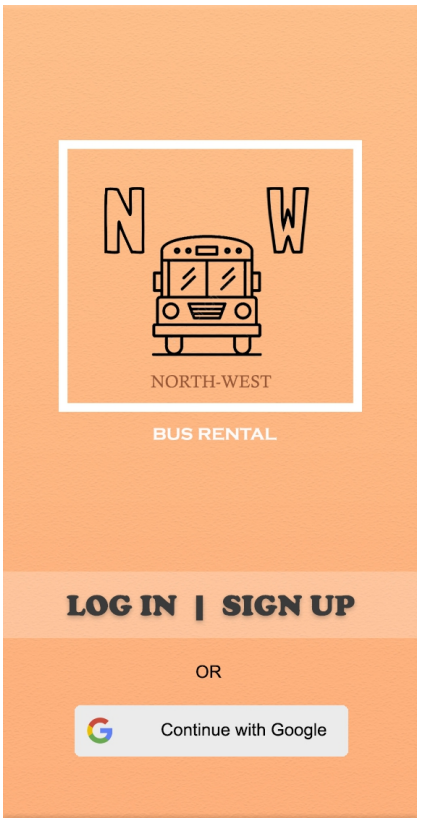
6.1.3 Physical DFD of Child Diagram for Process 4

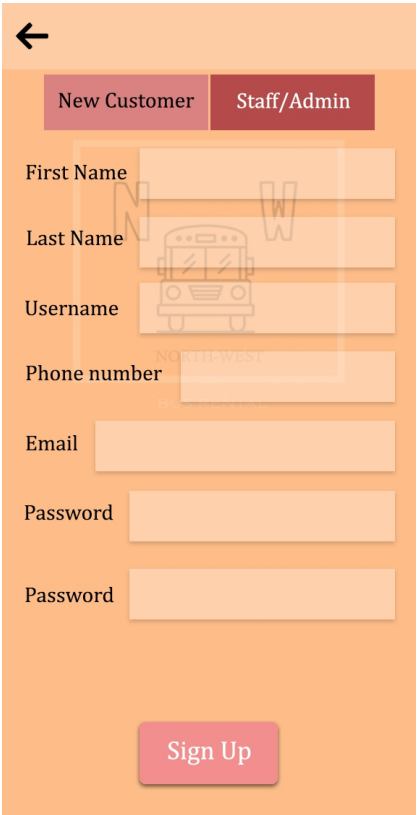


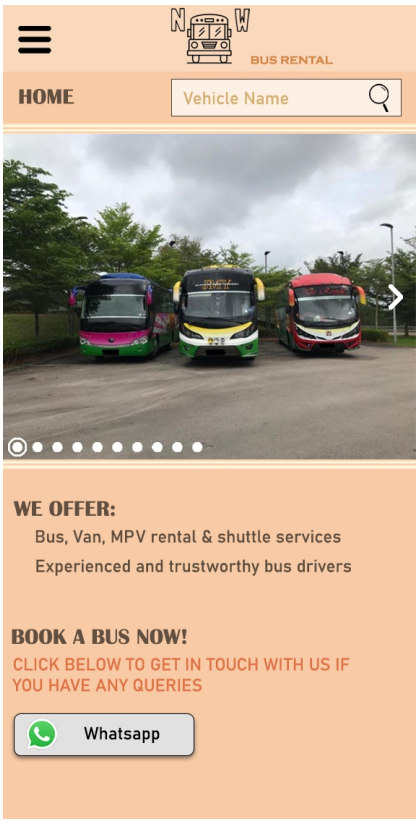
6.1.4 Physical DFD of Child Diagram for Process 6

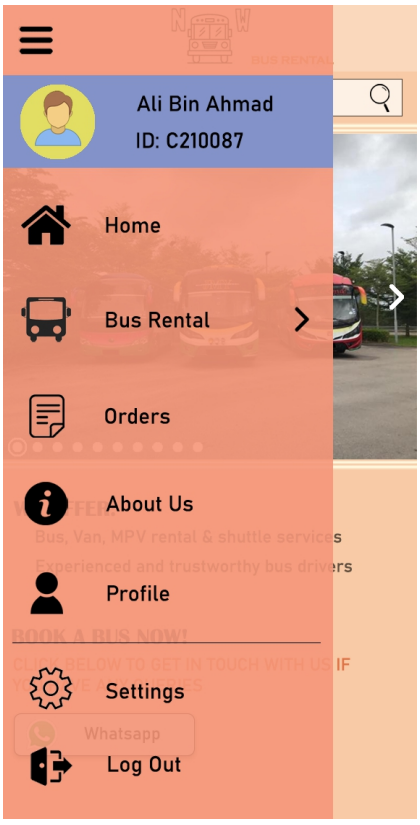


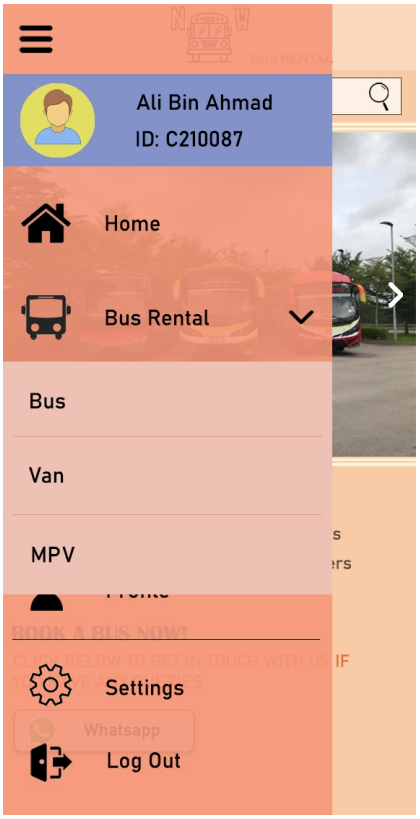
6.2 Interface Design (GUI)

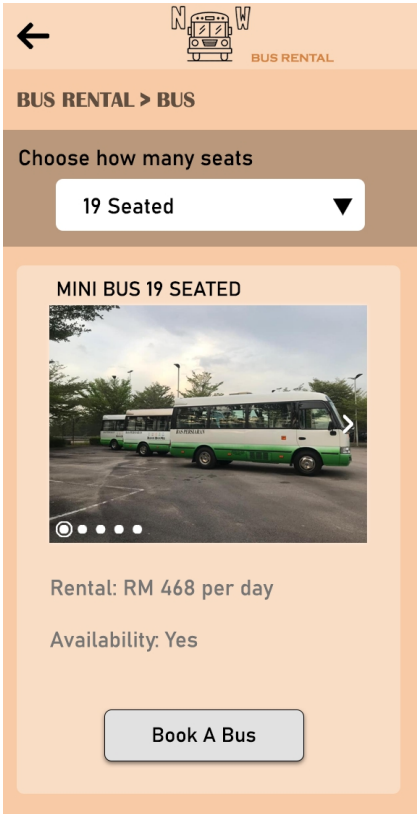


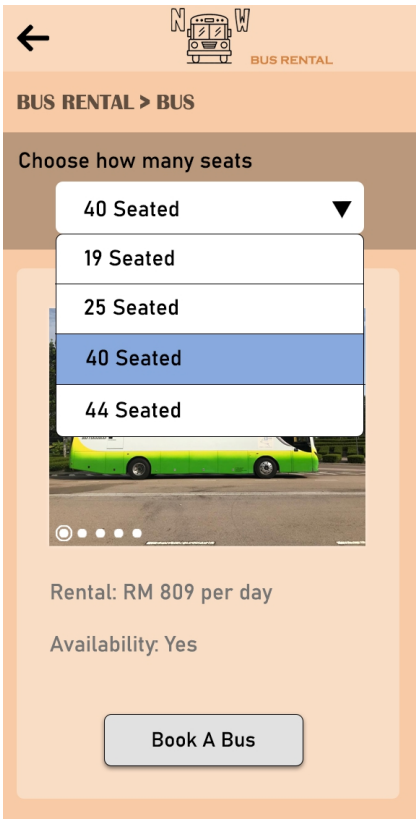


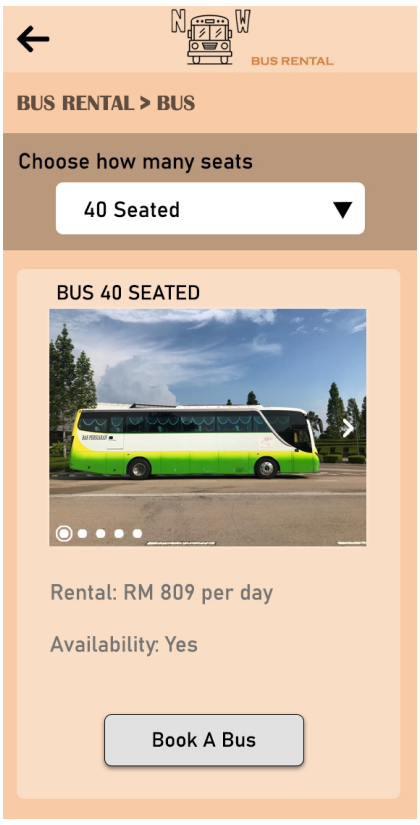

BUS RENTAL
HOME
Vehicle Name
WE OFFER:
Bus, Van, MPV rental & shuttle services
Experienced and trustworthy bus drivers
BOOK A BUS NOW!
CLICK BELOW TO GET IN TOUCH WITH US IF YOU HAVE ANY QUERIES
Whatsapp

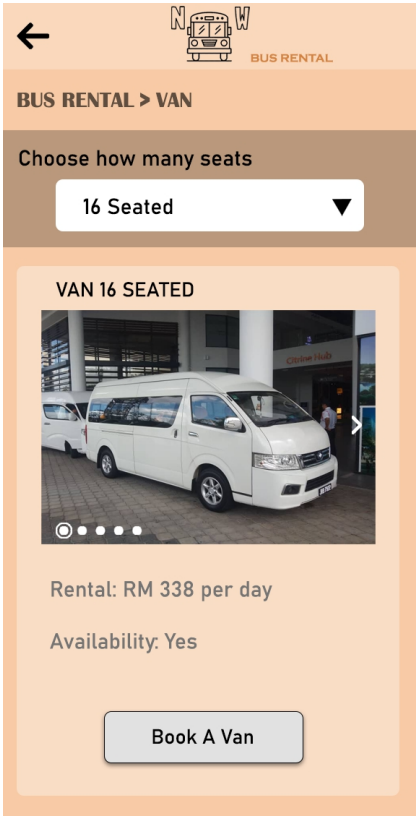

Ali Bin Ahmad
ID: C210087
Home
Bus Rental
Orders
About Us
Profile
Settings
Log Out

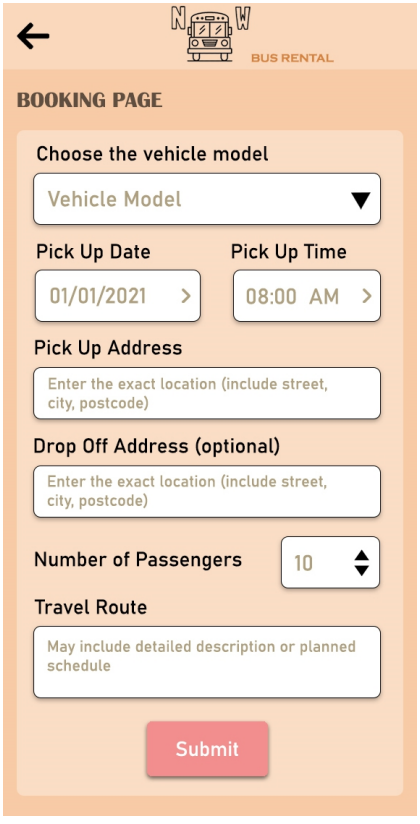

Ali Bin Ahmad
ID: C210087
Home
Bus Rental
Bus
Van
MPV
Settings
Log Out

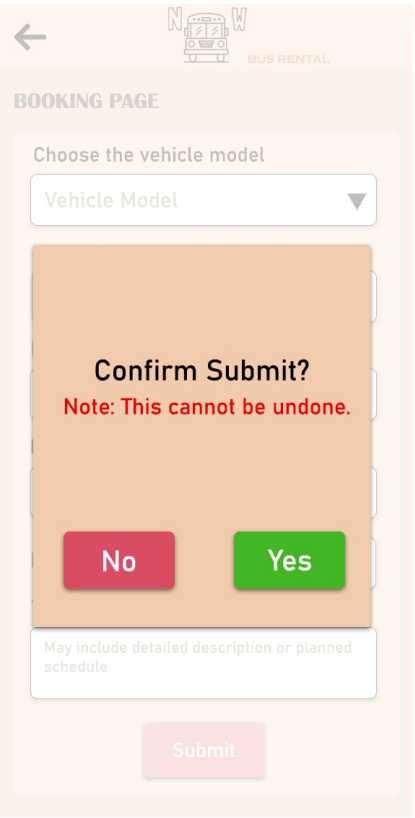

BUS RENTAL
BUS RENTAL > BUS
Choose how many seats
19 Seated
MINI BUS 19 SEATED
Rental: RM 468 per day
Availability: Yes
Book A Bus

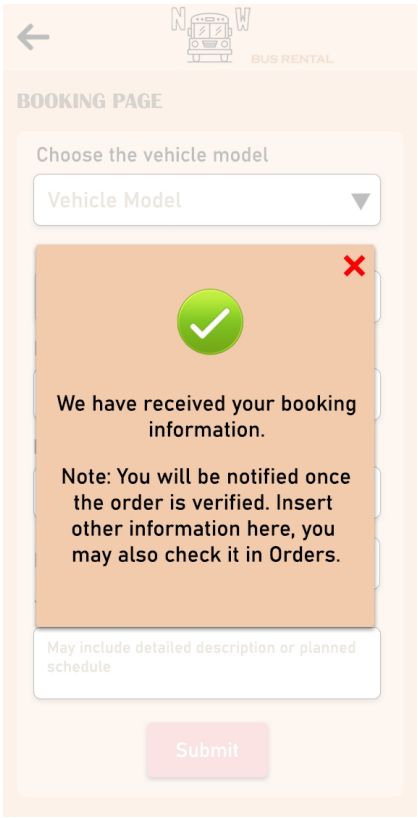

BUS RENTAL
BUS RENTAL > BUS
Choose how many seats
40 Seated
19 Seated
25 Seated
40 Seated
44 Seated
Rental: RM 809 per day
Availability: Yes
Book A Bus

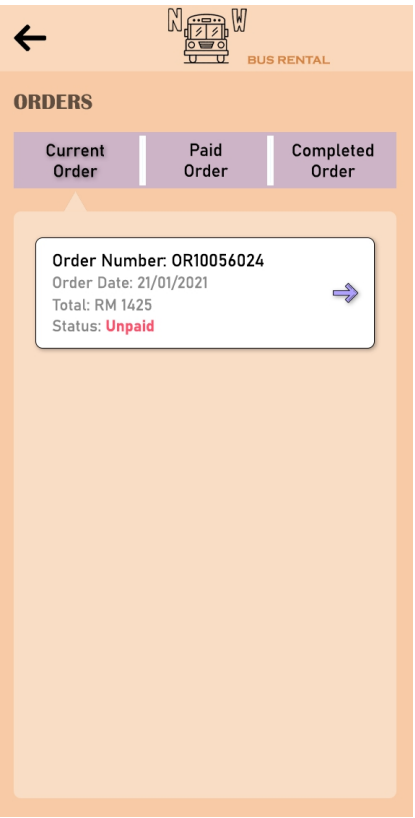

BUS RENTAL
BUS RENTAL > BUS
Choose how many seats
40 Seated
BUS 40 SEATED
Rental: RM 809 per day
Availability: Yes
Book A Bus

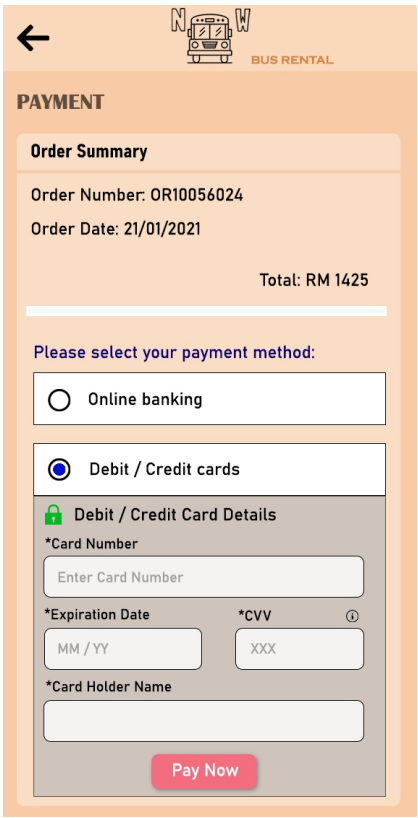

BUS RENTAL
BUS RENTAL > VAN
Choose how many seats
16 Seated
VAN 16 SEATED
Rental: RM 338 per day
Availability: Yes
Book A Van

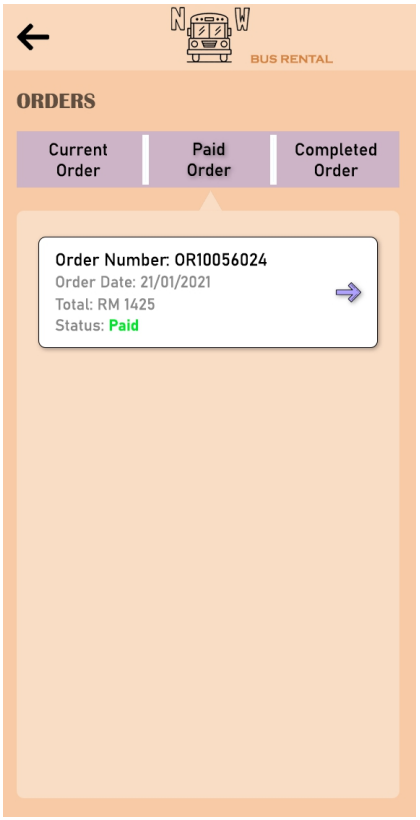

BUS RENTAL
BOOKING PAGE
Choose the vehicle model
Vehicle Model
Pick Up Date
01/01/2021
Pick Up Time
08:00 AM
Pick Up Address
Enter the exact location (include street, city, postcode)
Drop Off Address (optional)
Enter the exact location (include street, city, postcode)
Number of Passengers
10
Travel Route
May include detailed description or planned schedule
Submit

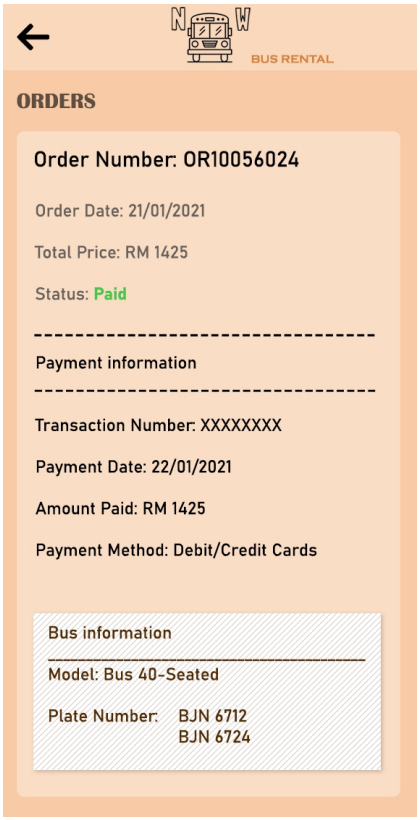

BUS RENTAL
BOOKING PAGE
Choose the vehicle model
Vehicle Model
Confirm Submit?
Note: This cannot be undone.
No
Yes
May include detailed description or planned schedule
Submit


BUS RENTAL
BOOKING PAGE
Choose the vehicle model
Vehicle Model
We have received your booking information.
Note: You will be notified once the order is verified. Insert other information here, you may also check it in Orders.
May include detailed description or planned schedule
Submit

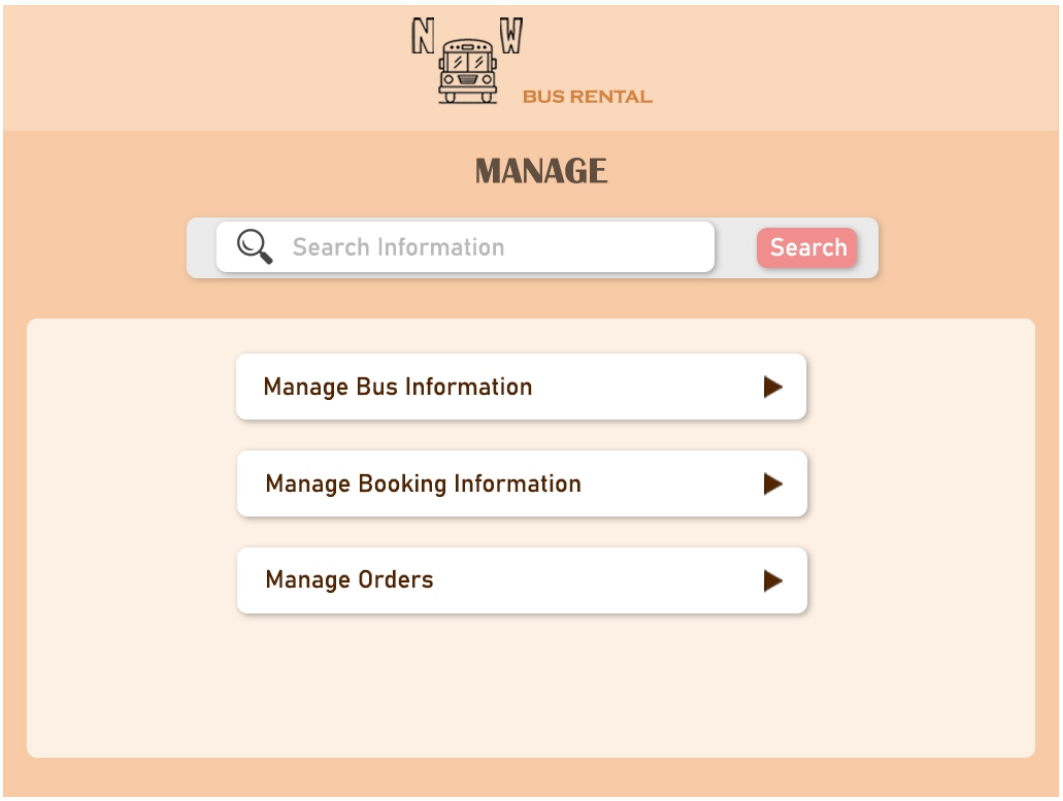

BUS RENTAL
ORDERS
Current Order
Paid Order
Completed Order
Order Number: OR10056024
Order Date: 21/01/2021
Total: RM 1425
Status: Unpaid

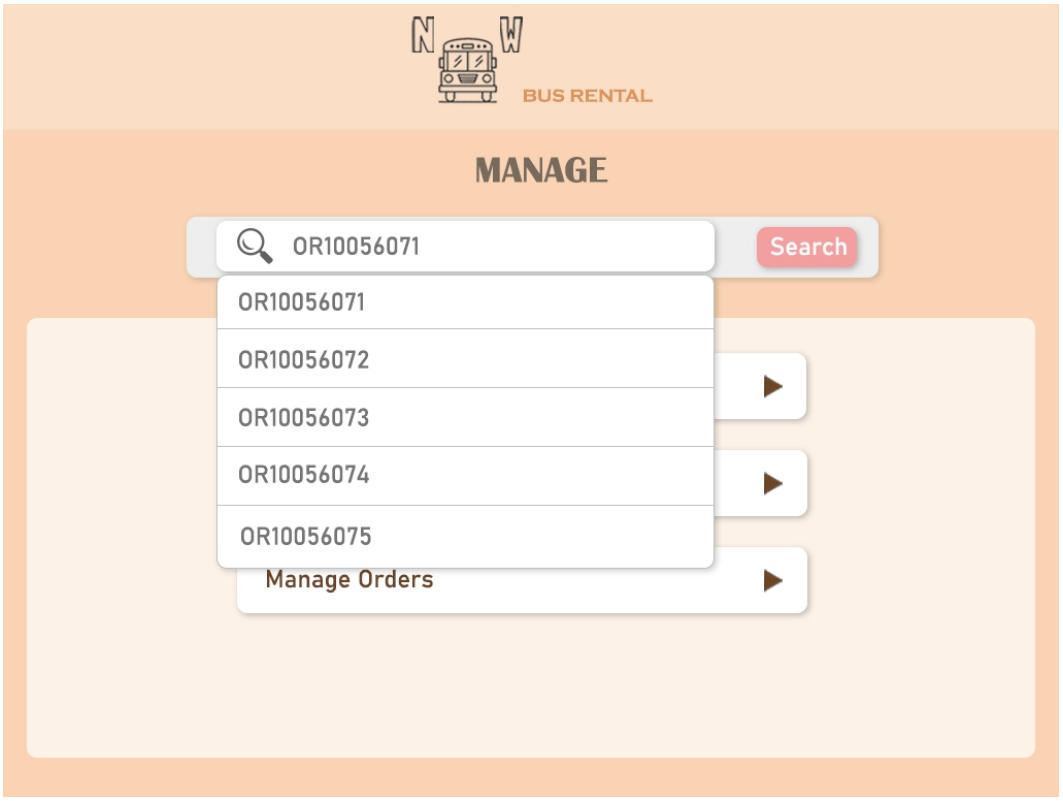

BUS RENTAL
PAYMENT
Order Summary
Order Number: OR10056024
Order Date: 21/01/2021
Total: RM 1425
Please select your payment method:
Online banking
Debit / Credit cards
Debit / Credit Card Details
*Card Number
Enter Card Number
*Expiration Date
*CVV
MM / YY
XXX
*Card Holder Name
Pay Now


BUS RENTAL
ORDERS
Current Order
Paid Order
Completed Order
Order Number: OR10056024
Order Date: 21/01/2021
Total: RM 1425
Status: Paid


BUS RENTAL
ORDERS
Order Number: OR10056024
Order Date: 21/01/2021
Total Price: RM 1425
Status: Paid
Payment information
Transaction Number: XXXXXXXX
Payment Date: 22/01/2021
Amount Paid: RM 1425
Payment Method: Debit/Credit Cards
Bus information
Model: Bus 40-Seated
Plate Number: BJN 6712
BJN 6724


BUS RENTAL
PROFILE
ID: C210087
First Name
Ali
Last Name
Bin Ahmad
Phone number
0134567890
Email
aliahmad@gmail.com
Password
****
Update


BUS RENTAL
MANAGE
Search Information
Search
Manage Bus Information
Manage Booking Information
Manage Orders


BUS RENTAL
MANAGE
OR10056071
Search
OR10056071
OR10056072
OR10056073
OR10056074
OR10056075
Manage Orders

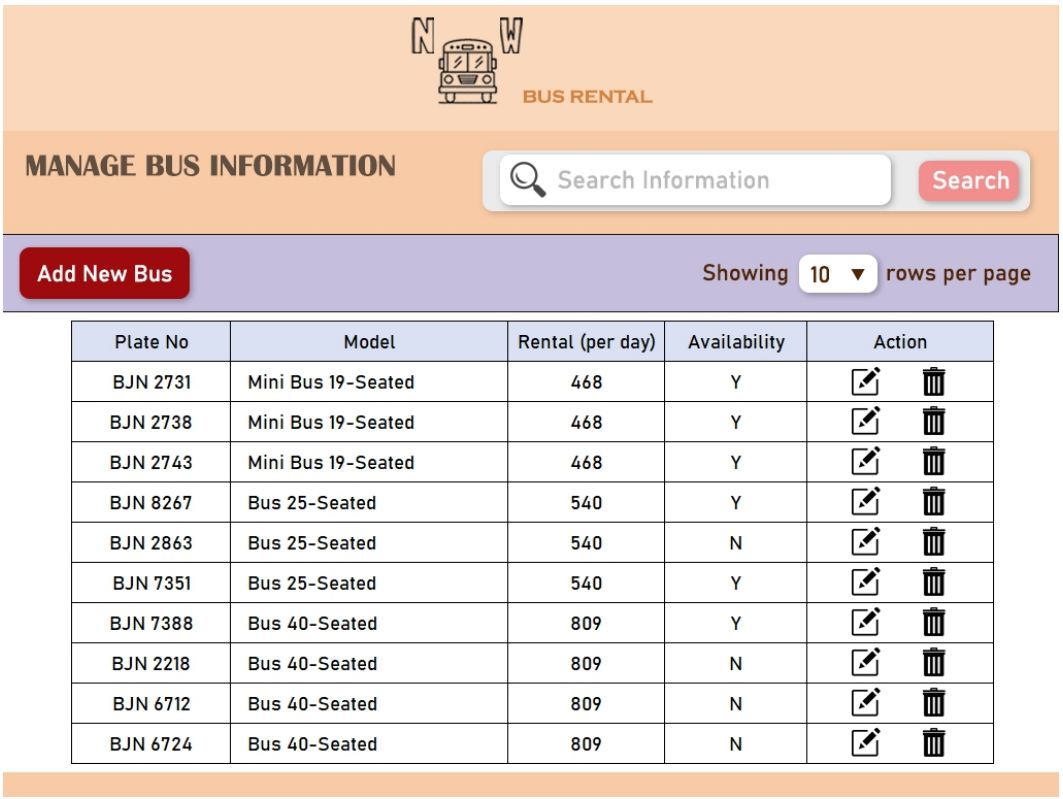
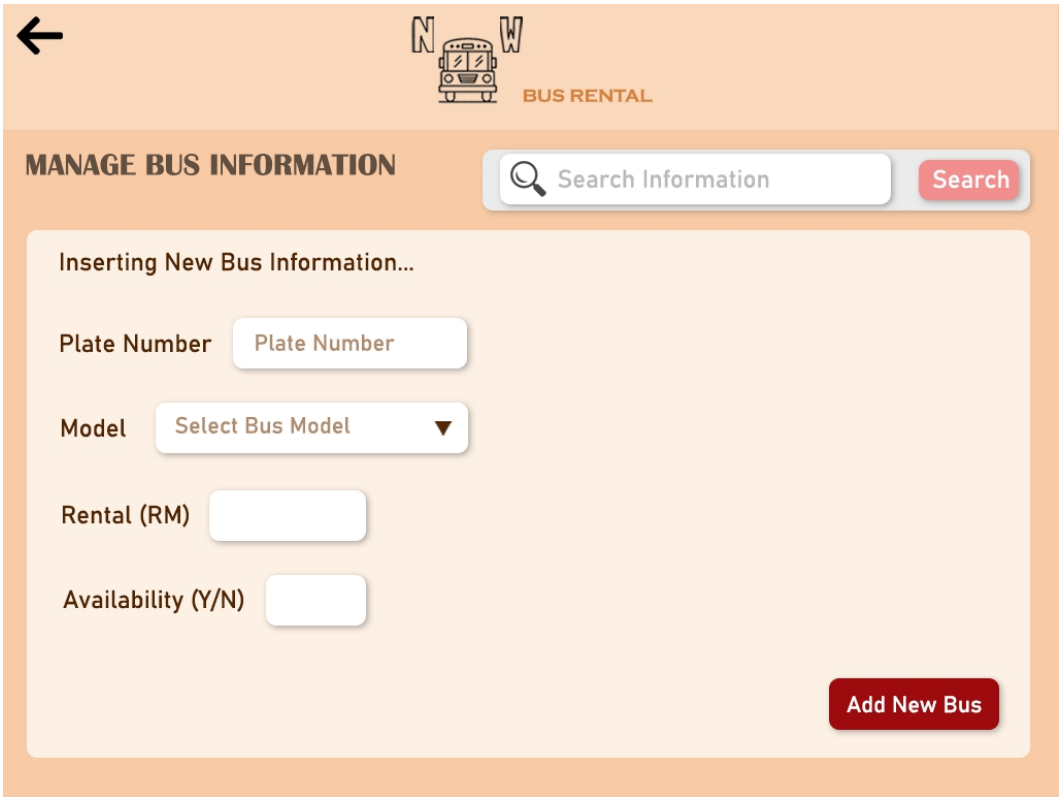
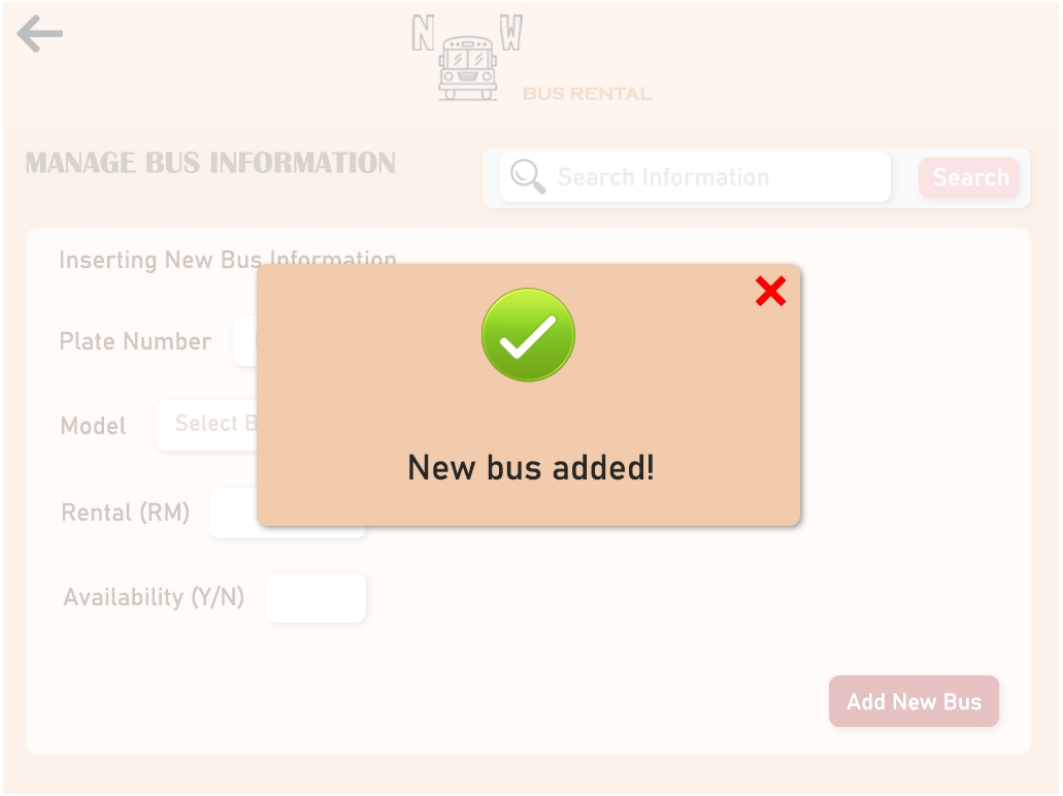
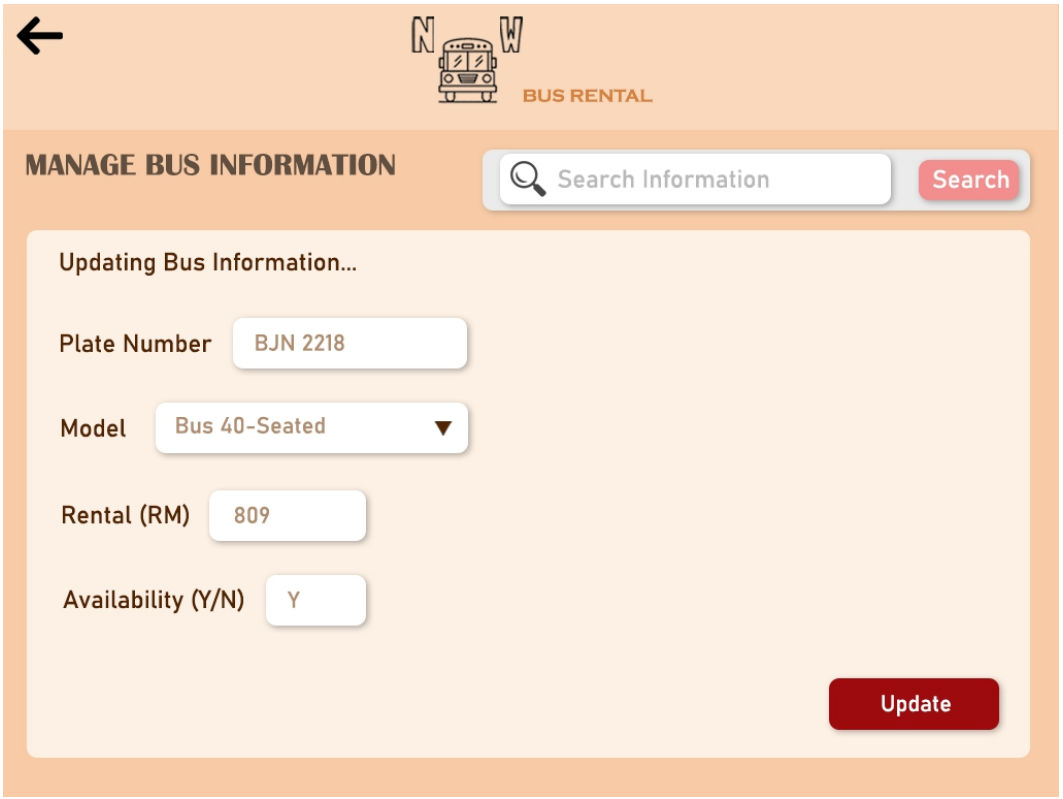
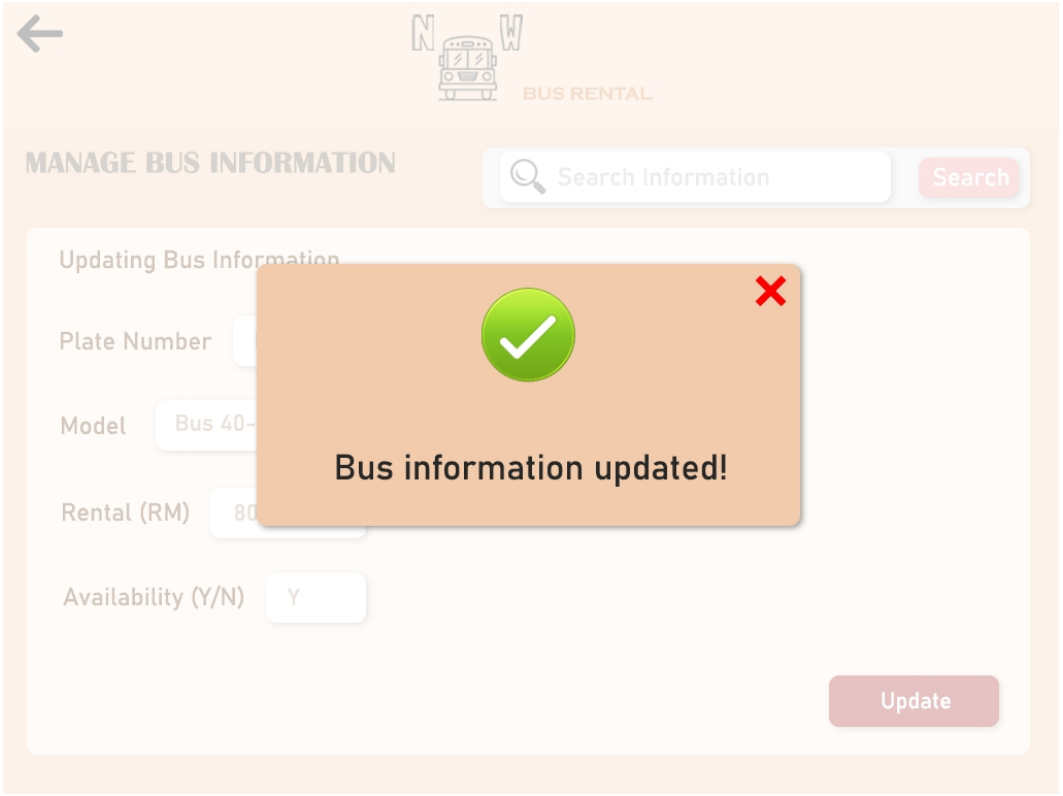


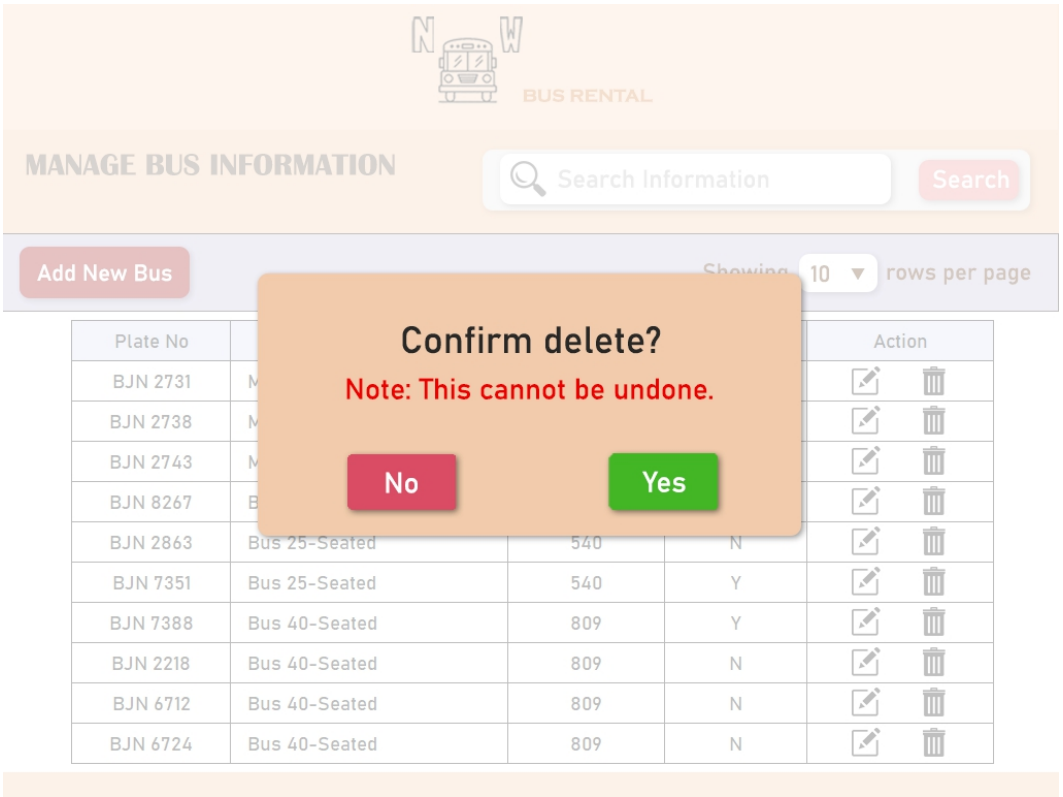
Plate No	Model	Rental (per day)	Availability	Action
BJN 2731	Mini Bus 19-Seated	468	Y	
BJN 2738	Mini Bus 19-Seated	468	Y	
BJN 2743	Mini Bus 19-Seated	468	Y	
BJN 8267	Bus 25-Seated	540	Y	
BJN 2863	Bus 25-Seated	540	N	
BJN 7351	Bus 25-Seated	540	Y	
BJN 7388	Bus 40-Seated	809	Y	
BJN 2218	Bus 40-Seated	809	N	
BJN 6712	Bus 40-Seated	809	N	
BJN 6724	Bus 40-Seated	809	N	

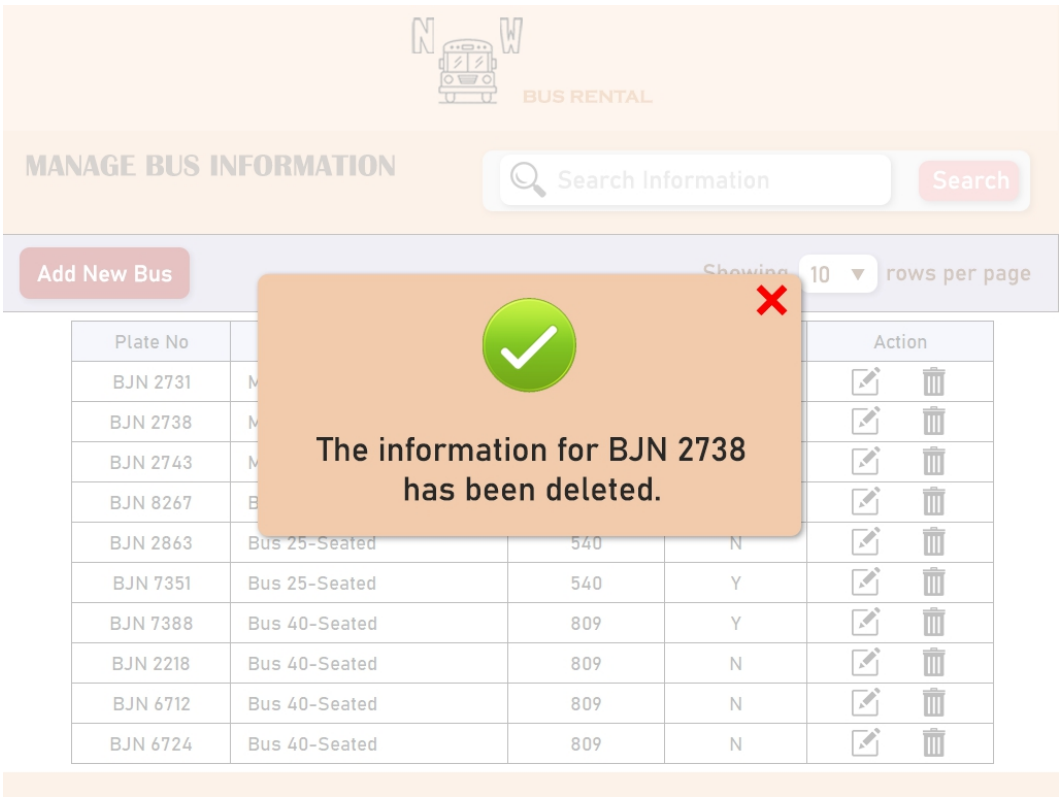


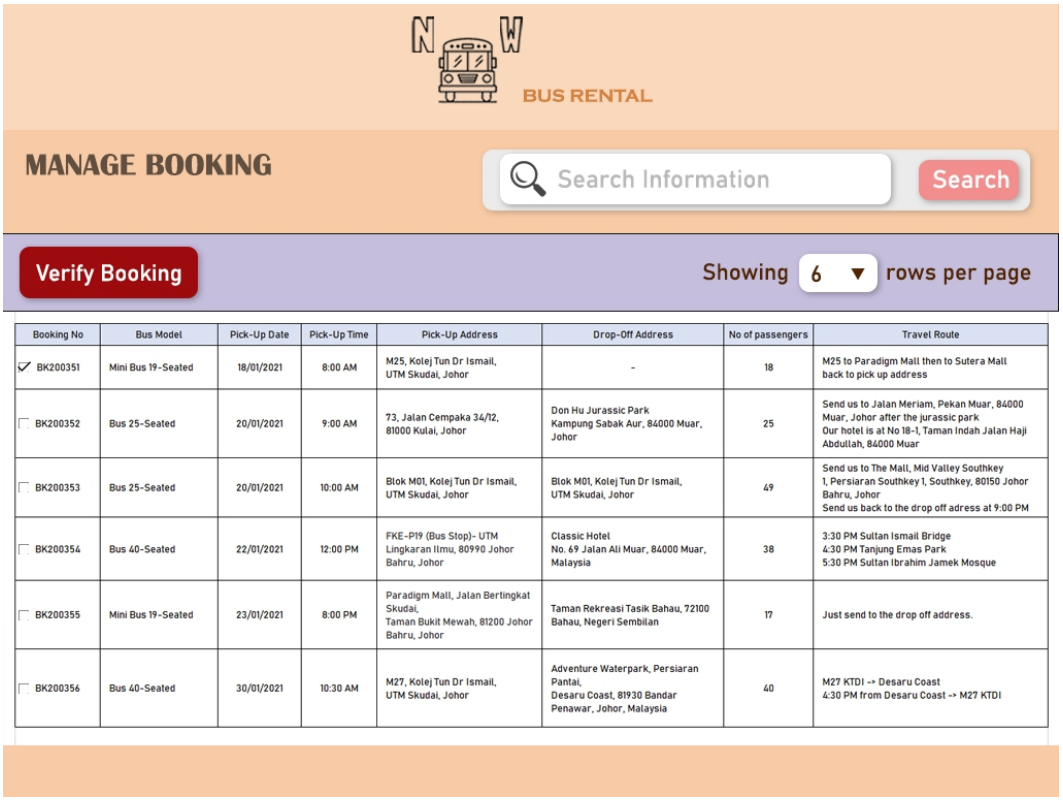

BUS RENTAL
MANAGE BUS INFORMATION
Search Information
Search
Inserting New Bus Information
Plate Number
Model
Select B
Rental (RM)
Availability (Y/N)
New bus added!
Add New Bus

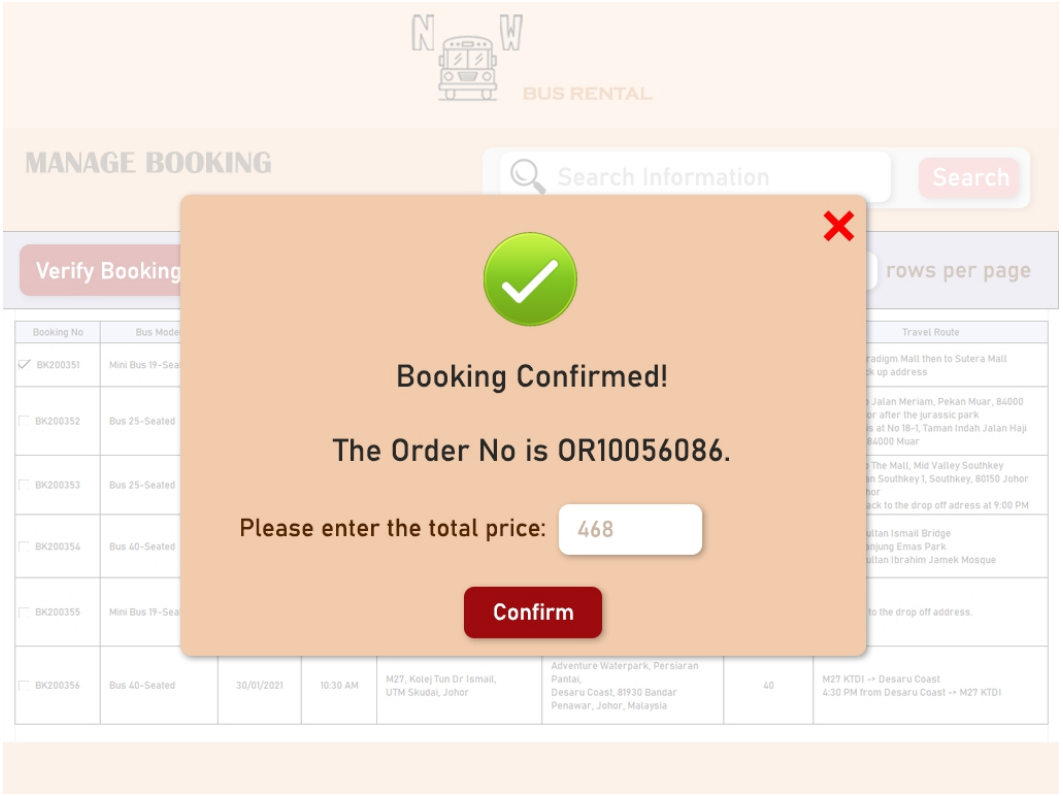

BUS RENTAL
MANAGE BUS INFORMATION
Search Information
Search
Updating Bus Information...
Plate Number
BJN 2218
Model
Bus 40-Seated
Rental (RM)
809
Availability (Y/N)
Y
Update

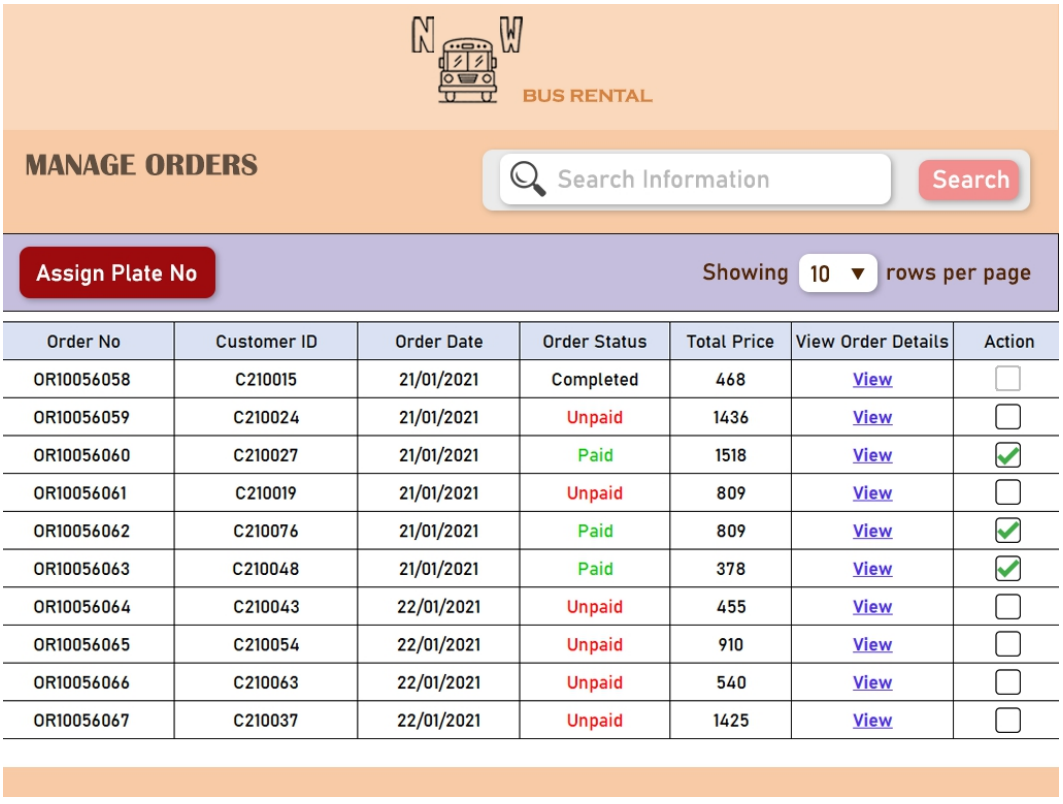

BUS RENTAL
MANAGE BUS INFORMATION
Search Information
Search
Updating Bus Information
Plate Number
Model
Bus 40-
Rental (RM)
Availability (Y/N)
Y
Update
Bus information updated!


BUS RENTAL
MANAGE BUS INFORMATION
Search Information
Search
Add New Bus
Showing 10 rows per page
Confirm delete?
Note: This cannot be undone.
No
Yes
Plate No
Action
BJN 2731
BJN 2738
BJN 2743
BJN 8267
BJN 2863 Bus 25-Seated 540 N
BJN 7351 Bus 25-Seated 540 Y
BJN 7388 Bus 40-Seated 809 Y
BJN 2218 Bus 40-Seated 809 N
BJN 6712 Bus 40-Seated 809 N
BJN 6724 Bus 40-Seated 809 N

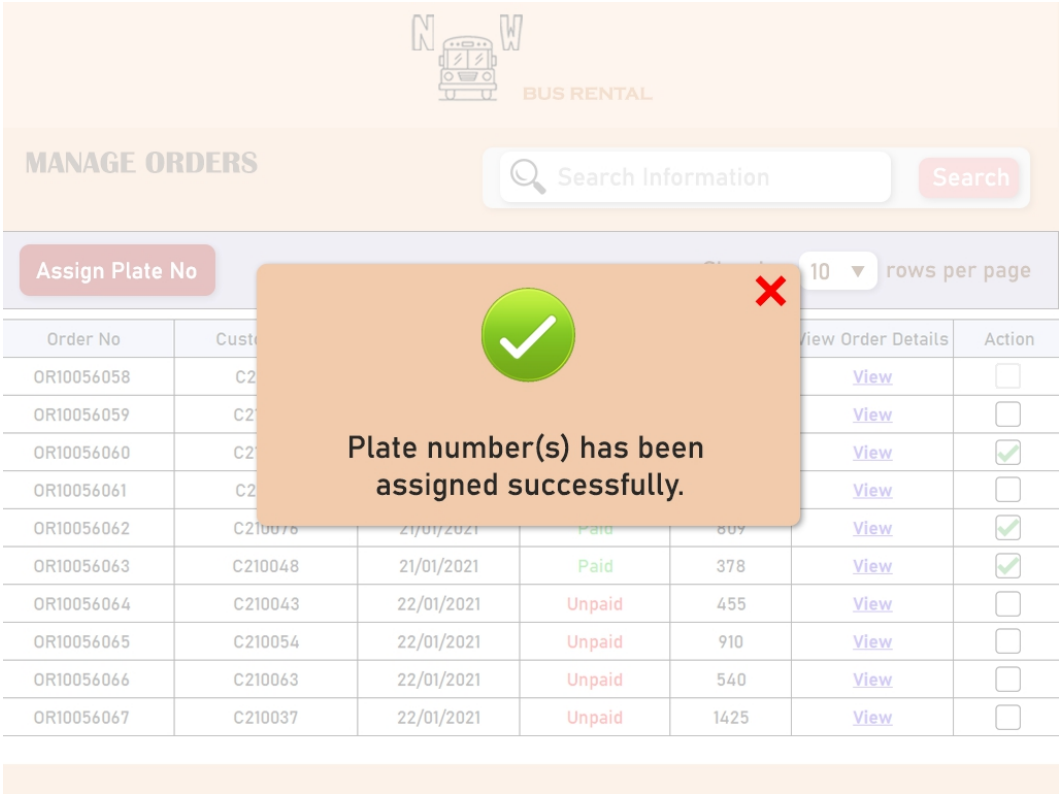

BUS RENTAL
MANAGE BUS INFORMATION
Search Information
Search
Add New Bus
Showing 10 rows per page
The information for BJN 2738 has been deleted.
Plate No
Action
BJN 2731
BJN 2738
BJN 2743
BJN 8267
BJN 2863 Bus 25-Seated 540 N
BJN 7351 Bus 25-Seated 540 Y
BJN 7388 Bus 40-Seated 809 Y
BJN 2218 Bus 40-Seated 809 N
BJN 6712 Bus 40-Seated 809 N
BJN 6724 Bus 40-Seated 809 N


BUS RENTAL
MANAGE BOOKING
Search Information
Search
Verify Booking
Showing 6 rows per page
Booking No | Bus Model | Pick-Up Date | Pick-Up Time | Pick-Up Address | Drop-Off Address | No of passengers | Travel Route
BK200351 | Mini Bus 19-Seated | 18/01/2021 | 8:00 AM | M25, Kolej Tun Dr Ismail, UTM Skudai, Johor | - | 18 | M25 to Paradigm Mall then to Sutera Mall back to pick up address
BK200352 | Bus 25-Seated | 20/01/2021 | 9:00 AM | 73, Jalan Cempaka 34/12, 81000 Kulai, Johor | Don Hu Jurassic Park Kampung Sabak Aur, 84000 Muar, Johor | 25 | Send us to Jalan Meriam, Pekan Muar, 84000 Muar, Johor after the jurassic park Our hotel is at No 18-1, Taman Indah Jalan Haji Abdullah, 84000 Muar
BK200353 | Bus 25-Seated | 20/01/2021 | 10:00 AM | Blok M01, Kolej Tun Dr Ismail, UTM Skudai, Johor | Blok M01, Kolej Tun Dr Ismail, UTM Skudai, Johor | 49 | Send us to The Mall, Mid Valley Southkey 1, Persiaran Southkey 1, Southkey, 80150 Johor Bahru, Johor Send us back to the drop off adress at 9:00 PM
BK200354 | Bus 40-Seated | 22/01/2021 | 12:00 PM | FKE-P19 (Bus Stop)- UTM Lingkaran Ilmu, 80990 Johor Bahru, Johor | Classic Hotel No. 69 Jalan Ali Muar, 84000 Muar, Malaysia | 38 | 3:30 PM Sultan Ismail Bridge 4:30 PM Tanjung Emas Park 5:30 PM Sultan Ibrahim Jamek Mosque
BK200355 | Mini Bus 19-Seated | 23/01/2021 | 8:00 PM | Paradigm Mall, Jalan Bertingkat Skudai, Taman Bukit Mewah, 81200 Johor Bahru, Johor | Taman Rekreasi Tasik Bahau, 72100 Bahau, Negeri Sembilan | 17 | Just send to the drop off address.
BK200356 | Bus 40-Seated | 30/01/2021 | 10:30 AM | M27, Kolej Tun Dr Ismail, UTM Skudai, Johor | Adventure Waterpark, Persiaran Pantai, Desaru Coast, 81930 Bandar Penawar, Johor, Malaysia | 40 | M27 KTDI -> Desaru Coast 4:30 PM from Desaru Coast -> M27 KTDI





Order No	Customer ID	Order Date	Order Status	Total Price	View Order Details	Action
OR10056058	C210015	21/01/2021	Completed	468	View	☐
OR10056059	C210024	21/01/2021	Unpaid	1436	View	☐
OR10056060	C210027	21/01/2021	Paid	1518	View	☑
OR10056061	C210019	21/01/2021	Unpaid	809	View	☐
OR10056062	C210076	21/01/2021	Paid	809	View	☑
OR10056063	C210048	21/01/2021	Paid	378	View	☑
OR10056064	C210043	22/01/2021	Unpaid	455	View	☐
OR10056065	C210054	22/01/2021	Unpaid	910	View	☐
OR10056066	C210063	22/01/2021	Unpaid	540	View	☐
OR10056067	C210037	22/01/2021	Unpaid	1425	View	☐


BUS RENTAL
MANAGE ORDERS
Search Information
Search
Assign Plate No
10
rows per page
Plate number(s) has been assigned successfully.
Order No
View Order Details
Action
OR10056058
View
OR10056059
View
OR10056060
View
OR10056061
View
OR10056062
View
OR10056063
C210048
21/01/2021
Paid
378
View
OR10056064
C210043
22/01/2021
Unpaid
455
View
OR10056065
C210054
22/01/2021
Unpaid
910
View
OR10056066
C210063
22/01/2021
Unpaid
540
View
OR10056067
C210037
22/01/2021
Unpaid
1425
View

7.0 Summary of proposed system

North-West Bus Rental is a new system developed to overtake the existing manual system applied by the JMY transportation. North-West Bus Rental can help customers to book a bus easily online. It can receive the data inserted by the customer and store into the database. It allows the user to determine the data of the bus before booking it. Availability of the bus also stated in the system to convenient the user to know whether our company contains the bus that is required by the customer. It saves customer time as they can determine if the bus they needed is free or not and will not try to book the bus. Overall, North-West Bus Rental system is a good system that solves the problem of manual systems that require responses to each and every customer query into system management that require admin approval on the booking statement.

Appendix

Meeting Logs for Phase A1

A1 meeting dates: 14 November 2020

Attendance:

Team-mate Name	**Signatures**
MAU KHAI SHEN	
LIM CHIN QING	
CHIAM WOOI CHIN	
NG JING ER	

Discussion Results : We are discussing the company that we wanted to choose as our project title. We had narrowed down to the dobi system and bus rental transport system as our choice of our project title.

Contributions/Ideas:

Team-mate Name	Contributions/Ideas
MAU KHAI SHEN	-Giving suggestion on the system title
LIM CHIN QING	-Purposed some potential usable transport service company
CHIAM WOOI CHIN	-Identify the objective of the project
NG JING ER	-Identify the potential existing problem of the system

Meeting Logs for Phase A2

A2 meeting dates: 21 November 2020

Attendance:

Team-mate Name	**Signatures**
MAU KHAI SHEN	
LIM CHIN QING	
CHIAM WOOI CHIN	
NG JING ER	

Discussion Results : We had discussed among ourselves and came with a conclusion to choose the bus rental system as our project title. We had chosen JMY transport as our target to develop a database system.

Contributions/Ideas:

Team-mate Name	Contributions/Ideas
MAU KHAI SHEN	-Identify the titles of the project -Giving suggestion of new database system
LIM CHIN QING	-Identifying the disadvantages of the manual system of the company -Giving advice on new database system
CHIAM WOOI CHIN	-Identify the problem faced by the owner -Identify the benefit of our system
NG JING ER	-Declaring objective of our studies -Identify the constraint of our system

Meeting Logs for Phase A3

A3 meeting dates: 6 December 2020

Attendance:

Team-mate Name	**Signatures**
MAU KHAI SHEN	
LIM CHIN QING	
CHIAM WOOI CHIN	
NG JING ER	

Discussion Results : We had discussed the DFD system and the major user view of the system.

Contributions/Ideas:

Team-mate Name	Contributions/Ideas
MAU KHAI SHEN	-Reorganise the opinion and suggestion given and come with a concluded solution.
LIM CHIN QING	-Suggesting the Entity of the program
CHIAM WOOI CHIN	-Giving opinions on the major user view
NG JING ER	-Suggest the process of the system

Meeting Logs for Phase A4

A4 meeting dates: 20 January 2021

Attendance:

Team-mate Name	**Signatures**
MAU KHAI SHEN	
LIM CHIN QING	
CHIAM WOOI CHIN	
NG JING ER	

Discussion Results : We discuss on the details of the final report and giving the whole idea what is need to be done for the final report.

Contributions/Ideas:

Team-mate Name	Contributions/Ideas
MAU KHAI SHEN	-Discuss on ERD -Give idea on GUI
LIM CHIN QING	-Discuss on GUI -Giving idea on Diagram 0
CHIAM WOOI CHIN	-Suggest on ERD -Give idea on Process Specification
NG JING ER	-Disucss on physical DFD -Suggesting ideas on Process Specification