

CometBus

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SESSION 2022/2023

FACULTY OF INFORMATION SCIENCE AND TECHNOLOGY

MULTIMEDIA UNIVERSITY

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BY

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We have chosen the project title "Bus Ticket Booking System" because of our shared interest in developing an efficient and user-friendly system for booking bus tickets. This project allowed us to showcase the coding skills we learned during the class and explore new codes while creating a system that would benefit many users.

ABSTRACT

Bus Ticket Booking System is a web-based application for customers to purchase tickets online. We are using this system to provide a more convenient and easier method for customers buying tickets. Customers are able to purchase tickets by choosing the origin and destination including time and day. In our system, we also required customers to do a registration which is sign up or login before using the system to purchase tickets. Throughout this registration action, we eliminate the need of filling personal information manually when purchasing tickets. Customers can choose whatever buses and seats they want without any hassle that we have provided. We also provide seamless payment such as credit and debit card or cash payment for tickets.

LIST OF TABLES

Table 1.6.1: <i>Division of tasks</i>	21
Table 3.5.1: <i>Data Dictionary</i>	36 - 40
Table 5.1.1: <i>System Testing</i>	90 - 95

LIST OF FIGURES

Figure 1.5.1 - Gantt Chart	20
Figure 2.1.13 - Home page of EasyBook website.....	23
Figure 2.1.14 - Bus Ticket Pages.....	23
Figure 2.1.15 - Payment page of Easybook.....	24
Figure 2.1.16 - Payment page of Easybook.....	25
Figure 2.1.17 - Payment page of Easybook.....	26
Figure 2.1.18 - User Registration Page.....	27
Figure 3.3.1 - Context Diagram.....	33
Figure 3.3.2 - Data Flow Diagram.....	34
Figure 3.4.1 - Entity Relationship Diagram.....	35
Figure 4.1.0 - Home and Landing page	42-43
Figure 4.1.1 - About Us	44
Figure 4.1.2 - Contact Us	45
Figure 4.1.3 - Login page	46
Figure 4.1.4 - Forgot Password	47
Figure 4.1.5 - Example email received	47
Figure 4.1.6 - Verify Account	47
Figure 4.1.7 - Reset Password	48
Figure 4.1.8 - Sign Up	48

Figure 4.1.9 - View Profile	49
Figure 4.1.10 - Edit Profile	50
Figure 4.1.11 - Search Bar	51
Figure 4.1.12 - Departure Bus Schedule	52
Figure 4.1.13 - Departure Bus Schedule (Return Date Selected)	52
Figure 4.1.14 - Departure Bus Seat Page	53
Figure 4.1.15 - Process Choosing Departure Bus Seat	53
Figure 4.1.16 - Return Bus Schedule List	54
Figure 4.1.17 - Return Bus Seat Page	54
Figure 4.1.18 - Process Choosing Return Bus Seat	55
Figure 4.1.19 - Passenger Details Page	55
Figure 4.1.20 - Payment Page	56
Figure 4.1.21 - Sweet Alert when the email sent successfully	56
Figure 4.1.22 - Example Email Sent	57-58
Figure 4.1.23 - Transaction Details Page	58
Figure 4.1.24 - Order History	59
Figure 4.1.25 - View and Download Ticket	60-61
Figure 4.1.26 - Rating page	61
Figure 4.1.27 - Logout	62
Figure 4.1.28 - Example of back button	62
Figure 4.1.29 - Example of page after logout	63

Figure 4.2.0 - Admin Dashboard (Part 1)	63
Figure 4.2.0 - Admin Dashboard (Part 2)	63
Figure 4.2.1 - Admin Staff Main Page.....	64
Figure 4.2.1 - Admin Staff Main Page (Admin Status Button).....	65
Figure 4.2.1 - Admin Staff Main Page (Send Admin Information Button).....	66
Figure 4.2.1 – Admin Staff (Edit Staff Details – Part 1).....	67
Figure 4.2.1 – Admin Staff (Edit Staff Details – Part 2).....	67
Figure 4.2.1 – Admin Staff (See All Staff Details – Part 1)	68
Figure 4.2.1 – Admin Staff (See All Staff Details – Part 2)	68
Figure 4.2.1 – Admin Staff (Add New Staff Details – Part 1).....	69
Figure 4.2.1 – Admin Staff (Add New Staff Details – Part 2).....	69
Figure 4.2.2 – Admin Bus Schedule Main Page.....	70
Figure 4.2.2 – Admin Bus Schedule Main Page (Bus Schedule Status Button).....	71
Figure 4.2.2 – Admin Bus Schedule Main Page (Bus Schedule Delete Button).....	71
Figure 4.2.2 – Admin Bus Schedule (Edit Bus Schedule Details – Part 1).....	72
Figure 4.2.2 – Admin Bus Schedule (Edit Bus Schedule Details – Part 2).....	72

Figure 4.2.2 – Admin Bus Schedule (See all Bus Schedule details – Part 1).....	73
Figure 4.2.2 – Admin Bus Schedule (See all Bus Schedule details – Part 2).....	73
Figure 4.2.2 – Admin Bus Schedule (Add Bus Schedule details – Part 1).....	74
Figure 4.2.2 – Admin Bus Schedule (Add Bus Schedule details – Part 2).....	74
Figure 4.2.3 – Admin Bus Operators Main Page	75
Figure 4.2.3 – Admin Bus Operators Main Page (Bus Operator Status Button).....	75
Figure 4.2.3 – Admin Bus Operators (Edit Bus Operator Details).....	76
Figure 4.2.3 – Admin Bus Operators (Add Bus Operator Details).....	76
Figure 4.2.4 – Admin Bus Routes Main Page.....	77
Figure 4.2.5 – Admin Bus Drivers Main Page.....	77
Figure 4.2.5 – Admin Bus Drivers Main Page (Bus Driver Delete Button).....	78
Figure 4.2.5 – Admin Bus Drivers (Edit Bus Driver Details)	78
Figure 4.2.5 – Admin Bus Drivers (See All Bus Driver Details).....	79
Figure 4.2.5 – Admin Bus Drivers (Add Bus Driver Details).....	79
Figure 4.2.6 – Admin Bus Informations Main Page.....	80

Figure 4.2.6 – Admin Bus Information (Edit Bus Informations Details).....	80
Figure 4.2.6 – Admin Bus Information (Add Bus Informations Details).....	81
Figure 4.2.7 – Admin Customer Main Page.....	81
Figure 4.2.7 – Admin Customer Page (See all Customer Details – Part 1).....	82
Figure 4.2.7 – Admin Customer Page (See all Customer Details – Part 2).....	82
Figure 4.2.8 – Admin Booking Details Main Page	83
Figure 4.2.8 – Admin Booking Details Page (See all Booking Details – Part 1).....	84
Figure 4.2.8 – Admin Booking Details Page (See all Booking Details – Part 2).....	84
Figure 4.2.9 – Admin Account Page – Edit Account (Part 1).....	85
Figure 4.2.9 – Admin Account Page – Edit Account (Part 2).....	85

Table of Contents

ACKNOWLEDGEMENT.....	4
ABSTRACT.....	5
LIST OF TABLES	6
LIST OF FIGURES	7
Table of Contents	12
Part I: Introduction	14
1.1 Overview	15
1.2 Project Objectives	16
1.3 Target Users	17
1.4 Project Scope.....	18
1.5 Gantt Chart	19
1.6 Division of Work.....	20
Part II: Primary Study/Literature Research.....	21
2.1 Primary Study.....	22
2.2 Problem Statement	27
Part III: System Design	28
3.1 System Features.....	29
3.2 Hardware/Software Requirements	30
3.2.1 For Developer	30
3.2.2 For User	31
3.3 Context Diagram & Data Flow Diagram	32
3.4 Entity Relationship Diagram.....	34
3.5 Data Dictionary	35
Part IV: System Previews.....	40
4.1 Customer/Member Module	41
4.2 Admin/Staff/Front Desk Module	63
Part V: System Testing	86
5.1 System Testing.....	87
Part VI: Conclusion	93
6.1 Conclusion	94
6.2 Future Enhancements.....	96

Part VII: References	97
Part VIII: Appendix.....	99
Appendix A: Meeting minutes.....	100
Appendix B: Website Samples/Questionnaire/Forms	116

Part I:

Introduction

1.1 Overview

Nowadays, in this age of advances in information technology, the internet has brought us great convenience and is widely used in the world. The Internet is necessary for people to perform and complete tasks in daily life. People can communicate with each other via the Internet at any place and time. In addition, the Internet also saves us time and money because we can order something we want online rather than going to the physical shop. According to our research, a lot of bus stations make customers face a lot of problems. For example, customers need to wait a long time in line to buy a bus ticket. This problem also will cause a lot of people to wait, resulting in a lot of congestion. This is the problem faced by customers, customers do not want to spend a lot of time just to buy the tickets. So, our system will solve all these kinds of problems and let people conveniently book bus tickets via our bus ticket booking system. Our project is a bus ticket booking system. This system is important for people who do not have transport and often need to go to another city such as office workers, students and so on. In this day and age, people lack patience and they tend to book or buy tickets online because they do not want to wait in long lines to buy the bus ticket. Also, people buying tickets at the bus station will also cause the bus station to be very overcrowded. Customers do not want to see some scenes like this so our system will help them to book bus tickets. Our system is free to use which is convenient to people, especially for those people who are busy on all days. They can use our system anytime and anywhere with a network connection. It also allows customers to choose the seat they wanted and choose any date that is still available. Our system also provides the easiest way to register. Moreover, the benefit of using our bus ticket booking system is this system is simple and there is no hidden catch or charge. In addition, booking online is simple, and you will receive an overview of the entire process. Besides, the process of payments is faster, and you can book bus tickets anytime from anywhere you wish to because our system is open 24/7 for reservations. Moreover, customers can easily choose the seat they want. If customers face any problems with buying tickets, they can ask the customer service system directly and it will reply to the customer in a second.

1.2 Project Objectives

1. To enhance the information completeness of the system

The lack of information and details on the price of the Easybook website. We will provide the most important information for the users without scrolling down the web pages. Information scattered throughout the website should be reorganized together so that users are able to find their information faster and more efficient. We will also provide details especially about the price accurately and authentic.

1.3 Target Users

Client

1. Office workers

In order to reach our intended audience, we concentrate on office workers and those people without a means of transportation. Office professionals typically prefer to take the bus to office if they wish to purchase a home or a car of their own. It benefits those who work in other cities by reducing the cost of transportation.

2. Teenagers

Teenagers have also evolved into one of our system's target consumers because they like to travel and hang out in groups. This is due to the fact that most teenagers lack a vehicle, making the bus one of their transit options. Teenagers may plan ahead by purchasing their bus tickets early thanks to the availability of this method.

Administrators

1. Admin

Admin is also one of our target users because they are allowed to edit and do any modification to the web page. They can add new features, services, and new products on the web page. They also manage, maintain and update the system of the web page to make our system better than before and also satisfy users that are using our web page.

1.4 Project Scope

Our system is produced to help people to travel from one place to another in a more easy method with an affordable price. Additionally, this system is only limited to local and some cities which are well-known such as Kuala Lumpur, Johor Bahru, Penang, and Malacca.

Users can view the images and relevant information of the bus on our system. However, they can only book the bus ticket after registering to our system. They are required to provide their name and email address including the password during the registration process. After the registration, users are required to login to the system before they can proceed to book bus tickets. Next, users can pay instantly. However, the payment method offered by our system is debit or credit card.. They will witness a pop up window and receive an email when successfully paid. The details will be sent through the users' email and users must keep that email as a proof of getting on the bus because the email consists of the ticket information..

Besides, our system will update from time to time to provide the best services to users. For example, bus information will continuously be updated so the information can be fully trusted. Users can also give a rating in our system after they have the bus ride. Users can only rate once time for each bus ride, our system is not allow users to rate again for the same bus ride.

The system's administrator is able to edit the bus information and check the client's information. Only a Super administrator can delete a customer only. Super administrators can add, edit, delete, deactivate, activate an admin or send admin's information while admin cannot perform these actions. Other than that, administrators or Super administrators can manage bus schedules, bus routes, bus information, bus operators, bus drivers, booking details, and their own admin account.

1.5 Gantt Chart

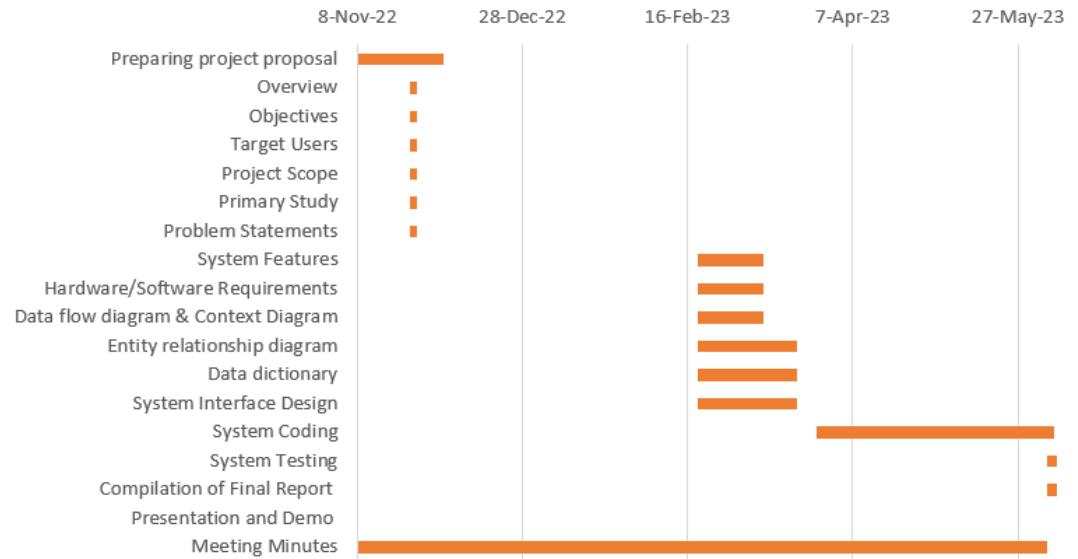


Figure 1.5.1: Gantt Chart

1.6 Division of Work

TASKS	STUDENTS		
	Tay Han Chung	Adrea Foong Jun Jie	Mah Qi Xiang
Preparing project proposal	X	X	X
Overview		X	
Objectives	X	X	X
Target Users			X
Project Scope	X		
Gantt chart	X		
Primary Study	X	X	X
Problem Statements	X	X	X
System Features			X
Hardware/Software Requirements		X	
Data flow diagram & Context Diagram	X	X	X
Entity relationship diagram	X	X	X
Data dictionary	X	X	X
System Interface Design	X	X	X
System Coding	X	X	X
System Testing	X	X	X
Compilation of Final Report	X	X	X
Presentation and Demo	X	X	X
Meeting Minutes	X	X	X

Table 1.6.1: *Division of tasks*

Part II:
Primary
Study/Literature
Research

2.1 Primary Study

1. EasyBook

Advantages

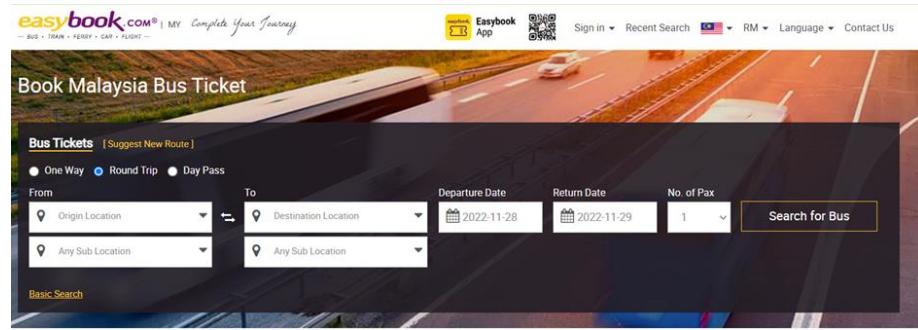


Figure 2.1.13: Home page of EasyBook website

Figure 2.1.13 shows that users are able to enter what destination they want to go on the home page without any hassle. The figure also shows that users are able to select when they want to go and when they want to return. Users can also select advanced search to enter any sub location they want. Other than that, Users are able to sign in, Search tickets manually, select their preferred language, select different types of currency, and contact us if users have any problems.

This screenshot shows the search results for bus trips from Kuala Lumpur to Genting Highlands. At the top, it displays the departure trip (Kuala Lumpur to Genting Highlands, Mon Nov 28) and return trip (Genting Highlands to Kuala Lumpur, Tue Nov 29). The search filters on the left include 'Depart Time' (Morning, Afternoon, Evening), 'Bus Operator' (Aerobus, Billion Stars, RWT EXPRESS), and 'Amenities' (Food On Board, Massage Chair, Socket Plug, TV, Wifi, Headphone). The main results table lists two trips:

Depart Time	Route	Seat	Fare	Action
07:30 AM 02h01m*	Pudu Sentral (Puduraya) (Kuala Lumpur) → Awana Bus Terminal (Genting Highlands)	23 Seats	RM 10.00 RM 10.00	Select
08:00 AM 02h15m*	Klang Sentral (Selangor) → Awana Bus Terminal (Genting Highlands)	13 Seats	RM 18.00 RM 18.00	Select

Each trip row includes a 'Details' link and a 'Reviews | Photo' section with a 5-star rating.

Figure 2.1.14: Bus Ticket Pages

The figure 2.1.14 shows that users are able to see different types of bus ticket that is provided by the website. Users can see what type of bus operator they wanted, review photos and details about the ticket, know what type of service they provided in the bus and price of the tickets. Users also be able to see the date and location of the depart trip and return trip. Other than that, Users are able to filter out what type of time they want if provided, bus operator amenities and more.

Disadvantages

The screenshot displays the Easybook.com website interface for bus ticket booking. At the top, there's a promotional banner for discounts and a sign-in link. Below it is a search bar with fields for departure (Kuala Lumpur), arrival (Genting Highlands), and dates (2022-11-28 to 2022-11-29). A 'Search' button is present. The main content area shows a search result for a bus trip from Kuala Lumpur to Genting Highlands. The result includes a summary table with details like Departure Date (28 Nov 2022), Depart From (Pudu Sentral), Arrive At (Awana Bus Terminal, Genting Highlands), Bus (Aerobus), and Seat Numbers (21). Below this, there are sections for 'Ticket Collector Info' (Email Address, Re-Enter Email Address, Contact No.) and 'Passenger Information' (Ticket Type: Bus Only, Full Name). A note at the bottom of the passenger info section says: 'To update the number of Child pax, please reduce the number of Adult pax.'

Figure 2.1.15: Payment page of Easybook

Passenger Information

Passenger Information 1

Ticket Type: Bus Only

Full Name

★ Golnsure Protection Plan

 Yes, I want Golnsure Protection Plan at RM1.00 (RM25,000 protection) and understood the [Product Disclosure Sheet | Master Scheme](#)
 No. I will take my own risk.

New Easybook Voucher [Redemption Guidelines](#)

Please Login or Register to use Easybook Voucher(s).

Total: RM 34.50

Please choose one:

Credit/Debit Card Note: Easybook only accepts Visa/Mastercard enrolled 3DS/OTP (Verified by Visa, mastercard securecode)

Visa/Master/Paypal/Alipay

E-Wallet

Online Banking

 (Preferred)  (Backup)

I agree on Easybook's ticketing policy. Reach pick-up point 30 minutes before departure.

Please complete payment in **7 minutes** upon clicking "**Pay Now**" button, else different seat(s) might be assigned to you if still available.

DO NOT CLICK BACK BUTTON after clicking the "**Pay Now**" button.

Figure 2.1.16: Payment page of Easybook

I agree on Easybook's ticketing policy. Reach pick-up point 30 minutes before departure.

Please complete payment in **7 minutes** upon clicking "**Pay Now**" button, else different seat(s) might be assigned to you if still available.

DO NOT CLICK BACK BUTTON after clicking the "**Pay Now**" button.

Things to check before making payment

1. Travel date(s) and Number of tickets
2. Amount to pay.
3. Turn off popup blocker if you make payment by malaysia internet banking. [Click here](#) to learn how to disable popup blocker.

Pay Now

Figure 2.1.17: Payment page of Easybook

Figures 2.1.15, 2.1.16, and 2.1.17 show that details about the ticket and payment are combined together. This makes the users overwhelmed by many types of information. Users need time to read through all the information they see by scrolling down before they start to enter their information.

New User Registration

Please fill in your personal particulars below:

Email * Please make sure this email is spelt correctly and the inbox is not full, because this email will be used to receive any receipt or document of purchase.

Contact * For emergency call

Password *

Re-enter Password * The password and confirmation password do not match.

Surname *

Given Name *

Nationality / Region *

Referral Code

Register Now

By clicking Register Now, you agree and consent to the processing of your personal data in accordance with the terms of our [Privacy Policy](#).

Figure 2.1.18: User Registration Page

Figure 2.1.18 shows that users are able to enter whatever email address and phone number without any validation. While the Re-enter Password tab shows error if it has a different or no password, email address and phone number does not show any error if entered wrongly.

2.2 Problem Statement

Objectives: To enhance the information completeness of the system.

Problem Statement:

The lack of information and details on the price of the Easybook website. Providing adequate information and details is very significant for a web page. This is because insufficient information will cause users to misunderstand or confuse the system. To avoid users being confused a web page should provide information clearly. Easybook does not provide information and details clearly especially for the price of the tickets. Easybus does not provide the minimum to maximum price to let users know about the range of the ticket's price. The range of the price will be useful for users to estimate the price needed. This will result in users being confused about how much money they should prepare for the payment.

Part III:

System Design

3.1 System Features

- Admin
 - Can log into the system.
 - Can view and edit admin profiles.
 - Can add and edit staff.
 - Can add, edit and delete a bus schedule.
 - Can view a list of customers.
 - Can view a list of staff.
 - Can view customers' booking details.
 - Can view bus routes
 - Can add and edit bus operators
 - Can add, edit, delete, view all bus drivers
 - Can add, edit bus informations
 - Can view all customers' details
 - Can edit own admin account
 - Can logout.

- User
 - Can register and log into the system.
 - Can view and edit profiles.
 - Can search bus tickets based on their choices.
 - Can view a list of bus schedules.
 - Can purchase a bus ticket.
 - Can make a payment.
 - Can view booking history.
 - Can logout.
 - Can use forget password to reset a new password for his/her accounts.

3.2 Hardware/Software Requirements

3.2.1 For Developer

Software:

- Microsoft Word
- Microsoft Powerpoint
- Google Docs
- XAMPP
- MySQL
- Visual Studio Code
- Google Chrome

Hardware:

- Laptop or desktop computer (Intel Core i5 or AMD Ryzen 5 5500U with Radeon Graphics (2.10 GHz))

3.2.2 For User

Minimum software requirements:

- Google Chrome

Minimum Hardware requirements:

- Windows 10
- Minimum 2GB of RAM
- Minimum Intel Core i3 or AMD Ryzen 3

3.3 Context Diagram & Data Flow Diagram

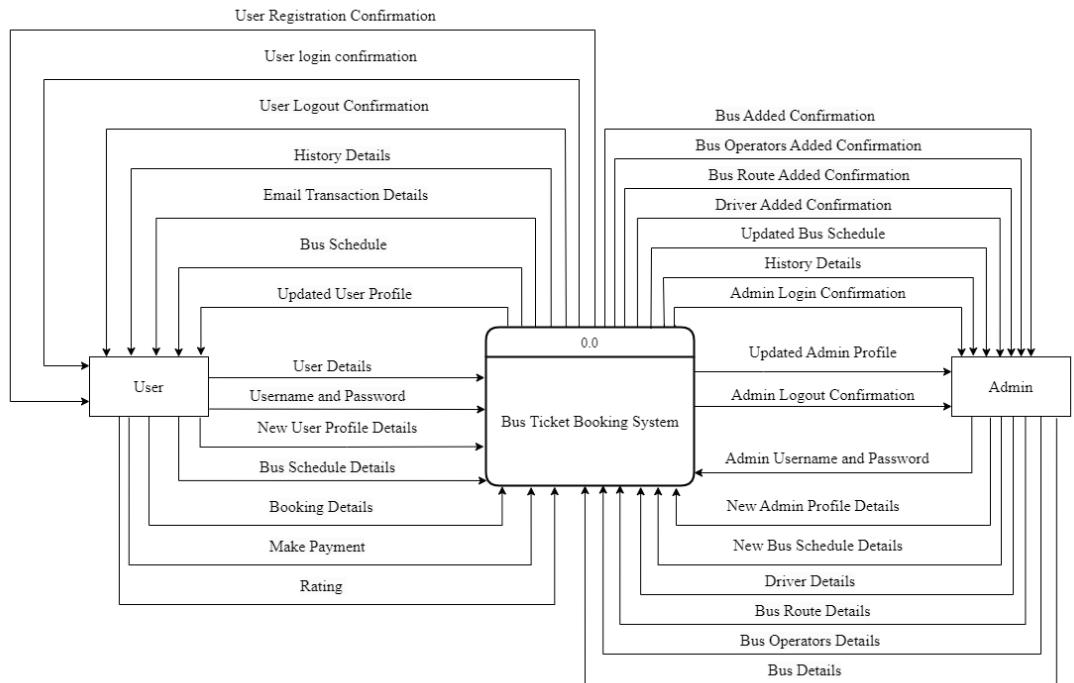
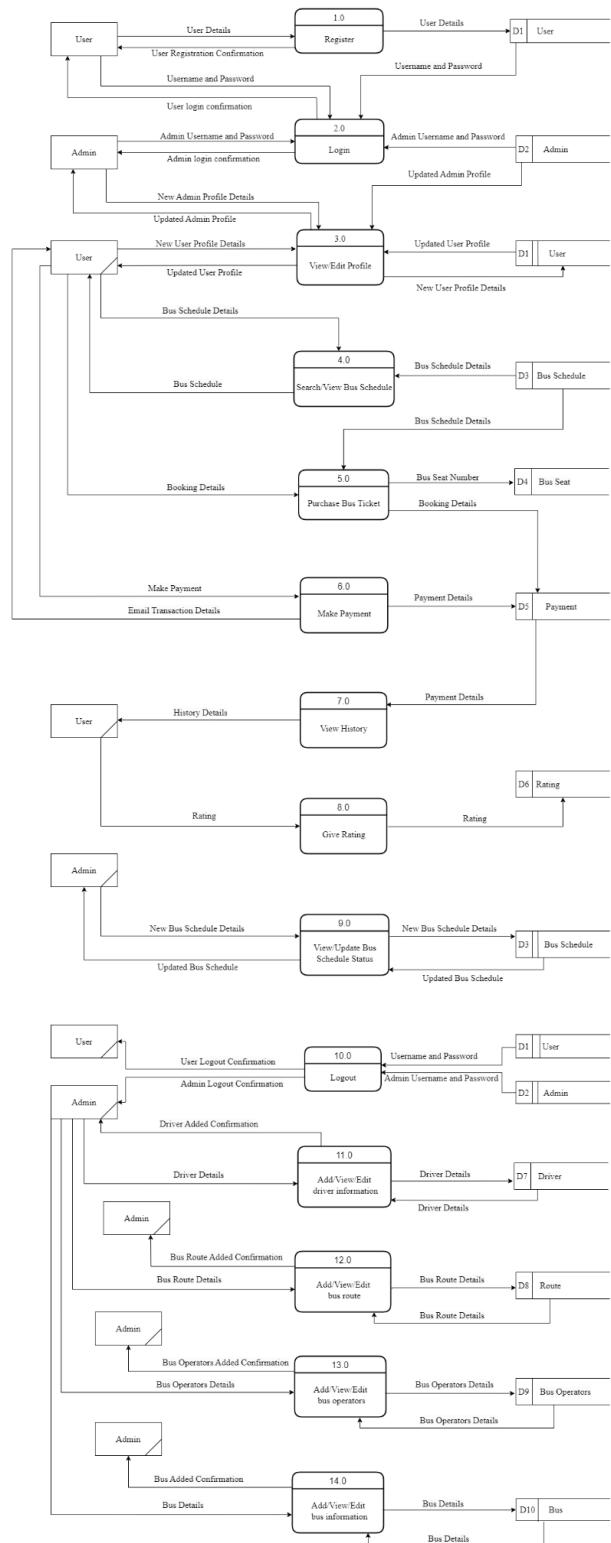


Figure 3.3.1: Context Diagram

**Figure 3.3.2: Data Flow Diagram**

3.4 Entity Relationship Diagram

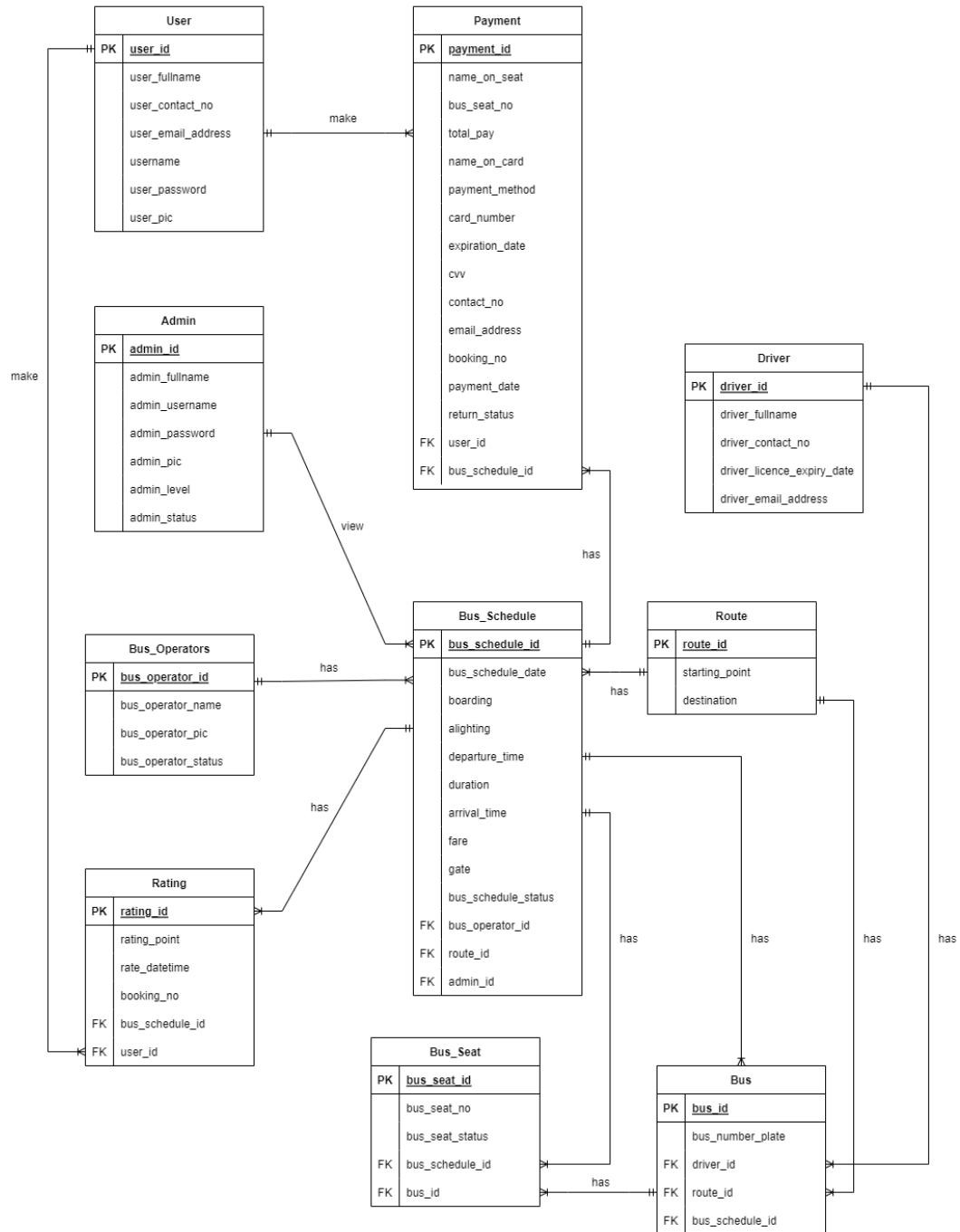


Figure 3.4.1: Entity Relationship Diagram

3.5 Data Dictionary

Table Name	Attribute Name	Contents	Type	Format	Required	PK or FK	FK reference table
user	user_id	User Identification	Auto Increment	9999999999	N	PK	
	user_fullname	User Full Name	varchar(100)	Xxxxxx	N		
	user_contact_no	User Contact Number	varchar(100)	Xxxxxx	N		
	user_email_address	User Email Address	varchar(100)	Xxxxxx	N		
	username	User Username	varchar(100)	Xxxxxx	N		
	user_password	User Password	varchar(100)	Xxxxxx	N		
	user_pic	User Picture	varchar(100)	Xxxxxx	N		
admin	admin_id	Admin Identification	Auto Increment	9999999999	N	PK	
	admin_fullname	Admin Full Name	varchar(100)	Xxxxxx	N		
	admin_username	Admin Username	varchar(100)	Xxxxxx	N		
	admin_password	Admin Password	varchar(100)	Xxxxxx	N		
	admin_pic	Admin Picture	varchar(100)	Xxxxxx	N		

	admin_level admin_status admin_email_address	Admin Level Admin Status Admin Email Address	varchar(100) int(11) varchar(100)	Xxxxxx 9999999999 Xxxxxx	N N N		
driver	driver_id	Driver Identification	Auto Increment	9999999999	N	PK	
	driver_fullname	Driver Full Name	varchar(100)	Xxxxxx	N		
	driver_contact_no	Driver Contact Number	varchar(100)	Xxxxxx	N		
	driver_licence_expiry_date	Driver Licence Expiry Date	Date	99-99-9999	N		
	driver_email_address	Driver Email Address	varchar(100)	Xxxxxx	N		
bus_schedule	bus_schedule_id	Bus Schedule Identification	Auto Increment	9999999999	N	PK	
	bus_schedule_date	Bus Schedule Date	Date	99-99-9999	N		
	boarding	Boarding	varchar(100)	Xxxxxx	N		
	alighting	Alighting	varchar(100)	Xxxxxx	N		
	departure_time	Bus Departure Time	varchar(100)	Xxxxxx	N		
	duration	Bus Schedule Duration	varchar(100)	Xxxxxx	N		
	arrival_time	Bus Arrival Time	varchar(100)	Xxxxxx	N		
	fare	Bus Schedule Fare	decimal(10,2)	(9999999999,2)	N		
	gate	Bus Schedule Gate	varchar(100)	Xxxxxx	N		

	bus_schedule_status bus_operator_id route_id admin_id	Bus Schedule Status Bus Operator Identification Route Identification Admin Identification	int(11) int(11) int(11) int(11)	9999999999 9999999999 9999999999 9999999999	N N N Y	FK FK FK FK	bus_operators route admin
bus	bus_id bus_number_plate driver_id route_id bus_schedule_id	Bus Identification Bus Number Plate Driver Identification Route Identification Bus Schedule Identification	Auto Increment varchar(100) int(11) int(100) int(11)	9999999999 Xxxxxx 9999999999 9999999999 9999999999	N N N N N	PK FK FK FK FK	driver Route bus_schedule
bus_seat	bus_seat_id bus_seat_no bus_seat_status bus_schedule_id bus_id	Bus Seat Identification Bus Seat Number Bus Seat Status Bus Schedule Identification Bus Identification	Auto Increment varchar(100) int(11) int(11) int(11)	9999999999 Xxxxxx 9999999999 9999999999 9999999999	N N N N N	PK FK FK FK FK	bus_schedule bus
bus_operators	bus_operator_id bus_operator_name bus_operator_pic	Bus Operator Identification Bus Operator Name Bus Operator Picture	Auto Increment varchar(100) varchar(100)	9999999999 Xxxxxx Xxxxxx	N N N	PK	

	bus_operator_status	Bus Operator Status	int(11)	9999999999	N		
rating	rating_id	Raring Identification	Auto Increment	9999999999	N	PK	
	rating_point	Rating Point	int(11)	9999999999	N		
	rate_datetime	Rating Date and Time	varchar(11)	Xxxxxx	N		
	booking_no	Booking Number	varchar(1000)	Xxxxxx	N	FK	bus_schedule
	bus_schedule_id	Bus Schedule Identification	int(11)	9999999999	N	FK	user
	user_id	User Identification	int(11)	9999999999	N	FK	bus_operators
	bus_operator_id	Bus Operator ID	int(11)	9999999999	N		
route	route_id	Route Identification	Auto Increment	9999999999	N	PK	
	starting_point	Starting Point	varchar(100)	Xxxxxx	N		
	destination	Destination	varchar(100)	Xxxxxx	N		
payment	payment_id	Payment Identification	Auto Increment	9999999999	N	PK	
	name_on_seat	User FullName on Seat	varchar(100)	Xxxxxx	N		
	bus_seat_no	Bus Seat Number	varchar(100)	Xxxxxx	N		
	total_pay	Total Payment	decimal(10,2)	(9999999999,2)	N		
	name_on_card	Name on Card	varchar(100)	Xxxxxx	N		
	payment_method	Payment Method	varchar(100)	Xxxxxx	N		

	card_number	Card Number	varchar(100)	Xxxxxx	N		
	expiration_date	Card Expiration Date	varchar(100)	Xxxxxx	N		
	cvv	Card CVV	varchar(100)	Xxxxxx	N		
	contact_no	User Contact Number	varchar(100)	Xxxxxx	N		
	email_address	User Email Address	varchar(100)	Xxxxxx	N		
	payment_date	Payment Date	Datetime	YYYY-MM-DD hh:mm:ss	N		
	booking_no	Booking Number	varchar(100)	Xxxxxx	N		
	return_status	Bus Return Status	int(1)	9	N		
	user_id	User Identification	int(11)	9999999999	N	FK	user
	bus_schedule_id	Bus Schedule Identification	int(11)	9999999999	N	FK	bus_schedule

Table 3.5.1: Data Dictionary

Part IV:

System Previews

4.1 Customer/Member Module

The screenshot shows the CometBus homepage. At the top, there is a dark header bar with the CometBus logo on the left and 'Home' and 'Sign up/Log in' links on the right. Below the header is a search bar with four input fields: 'Destination', 'Depart Date', 'Return Date', and 'Duration', followed by a 'Submit' button. The main background image is a scenic view of a tropical island with lush greenery and mountains. Overlaid on this image is the text 'CometBus' and 'Let's Discover The World Together' in large white letters, along with a 'Book Now' button. To the left of the main image is a photograph of a woman with a backpack, looking towards the horizon. On the right side of the main image is another photograph of a traditional long-tail boat on the water. The bottom section of the page features three promotional boxes: 'Competitive Pricing' (blue icon of a price tag), 'Best Services' (blue icon of a gear), and 'Simple & Easy' (blue icon of a smartphone). Each box contains a brief description.

ABOUT US

We Provide The Best Service

We provide the best customer service among other bus ticket websites. We offer hassle-free experience of purchasing tickets and with a few clicks away, you are ready to travel without any worries. Purchasing ticket will always be easy, with just a few clicks away.

Competitive Pricing
Get the best deals on bus tickets

Best Services
Experience top-notch service and amenities on your bus journey

Simple & Easy
Book your bus tickets with ease and simplicity on our user-friendly platform

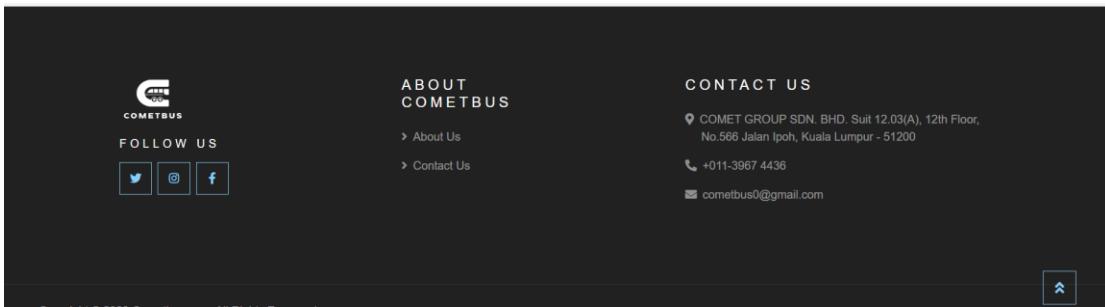


Figure 4.1.0: Home and Landing page

This is the home page of CometBus. On the home page, users can search for the bus ticket. The customer just needs to enter the departure city, arrival city and the departure date. There are some information related to CometBus on the home page.



About Us

Who are we?

We were founded in 2023. Comet is a bus ticket website that provides ticket for bus from Malaysia. We have grown rapidly with other bus company and become one of Malaysia's leading website for purchase bus tickets with more than 2 Million tickets sold within Malaysia.

How do we make it happen?

We provide the best customer service among other bus ticket websites. We offer hassle-free experience of purchasing tickets and with a few clicks away, you are ready to travel without any worries. Purchasing ticket will always be easy, with just a few clicks away.

Our Network

We have cover few bus operating in Malaysia. With many partnership with other bus company we providing the best travel experience with us. We also provide the best customer service within our website to provide you the best experience.

Travel have never been easy with Cometbus.

Figure 4.1.1: About Us

This is about us page of CometBus. This page provides information about the CometBus bus ticket website, including information about the company's history, customer service approach, and network of bus routes.



CONTACT US

Malaysia Office



COMET GROUP SDN. BHD. Suit 12.03(A), 12th Floor, No.566 Jalan Ipoh, Kuala Lumpur - 51200

Contact Number



+011-3967 4436

Figure 4.1.2: Contact Us

This is the Contact Us page of CometBus. This page will pop up after the users click to the hyperlink in the footer. It involves some information which are the phone number and venue of our office.

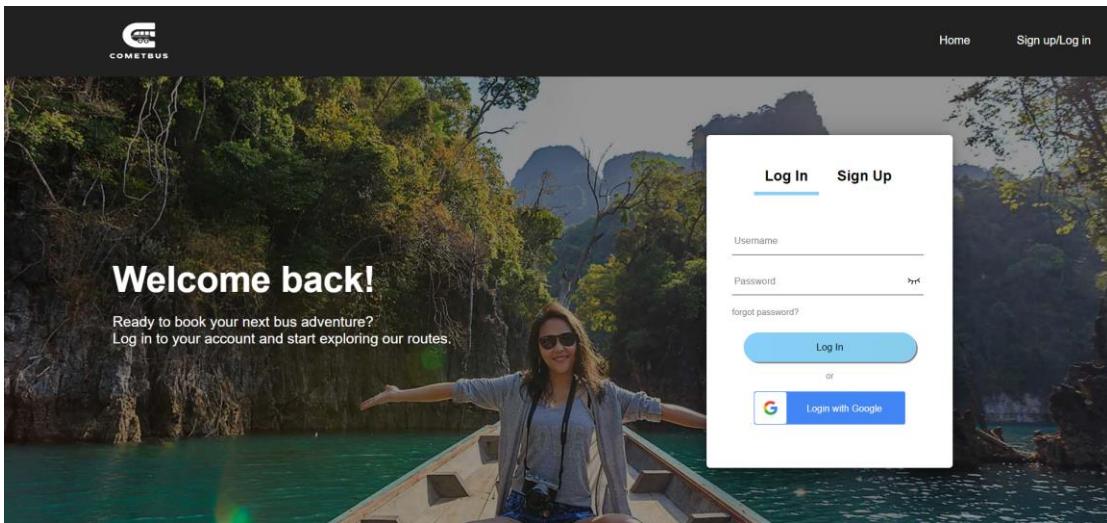


Figure 4.1.3: Login page

If the users already sign up, they can enter their username and password to log in. If the users enter an invalid username or password, the system will display the error message on the login form and request the user to enter again their username and password until the username and password are matched. There is another additional method to login which is login with google. Otherwise, the users are not allowed to log in to the system. Moreover, this log in page also allows the admin to login their account then go to the admin page it will check if the admin's username and password match with our database. If there is no error users can click on the log in button to log in then it will display a message to tell users there already login. If users already login the header will change to home, my profile, order history and logout.

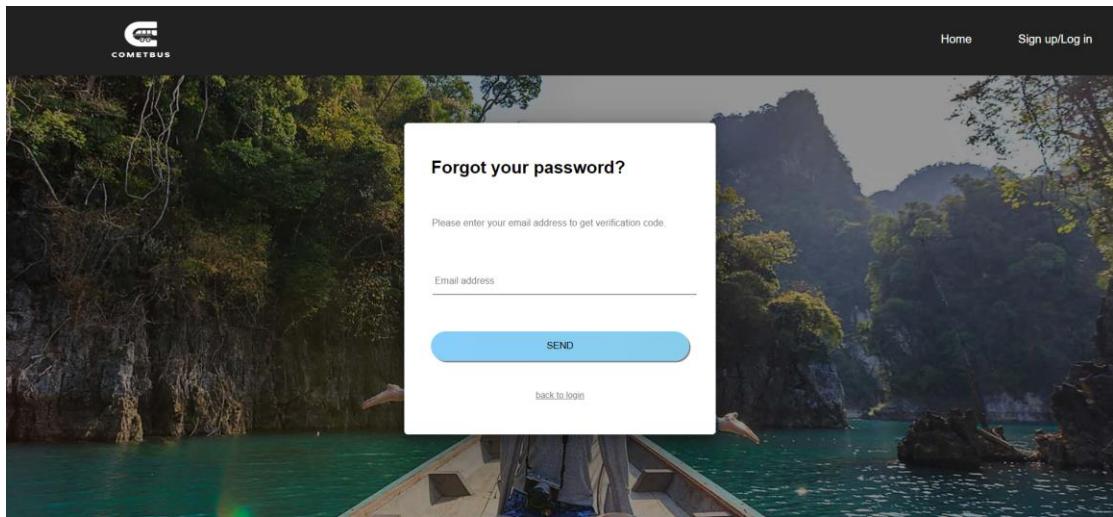


Figure 4.1.4: Forgot Password

Forgot password page will ask users to enter their email address and then will check whether this email address exists in our database or not. If it is exists in our database then will send a validation code to this email address else will display the error message.

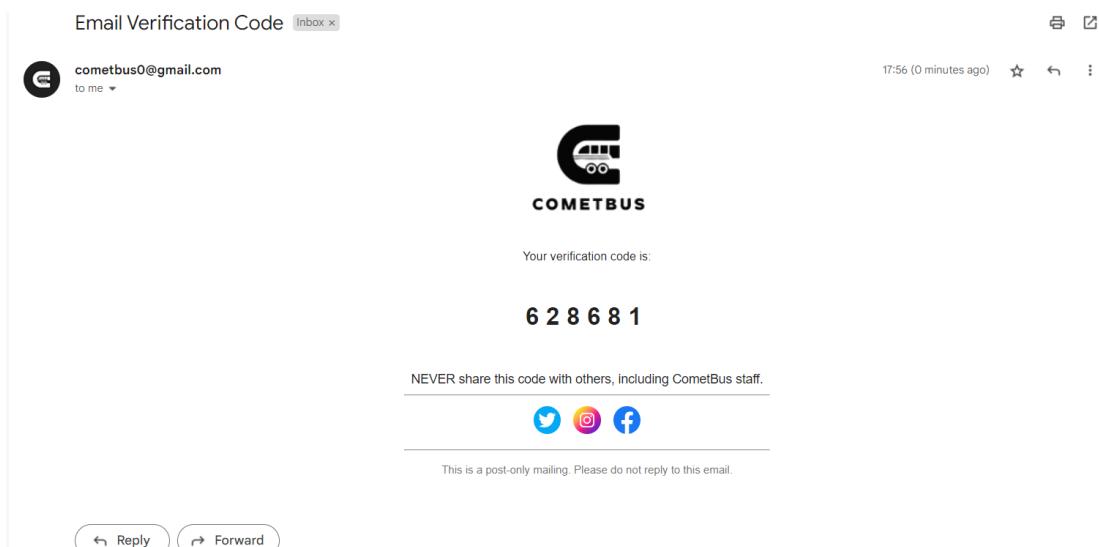


Figure 4.1.5: Example email received

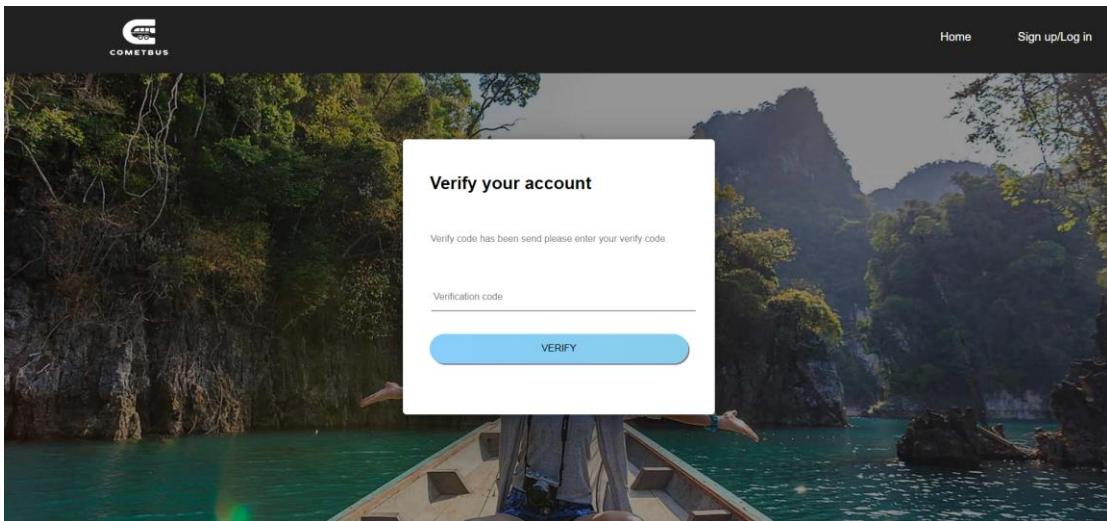


Figure 4.1.6: Verify Account

Before resetting the password this page will ask users to enter the validation code if users enter the wrong verification code and will ask them to enter it again. If it is correct it will proceed to reset the password page.

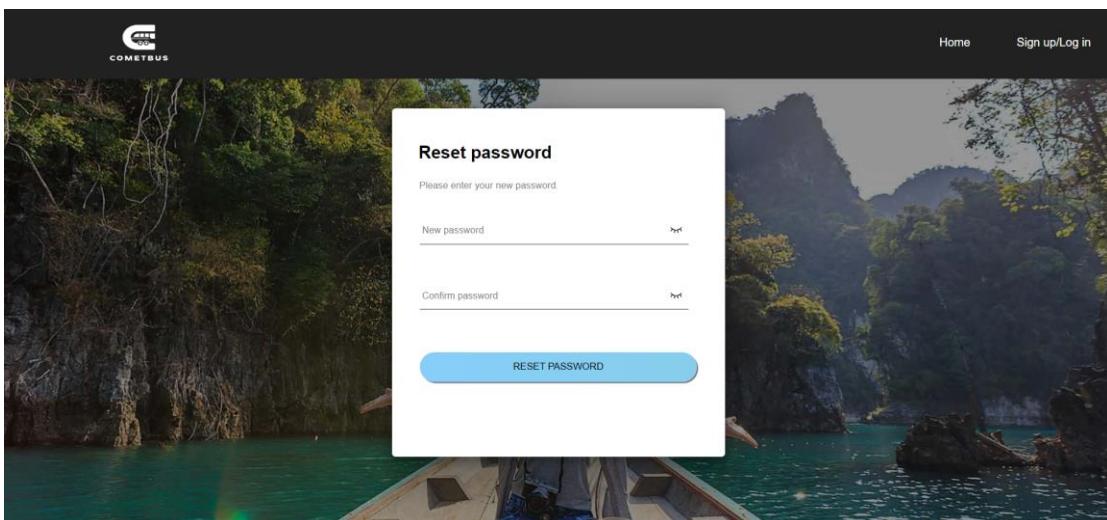


Figure 4.1.7: Reset Password

On this page users can reset their password. If users enter the password and confirm password does not match, the error message on the form will be displayed asking users to enter again and this form will also check the password either strong, weak or medium. Eventually, if no error message after the user clicks on the reset password button then will display a message to tell users their password has been reset.

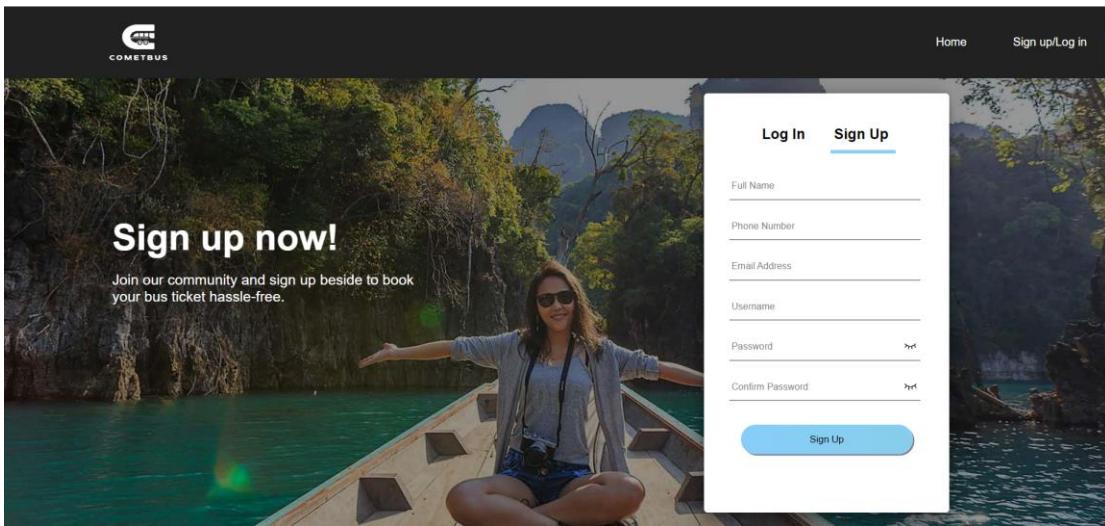


Figure 4.1.8: Sign Up

This is the sign up page. This page will ask users to input all fields. If users empty one or more fields it will display the error message on the sign up form to ask users to fill in the empty field. For all the input fields there is a validation to disallow user enter sql statements. The input field for the phone number will only allow users 10 to 11 digits and the first digit must be 0. For the email field, there is a validation function that will ask users to enter a proper email address if the user enters an email address without “@” and “.”. There is also a validation function in the user name input field where users must enter at least 6 characters and only numbers, lowercase and uppercase will be accepted if users enter a special character or less than 6 characters will display an error message on the sign up form. We will also check whether the email address and username have already been taken or used, if the email address or username has been taken or used then will display the error message on the sign up form. There is also have checking function for the password input field to check if the user password is strong, weak and medium. If it is medium or weak will display the password is weak or medium then not allow the user submit the form. Users must enter at least 8 characters, 1 uppercase, 1 lowercase, 1 digit and 1 special character else will display the password is weak or medium on the sign up form. In addition, if the password and confirm password do not match, the error message on the form will be displayed. Finally, if

there is no error users can click on the sign up button to sign up then will display a message to tell users already sign up.

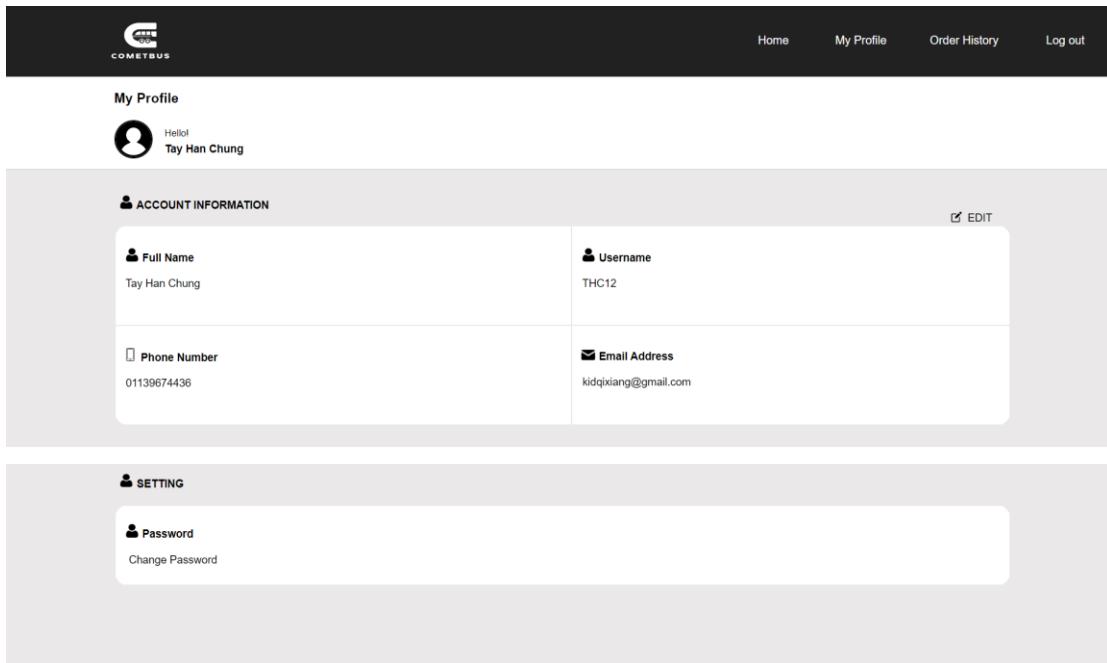


Figure 4.1.9: View Profile

User's full name, username, contact number, email address and user image will be displayed on this page. In this page users can edit their profile as well by clicking on the edit button then the page will change.

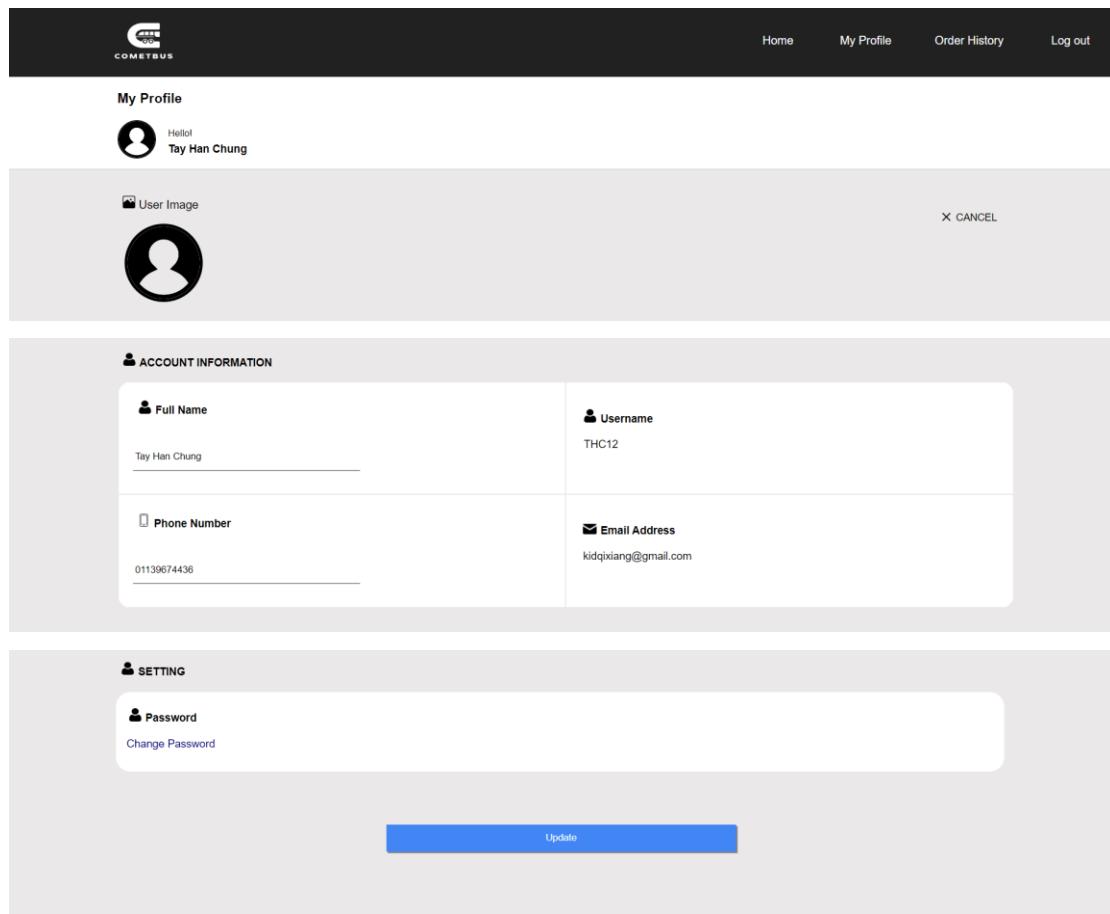


Figure 4.1.10: Edit Profile

In this page users are allowed to edit their profile including their full name, phone number, password and user image. They can change their full name, phone number and change their password. The input field also has the password validation to check if the user's entered password is strong, weak or medium and will also check if the phone number is a proper phone number or not. If there is no error message display means that the user can update their profile.

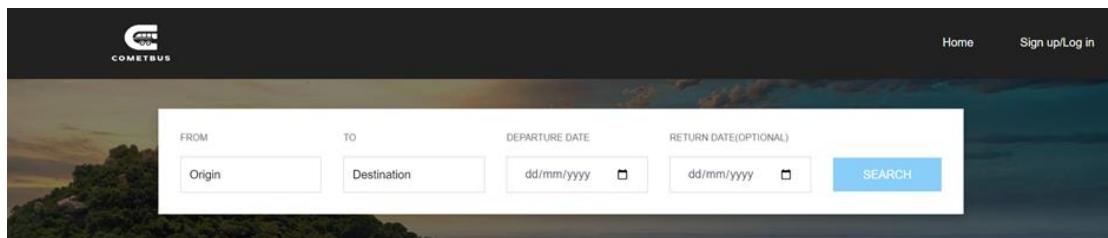


Figure 4.1.11: Search Bar

Users can search the bus schedule by choosing the origin and destination in the combo box and choosing the date for departure and return. The origin, destination, and departure date input fields are required if users did not choose the required input fields and a sweet alert will pop up. For the departure date, our system has set the minimum departure date as the current date. When users select the return date, the minimum return date is the same as the departure date chosen by users. When users did not log in to the system, the sweet alert in figure x will pop up and direct users to the signup and log-in page.

COMETBUS		Home	My Profile	Order History	Log out					
Bus From Malacca To Kuala Lumpur										
Malacca > Kuala Lumpur > 2023-06-26										
FILTER		ADD A RETURN DATE								
Departure Time		8 Buses found		Bus Operator	Departure Time	Boarding	Duration	Arrival Time	Rating	Fare
<input type="radio"/> Ascending				City Express	8:00 AM	Malacca Sentral	02.00 hours	10:00 AM	0.00	RM14.00
<input type="radio"/> Descending										View Seat
Arrival Time				KKKL	9:30 AM	Malacca Sentral	02.00 hours	11:30 AM	0.00	RM15.00
<input type="radio"/> Ascending										View Seat
<input type="radio"/> Descending										View Seat
Fare				Maraliner	10:00 AM	Malacca Sentral	02.00 hours	12:00 PM	0.00	RM16.00
<input type="radio"/> Low - High										View Seat
<input type="radio"/> High - Low				Mayang Sari Express	11:30 AM	Malacca Sentral	02.00 hours	1:30 PM	0.00	RM14.50
										View Seat

Figure 4.1.12: Departure Bus Schedule

 COMETBUS																																															
		Home	My Profile	Order History	Log out																																										
Bus From Malacca To Kuala Lumpur																																															
Malacca > Kuala Lumpur > 2023-06-26								Kuala Lumpur > Malacca > 2023-07-04																																							
FILTER	8 Buses found	Bus Operator	Departure Time	Boarding	Duration	Arrival Time	Rating	Fare																																							
Departure Time																																															
<input type="radio"/> Ascending																																															
<input type="radio"/> Descending																																															
Arrival Time																																															
<input type="radio"/> Ascending																																															
<input type="radio"/> Descending																																															
Fare																																															
<input type="radio"/> Low - High																																															
<input type="radio"/> High - Low																																															
<table border="1"> <thead> <tr> <th>City Express</th> <th>KKL</th> <th>Maraliner</th> <th>Mayang Sari Express</th> </tr> </thead> <tbody> <tr> <td></td><td></td><td></td><td></td></tr> <tr> <td>City Express</td><td>KKL</td><td>Maraliner</td><td>Mayang Sari Express</td></tr> <tr> <td>8:00 AM</td><td>9:30 AM</td><td>10:00 AM</td><td>11:30 AM</td></tr> <tr> <td>Malacca Sentral</td><td>Malacca Sentral</td><td>Malacca Sentral</td><td>Malacca Sentral</td></tr> <tr> <td>02.00 hours</td><td>02.00 hours</td><td>02.00 hours</td><td>02.00 hours</td></tr> <tr> <td>10:00 AM</td><td>11:30 AM</td><td>12:00 PM</td><td>1:30 PM</td></tr> <tr> <td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td></tr> <tr> <td>RM14.00</td><td>RM15.00</td><td>RM16.00</td><td>RM14.50</td></tr> <tr> <td>View Seat</td><td>View Seat</td><td>View Seat</td><td>View Seat</td></tr> </tbody> </table>								City Express	KKL	Maraliner	Mayang Sari Express					City Express	KKL	Maraliner	Mayang Sari Express	8:00 AM	9:30 AM	10:00 AM	11:30 AM	Malacca Sentral	Malacca Sentral	Malacca Sentral	Malacca Sentral	02.00 hours	02.00 hours	02.00 hours	02.00 hours	10:00 AM	11:30 AM	12:00 PM	1:30 PM	0.00	0.00	0.00	0.00	RM14.00	RM15.00	RM16.00	RM14.50	View Seat	View Seat	View Seat	View Seat
City Express	KKL	Maraliner	Mayang Sari Express																																												
																																															
City Express	KKL	Maraliner	Mayang Sari Express																																												
8:00 AM	9:30 AM	10:00 AM	11:30 AM																																												
Malacca Sentral	Malacca Sentral	Malacca Sentral	Malacca Sentral																																												
02.00 hours	02.00 hours	02.00 hours	02.00 hours																																												
10:00 AM	11:30 AM	12:00 PM	1:30 PM																																												
0.00	0.00	0.00	0.00																																												
RM14.00	RM15.00	RM16.00	RM14.50																																												
View Seat	View Seat	View Seat	View Seat																																												

Figure 4.1.13: Departure Bus Schedule (Return Date Selected)

The background color below the first row is to show to the user which schedule is choosing. Users can choose the bus schedule from the lists ordered by departure time, arrival time, and fare either in ascending order or descending order. By default, the bus schedule list is ordered by departure time in ascending order. If users want to choose a return date as they did not choose just now, they can press the “ADD A RETURN DATE”, and users will go back to the home page. If users select the return date, the return date will show in the figure 4.2.14 and the “ADD A RETURN DATE” will be replaced. Then, users can press the “View Seat” button to choose the bus seat.

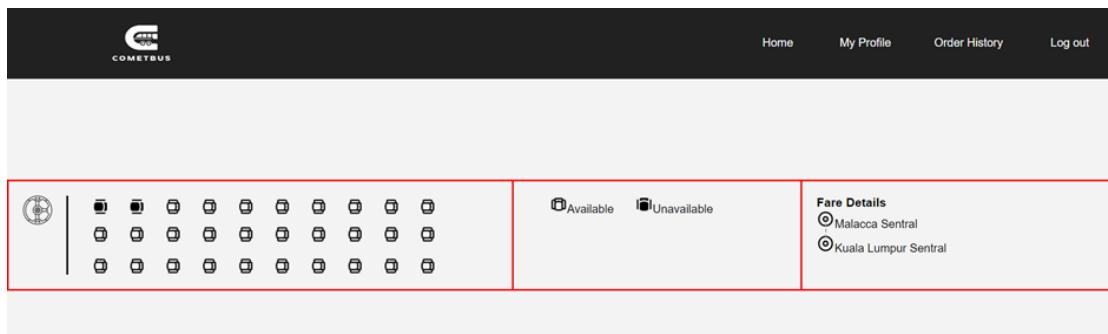


Figure 4.1.14: Departure Bus Seat Page

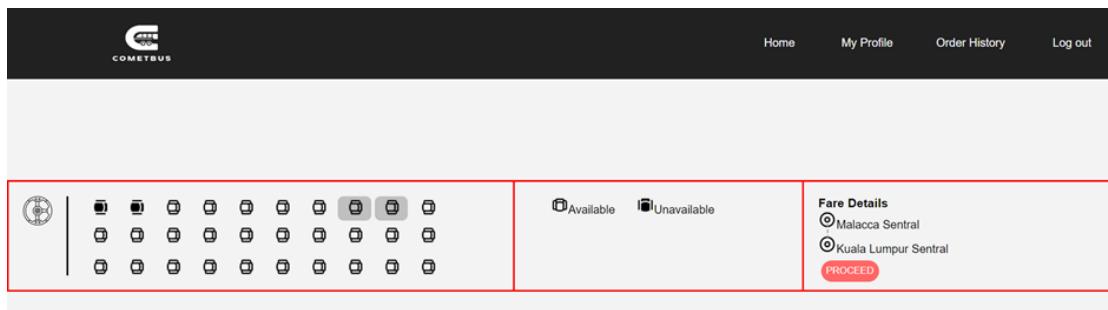


Figure 4.1.15: Process Choosing Departure Bus Seat

This page will divide into 3 columns, the first column is for users to select seats, the second column is showing the seats’ status, and the third column is for labeling the Fare Details by showing the origin and destination. Users can choose the bus seat by clicking one or more than one of the available seats on the page. The “PROCEED” button will only appear when users select at least one seat. When users select the seats and press the button, users will go to another page to fill in their personal information if users did not select the return date. If users had chosen the return date, the button will direct users to choose the return bus schedule.

Bus From Kuala Lumpur To Malacca		Kuala Lumpur > Malacca > 2023-07-04						
FILTER	8 Buses found	Bus Operator	Departure Time	Boarding	Duration	Arrival Time	Rating	Fare
Departure Time								
<input type="radio"/> Ascending								
<input type="radio"/> Descending								
Arrival Time								
<input type="radio"/> Ascending								
<input type="radio"/> Descending								
Fare								
<input type="radio"/> Low - High								
<input type="radio"/> High - Low								
			Maraliner	4:50 AM	Kuala Lumpur Sentral	02.00 hours	6:50 AM	0.00 RM16.00
								View Seat
			City Express	6:00 AM	Kuala Lumpur Sentral	02.00 hours	8:00 AM	0.00 RM14.00
								View Seat
			KKKL	8:30 AM	Kuala Lumpur Sentral	02.00 hours	10:30 AM	0.00 RM15.00
								View Seat
			Mayang Sari Express	1:30 PM	Kuala Lumpur Sentral	02.00 hours	3:30 PM	0.00 RM18.00
								View Seat

Figure 4.1.16: Return Bus Schedule List

The background color below the first row is to show to the user which schedule is choosing. Users can choose the bus schedule from the lists ordered by departure time, arrival time, and fare either in ascending order or descending order. By default, the bus

schedule list is ordered by departure time in ascending order. Then, users can press the “View Seat” button to choose the bus seat.

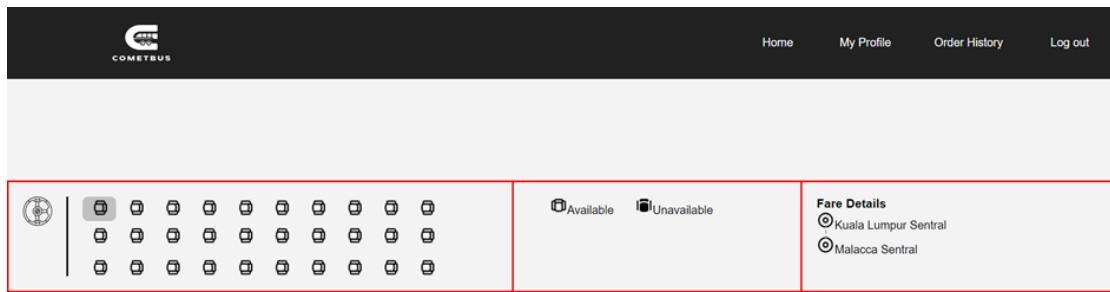


Figure 4.1.17: Return Bus Seat Page

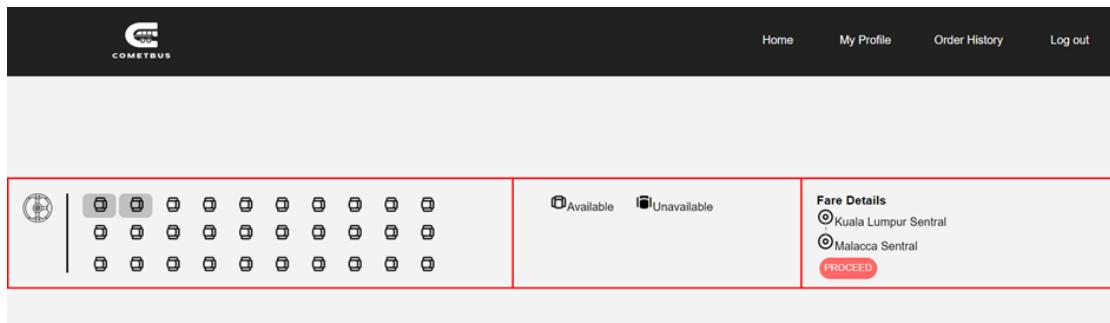


Figure 4.1.18: Process Choosing Return Bus Seat

This page will divide into 3 columns, the first column is for users to select seats, the second column is showing the seats’ status, and the third column is for labeling the Fare Details by showing the origin and destination. For instance, the users choose two departure bus seats so the “PROCEED” button will only appear when users select the same quantity with departure bus seats. When users select the seats and press the button, users will go to another page to fill in their personal information.

Passenger Details

Passenger Information

Passenger 1
Name: Tay Han Chung
Age: Age

Passenger 2
Name: Name
Age: Age

Contact Details

Email Address: myhanchung@gmail.com
Phone Number: 01139674436

Total Fare : RM60.00

PROCEED TO PAY

Figure 4.1.19: Passenger Details Page

Users need to enter their names in the alphabet, the primary age of the primary passenger must be at least 12, and a correct format of email address and phone number else the sweet alert will pop up.

SUMMARY
ONWARD TRIP

City Express

Departure Date: 2023-06-26
Origin: Malacca
Boarding: Malacca Sentral
Destination: Kuala Lumpur
Alighting: Kuala Lumpur Sentral

Seat Info :
Tay Han Chung(20)
Seats: 2A

PAYMENT

Cards Accepted : VISA, MasterCard

Name On Card : NAME ON CARD

Credit Card Number : XXXXXXXXXXXXXXXX

Exp Month : MM Exp Year : YY CVV : XXX

Make Payment

Figure 4.1.20: Payment Page

The sweet alert will pop up when users did not follow the correct format for all the inputs on the payment page. Users can also view the bus schedule summary before making the payment.

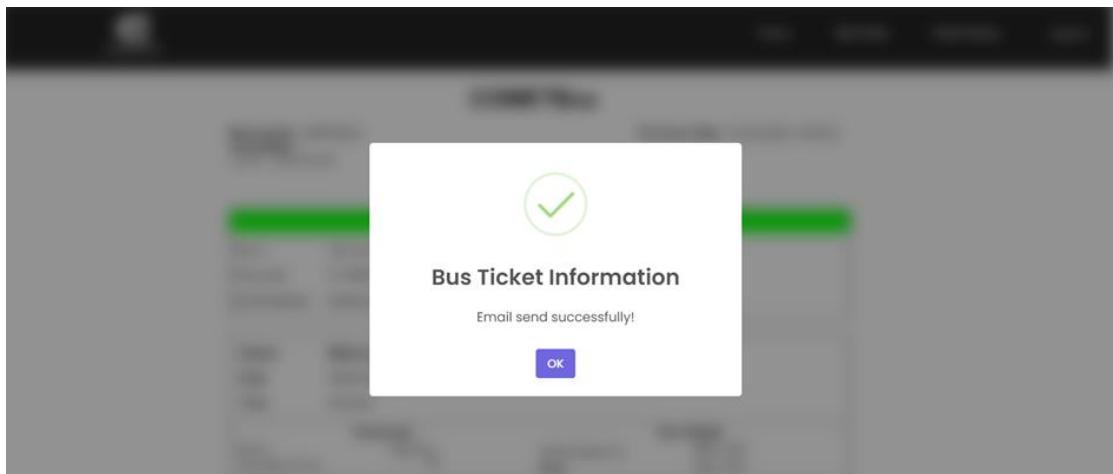


Figure 4.1.21: Sweet Alert when the email sent successfully

COMETBus

Booking No : 647ca69c10
Purchase Date : 04-06-2023 22:58:36
Travel Date :
Depart : 2023-07-15

Receipt

Customer Details	
Name:	Tay Han Chung
Phone No:	01139674436
Email Address:	tayhanchung@gmail.com

Depart	Malacca Sentral > Kuala Lumpur Sentral					
Date	2023-07-15					
Time	6:30 AM					
<hr/>						
	Passenger		Fare Details			
Name	Seat No.	Ticket Price	RM 15.00			
Tay Han Chung	1A	Total	RM 15.00			
Total Paid :	RM 15.00					
<hr/>						
Paid Via :						
VisaCard		RM 15.00				

Ticket 1	
FROM:	Malacca Sentral
TO:	Kuala Lumpur Sentral
2023-07-15	KKKL
6:30 AM	Booking Number : 647ca69c10
Gate No. B	Seat No : 1A Tay Han Chung

Figure 4.1.22: Example Email Sent

The screenshot shows the COMETBus transaction details page. At the top, there's a navigation bar with links for Home, My Profile, Order History, and Log out. Below the navigation, the page title is "COMETBus". It displays booking information: Booking No : 647f12fc3e, Travel Date : Depart : 2023-06-26, Purchase Date : 06-06-2023 19:05:32. A "Receipt" section contains "Customer Details" with Name: Tay Han Chung, Phone No: 01139874436, and Email Address: tayhanchung@gmail.com. Another section shows travel details: Depart: Malacca Sentral > Kuala Lumpur Sentral, Date: 2023-06-26, Time: 8:00 AM. It lists a passenger: Name: Tay Han Chung, Seat No: 2A, and fare details: Ticket Departure: RM 14.00, Total: RM 14.00. Payment information shows Paid Via: VisaCard, Amount: RM 14.00. A "Ticket 1" summary at the bottom lists the same travel details and passenger information. A "BACK TO HOME" button is at the bottom left.

Figure 4.1.23: Transaction Details Page

Transaction details will be sent to the users' email as they key into the passenger info page. Users can view the transaction details and also the ticket on this page. After

viewing all the information, users can click the “BACK TO HOME” button to go back to the home page.

The screenshot displays the 'My Trip' section of the CometBus Order History page. It shows three separate bus trips with their details:

- Trip 1:** Departure: 2023-07-18/3:00PM from Kuala Lumpur Sentral to Malacca Sentral. Seats: SEAT 4A. Passenger: Tay Han Chung. Payment Method: VisaCard. Total: RM 18.00. A 'Rate' button is present.
- Trip 2:** Departure: 2023-07-18/3:00PM from Kuala Lumpur Sentral to Malacca Sentral. Seats: SEAT 1A. Passenger: Tay Han Chung. Payment Method: VisaCard. Total: RM 18.00.
- Trip 3:** Departure: 2023-05-15/4:00AM from City Express to Kuala Lumpur Sentral. Seats: SEAT 1A. Passenger: Tay Han Chung. Payment Method: VisaCard. Total: RM 14.00. A 'Rate' button is present.

Each trip entry includes a 'View/Download Ticket' link at the top right. The page header features the CometBus logo and navigation links: Home, My Profile, Order History, and Log out.

Figure 4.1.24: Order History

Screenshot above shows the order history page of CometBus. The order history page will show the significant bus ticket booking information which has done the payment. For example, departure date, boarding, user's name, purchase date, booking number and others. In this page users also can view the details of the ticket and rate for the trip. In the above screenshot some of the rate buttons disappear because the departure date is in the future so users can not give rating before ride the bus and some appear because the date has been pass.

		Home	My Profile	Order History	Log out
Customer Details					
Name:	Tay Han Chung				
Phone No:	01139674436				
Email Address:	kidqixiang@gmail.com				
Depart: Malacca Sentral > Kuala Lumpur Sentral Date: 2023-07-15 Time: 4.00 Return: Kuala Lumpur Sentral > Malacca Sentral Date: 2023-07-18 Time: 15.00					
Passenger			Fare Details		
Name			Seat No.	Total Price	
Tay Han Chung			1A	RM 32	
Tay Han Chung			1A	RM 32	
Total Paid : RM 64					
Ticket 1					
FROM: Malacca Sentral TO: Kuala Lumpur Sentral					
2023-07-15		City Express Booking Number: 646f7067df			
4.00					
Gate No.A		Seat No. 1A Tay Han Chung			

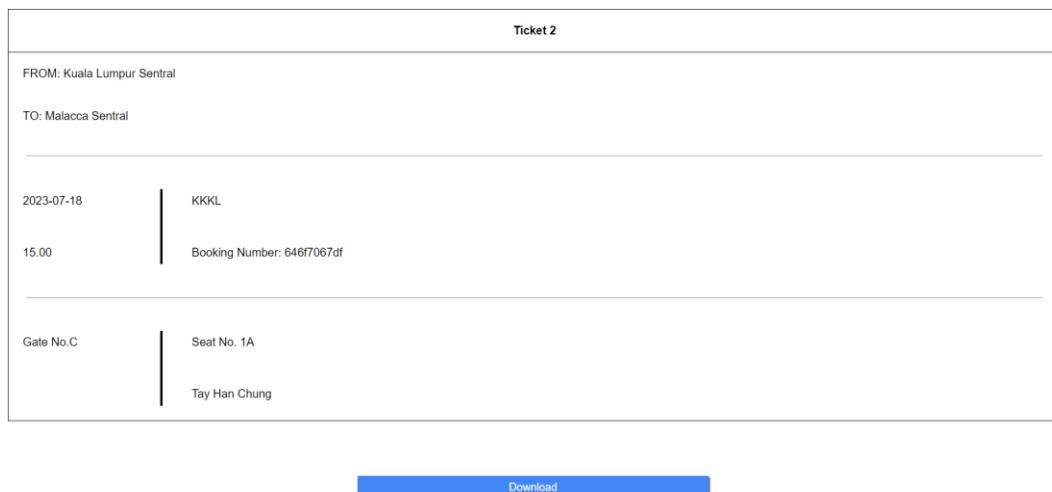


Figure 4.1.25: View and Download Ticket

Screenshot above shows the view and download ticket page of CometBus. In this page users can view the details of the ticket and download the ticket in pdf file format.

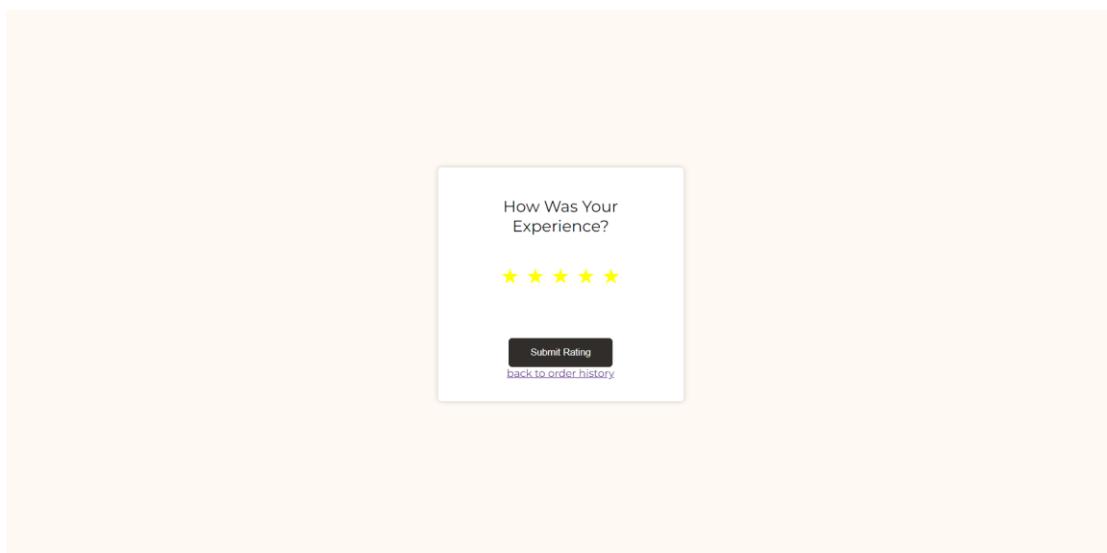


Figure 4.1.26: Rating page

This is rating page of CometBus. In this page users can rate for a trip.

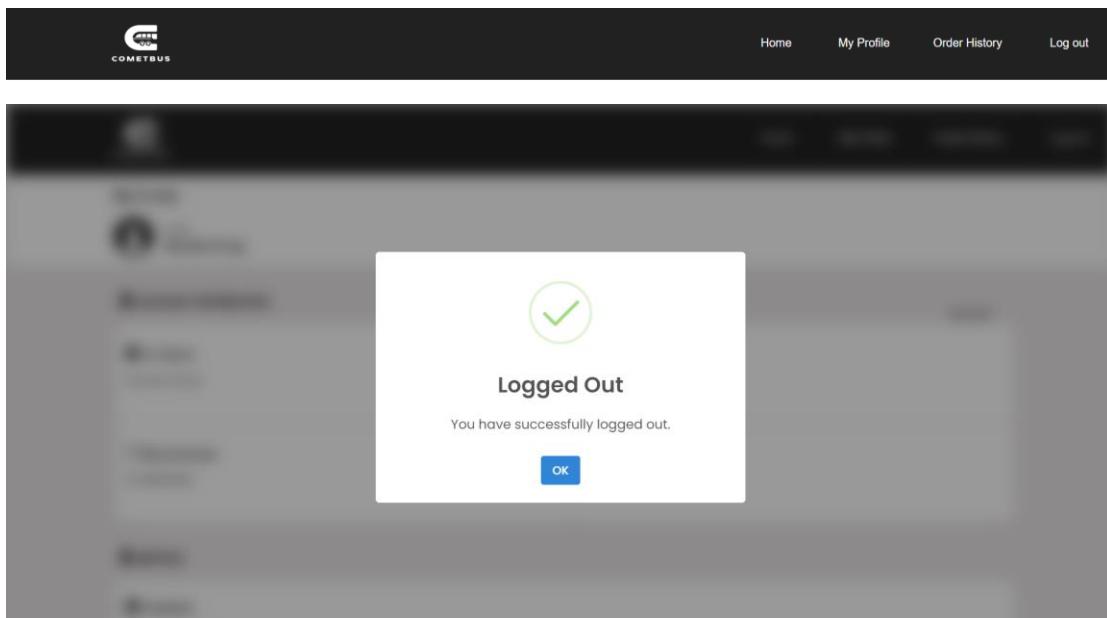


Figure 4.1.27: Logout

Screenshot above shows the logout function of our system. The content of the header is home, my profile, order history and logout after logout will display an alert message then if the user clicks “OK” will logout. After user logout the content of the header will change to home and signup/login and the user is unable to go back using the back button(web browser).



Figure 4.1.28: Example of back button

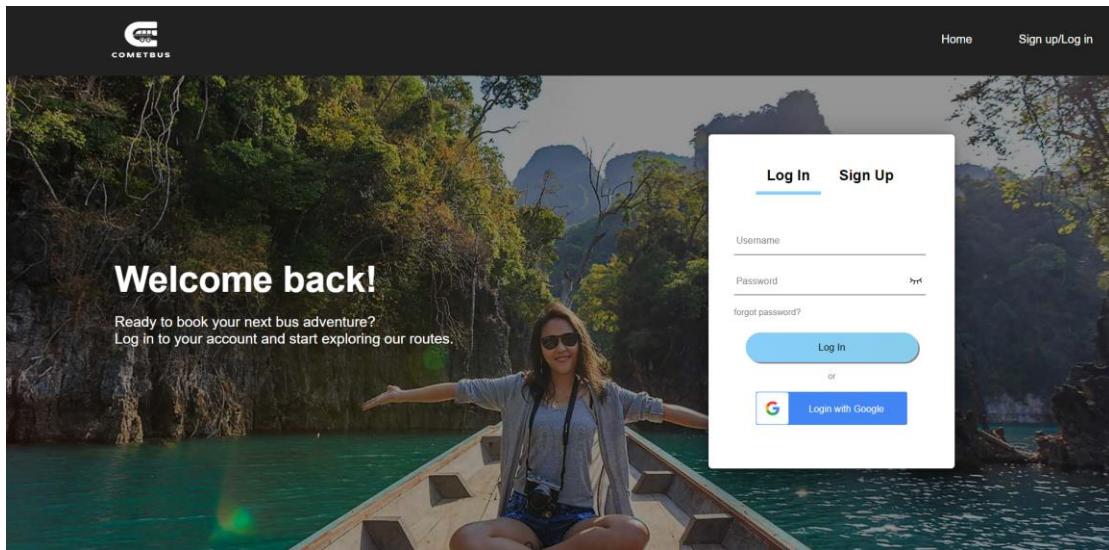


Figure 4.1.29: Example of page after logout

4.2 Admin/Staff/Front Desk Module

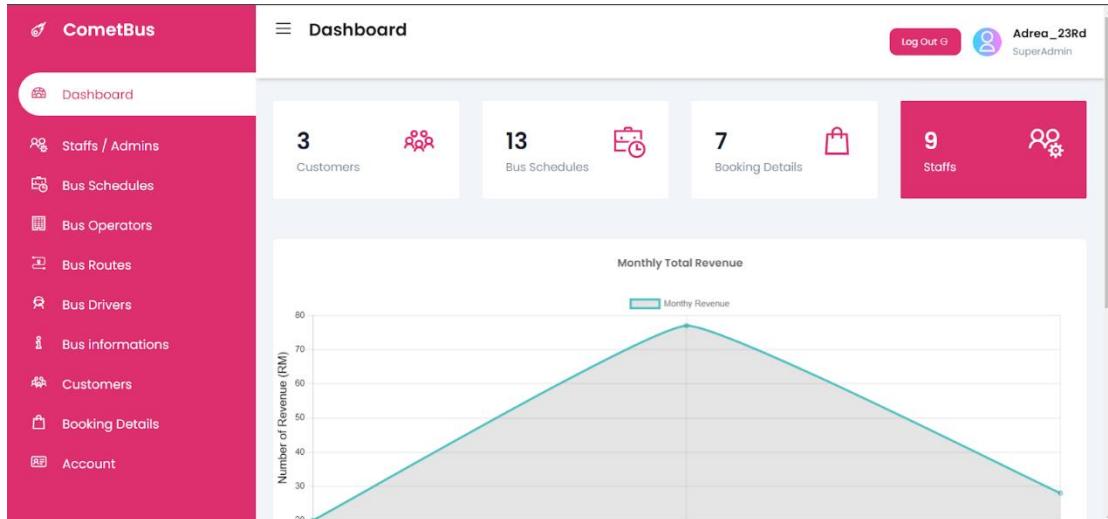


Figure 4.2.0: Admin Dashboard (Part 1)

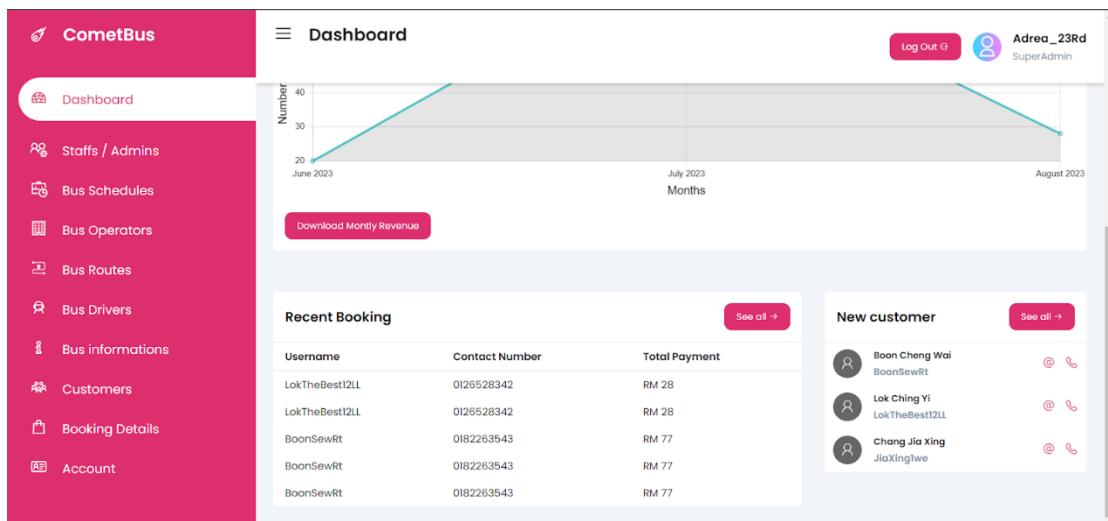
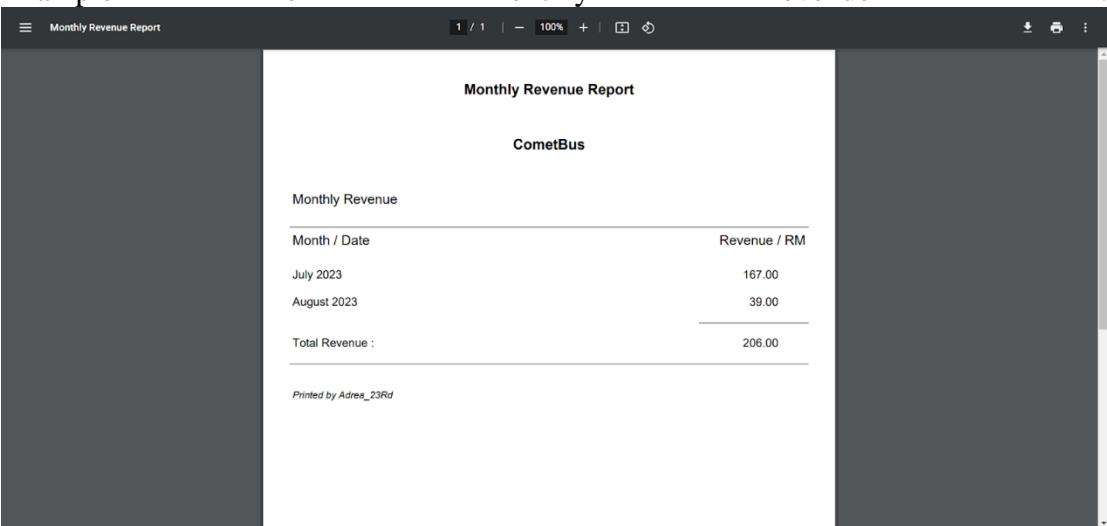


Figure 4.2.0: Admin Dashboard (Part 2)

Figure 4.2.0 Part 1 and Part 2 show the Admin Dashboard after the admin has logged in on the User login page. The Dashboard shows Admin Username, Admin Level (SuperAdmin or Admin), Logout button where the admin wants to log out, and the sidebar. The sidebar has ten tabs, including the Dashboard tab, Staff / Admins tab, Bus Schedule tab, Bus Operators tab, Bus Route tab, Bus Drivers tab, Bus Informations tab, Customers tab, Booking Details tab, and Account tab. The Dashboard also shows the total number of Customers, Bus Schedules, Booking Details, and Staff. Other than that,

The Dashboard shows the Monthly Revenue, five recent booking details, and five recent new customers. The Monthly Revenue can be downloaded from the Dashboard.

Example of Monthly Revenue PDF:



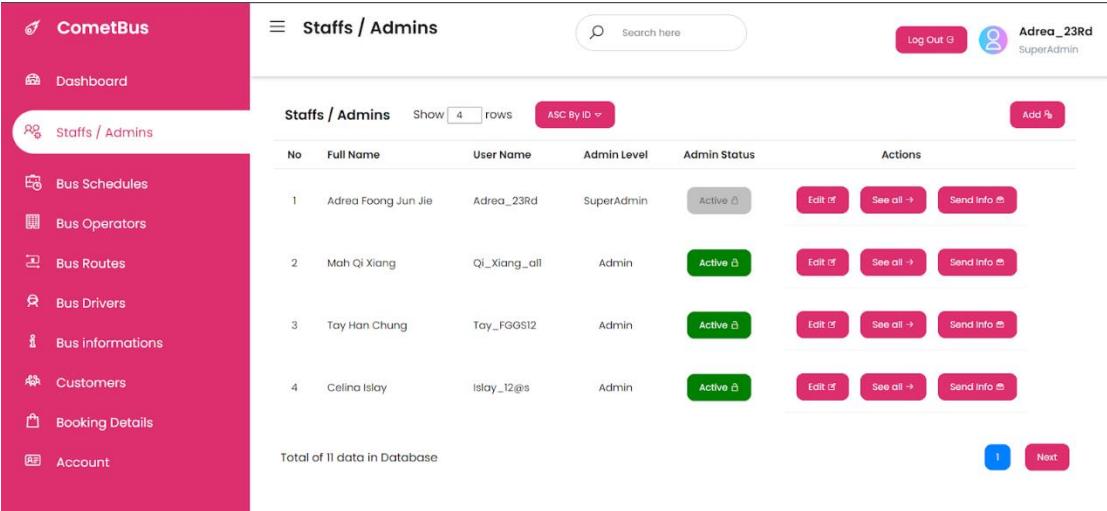
Monthly Revenue Report

CometBus

Monthly Revenue

Month / Date	Revenue / RM
July 2023	167.00
August 2023	39.00
Total Revenue :	206.00

Printed by Adrea_23Rd



CometBus

Dashboard

Staffs / Admins

Search here

Log Out Adrea_23Rd SuperAdmin

Staffs / Admins Show 4 rows ASC By ID ▾ Add ↗

No	Full Name	User Name	Admin Level	Admin Status	Actions
1	Adrea Foong Jun Jie	Adrea_23Rd	SuperAdmin	Active	Edit ↗ See all → Send Info ↗
2	Mah Qi Xiang	Qi_Xiang_all	Admin	Active	Edit ↗ See all → Send Info ↗
3	Tay Han Chung	Tay_FGGS12	Admin	Active	Edit ↗ See all → Send Info ↗
4	Celina Islay	Islay_I2@s	Admin	Active	Edit ↗ See all → Send Info ↗

Total of 11 data in Database

Figure 4.2.1: Admin Staff Main Page

Figure 4.2.1 shows the Admin Staff Main Page. This page shows the details of the Admin account. The page can search a specific account, sort the account by ID, show desired rows, add admin, active or deactivate admin account, edit admin account, and send admin account information to an email. Only a Superadmin can perform all the actions and disable the admin account.

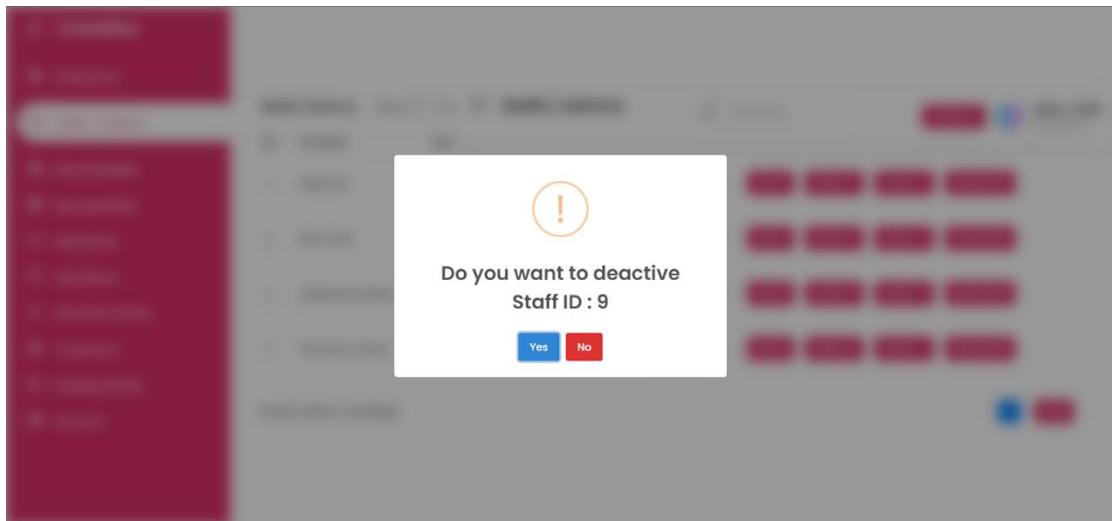


Figure 4.2.1: Admin Staff Main Page (Admin Status Button)

Figure 4.2.1 – Admin Staff Main Page (Admin Status Button) shows that if the admin presses the Admin Status button, it will display the prompt to ensure that the Superadmin wants to activate or deactivate an admin account.

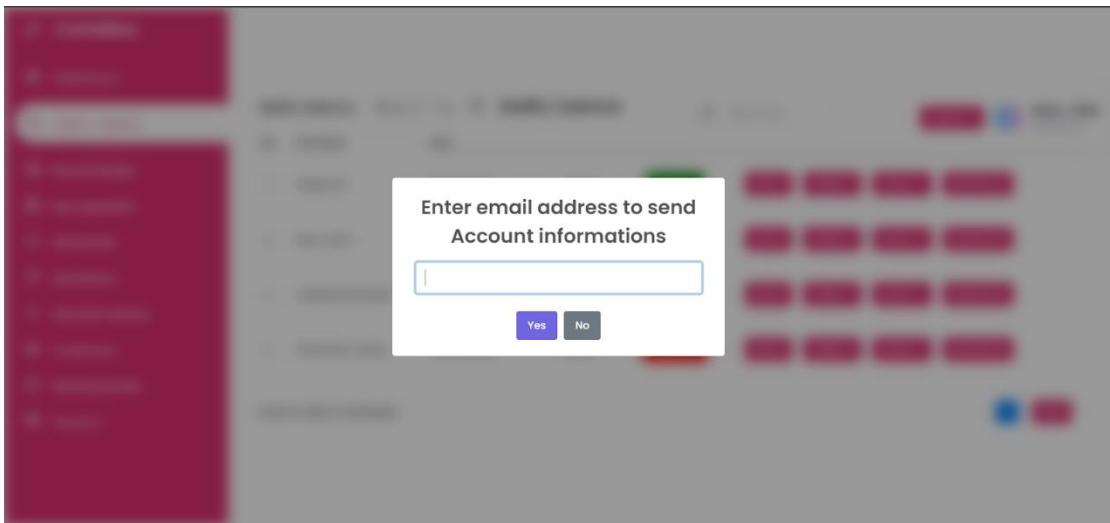


Figure 4.2.1: Admin Staff Main Page (Send Admin Information Button)

Figure 4.2.1, Admin Staff Main Page (Send Admin Information Button), shows that if the admin presses the Send Admin Information Button, it will display a prompt to let the Superadmin type in the email address of the receiver to send the admin account information to a person.

Example of sending information to email:

A screenshot of an email inbox. The top bar shows the title "Admin Login Information for CometBus" with an "External" link and an "Inbox" button. On the right side of the top bar are several small icons. The main area shows an incoming email from "cometbus0@gmail.com" with the subject "to me". The email body contains the following text:

Important: Your Super Admin has sent you the login information for your admin account.
Below are the Account to Log into the admin page
DO NOT SHARE THIS INFORMATION WITH ANYONE OR MAKE IT PUBLIC.
Unauthorized sharing of your admin login information can lead to security breaches and may result in disciplinary actions. (Even you are not in this company anymore)
For security reasons, we recommend that you take the following steps:

- Change your password immediately after logging in for the first time.
- Use a strong, unique password that you have not used before and will not use for any other accounts.
- Do not write down or store your password in an insecure location.
- Regularly update your password to keep your account secure.

Your admin login information:
Username: **ADREAADREA123123**
Password: **ADREA12333!**

At the bottom of the email are two buttons: "Reply" and "Forward".

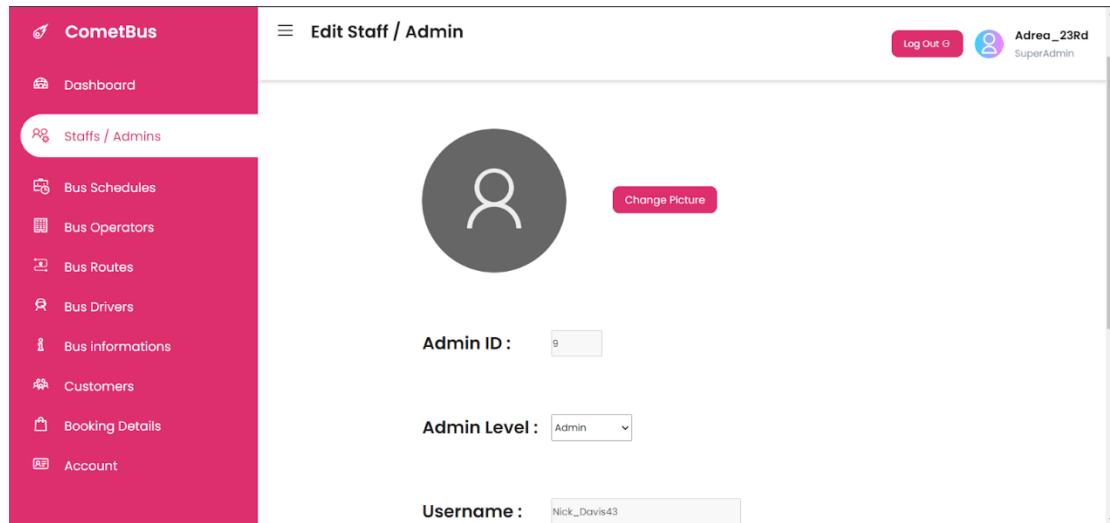


Figure 4.2.1: Admin Staff (Edit Staff Details – Part 1)

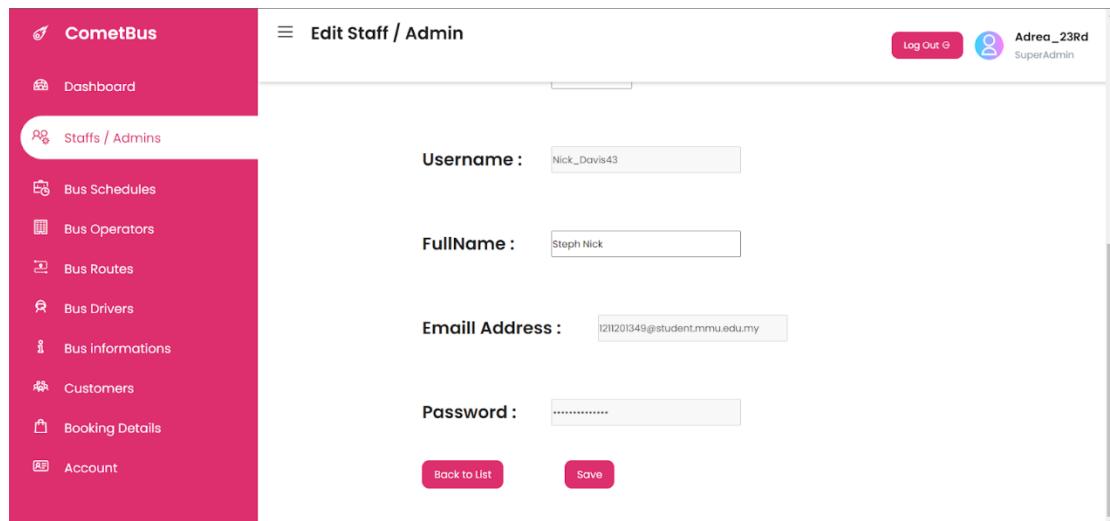


Figure 4.2.1: Admin Staff (Edit Staff Details – Part 2)

Figure 4.2.1 - Admin Staff (Edit Staff Details – Part 1 and Part 2) shows the edit staff details page if a Superadmin has pressed the edit button on Admin Staff Main Page. This page will let the Superadmin edit Admin's Details, including Admin level, and Full name. It also has a back button if the Superadmin wants to quit editing the admin's details and a save button if Superadmin wants to save.

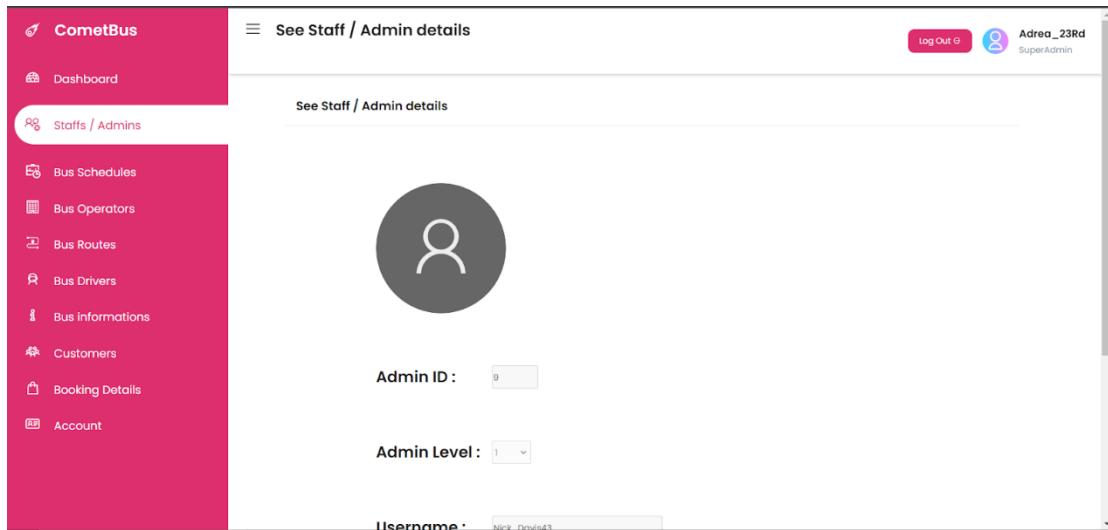


Figure 4.2.1: Admin Staff (See All Staff Details – Part 1)

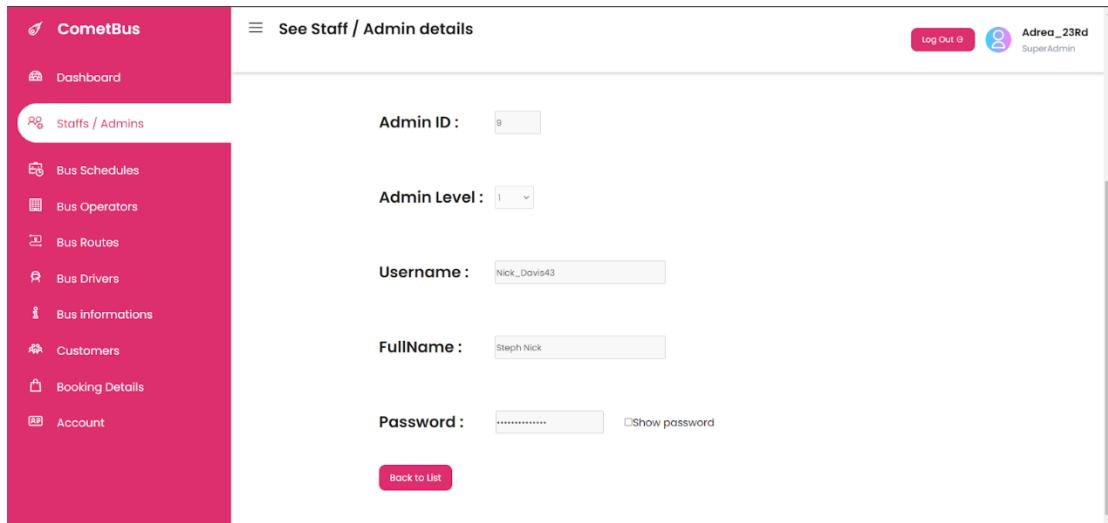


Figure 4.2.1: Admin Staff (See All Staff Details – Part 2)

Figure 4.2.1 - Admin Staff (See All Staff Details – Part 1 and Part 2) shows the details of the staff if a Superadmin has pressed the See All button on Admin Staff Main Page. This page will show the details of the admin. It is also a back button if the Superadmin wants to quit viewing the details.

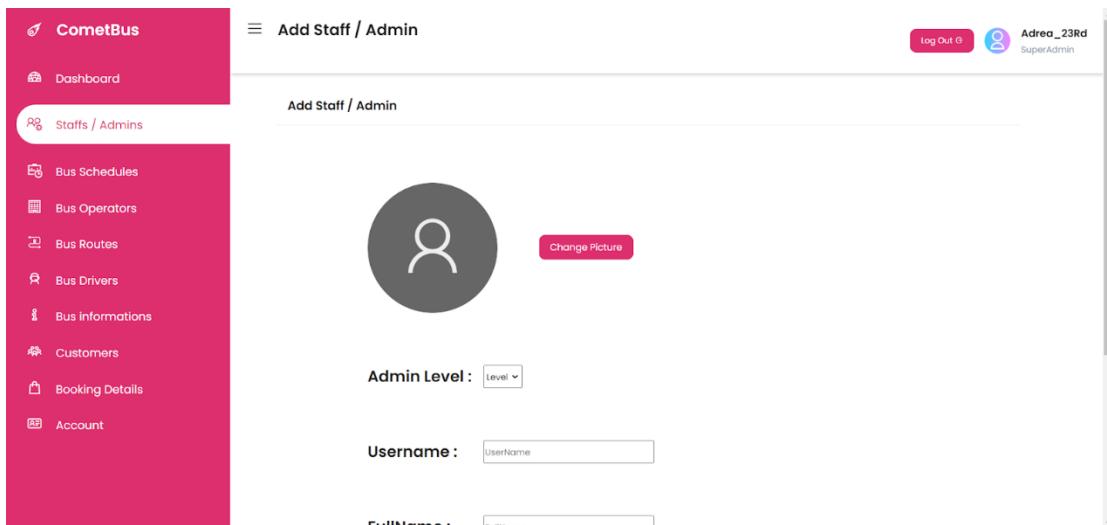


Figure 4.2.1: Admin Staff (Add New Staff Details – Part 1)

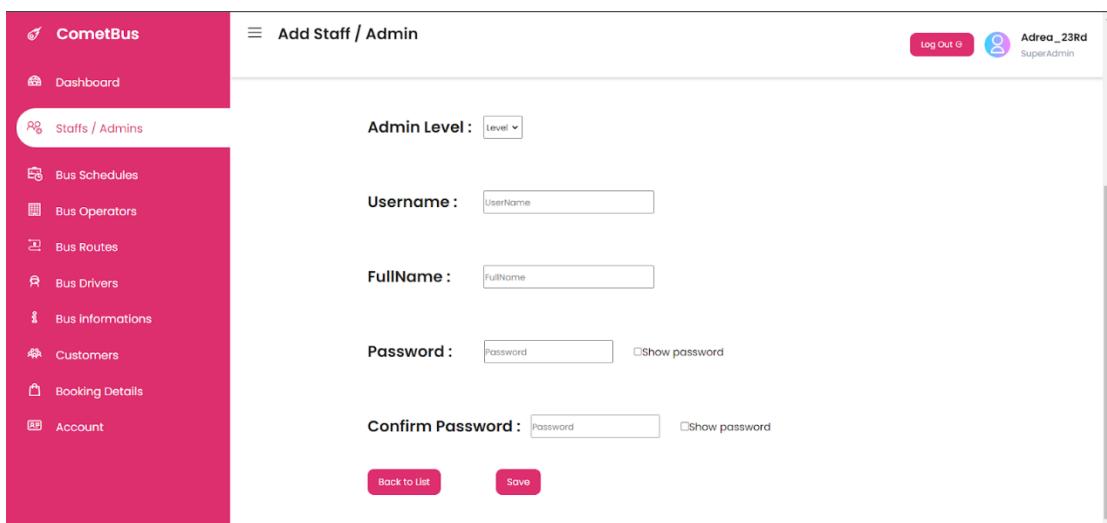


Figure 4.2.1: Admin Staff (Add New Staff Details – Part 2)

Figure 4.2.1 - Admin Staff (Add New Staff Details – Part 1 and Part 2) shows the page that can add a new admin if a Superadmin has pressed the add button on Admin Staff Main Page. This page will let SuperAdmin add a new admin with its details. It also has a back button if the Superadmin wants to quit editing the admin's details and a save button if Superadmin wants to save.

The screenshot shows the 'Bus Schedules' section of the CometBus Admin interface. The left sidebar has a pink header 'CometBus' with icons for Dashboard, Staffs / Admins, and Bus Schedules. Under 'Bus Schedules', there are links for Bus Operators, Bus Routes, Bus Drivers, Bus Informations, Customers, Booking Details, and Account. The main area has a header 'Bus Schedules' with a search bar, a row for 'Show 4 rows', and a sorting option 'DESC By ID'. A table lists four bus schedules with columns: No, Schedule Date, Boarding, Alignment, Departure Time (24-hour time notation), Status, and Actions. Each row includes a green 'Active' button, edit and delete buttons, and a 'See all' button. Below the table, it says 'Total of 13 data in Database'. At the bottom right are navigation buttons for page 1 and 'Next'.

No	Schedule Date	Boarding	Alignment	Departure Time (24-hour time notation)	Status	Actions
1	2023-05-01	Penang Sentral	Malacca Sentral	9:00	Active	Edit Delete See all
2	2023-02-16	Malacca Sentral	Kuala Lumpur Sentral	4:00	Active	Edit Delete See all
3	2023-08-22	Malacca Sentral	Kuala Lumpur Sentral	12:00	Active	Edit Delete See all
4	2023-09-22	Malacca Sentral	Kuala Lumpur Sentral	12:00	Active	Edit Delete See all

Total of 13 data in Database

Figure 4.2.2: Admin Bus Schedule Main Page

Figure 4.2.2 shows the Admin Bus Schedule Main Page. This page shows the details of Bus Schedules. The page can search a specific Bus Schedule, sort the bus schedule by ID, show desired rows from admin or Superadmin, active or deactivate the bus schedule, edit the bus schedule, delete the bus schedule, view all details of the bus schedule, and add new bus schedule.

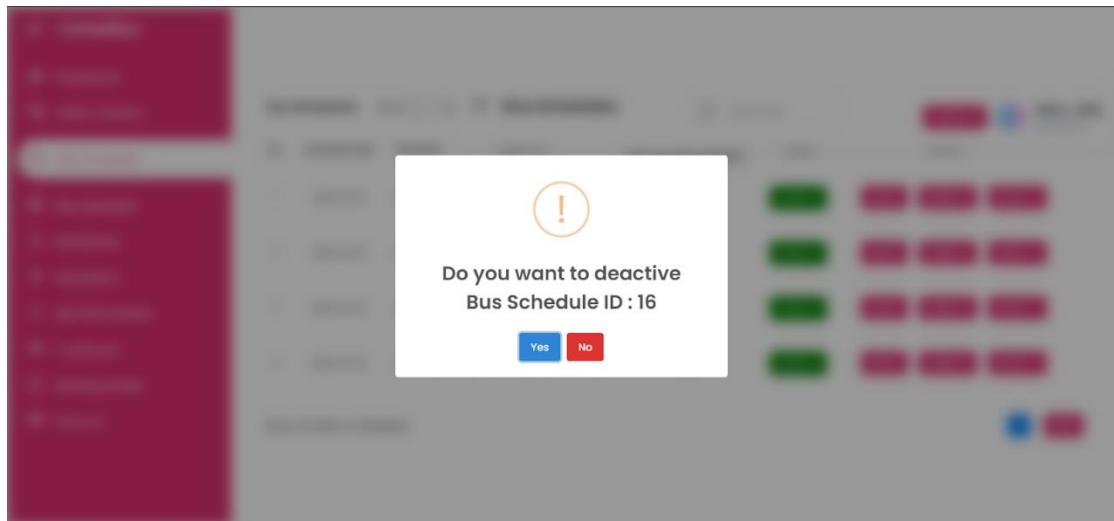


Figure 4.2.2: Admin Bus Schedule Main Page (Bus Schedule Status Button)

Figure 4.2.2 – Admin Bus Schedule Main Page (Bus Schedule Status Button), shows that if the admin or Superadmin presses the Bus Schedule Status button, it will display the prompt to make sure that if the admin or Superadmin wants to activate or deactivate a bus schedule.

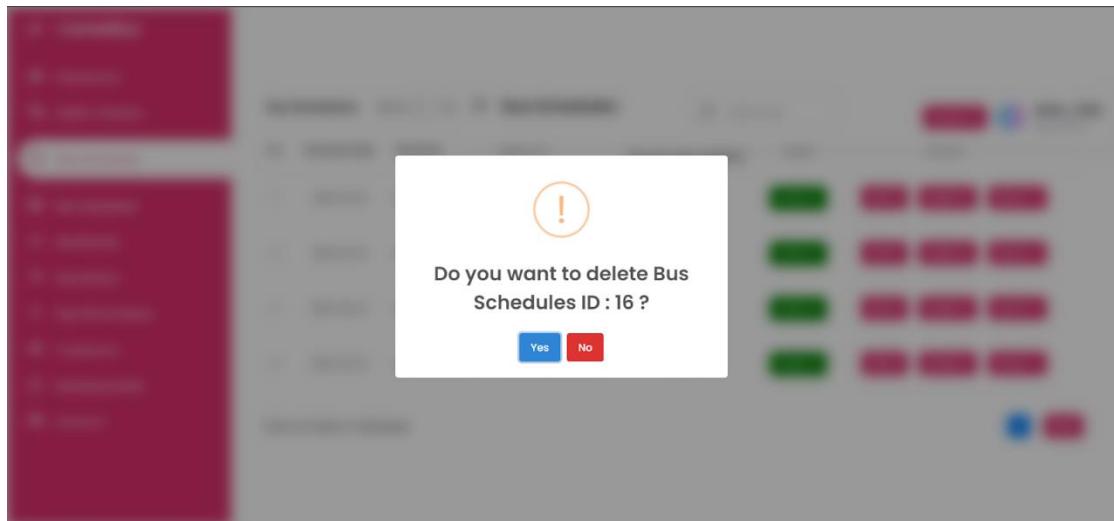


Figure 4.2.2: Admin Bus Schedule Main Page (Bus Schedule Delete Button)

Figure 4.2.2 – Admin Bus Schedule Main Page (Bus Schedule Delete Button), shows that if the admin or Superadmin pressed the Bus Schedule Delete button, it would display the prompt to make sure that if the Admin or Superadmin wanted to delete the bus schedule.

The screenshot shows the 'Edit Bus Schedules' page. On the left is a sidebar with the CometBus logo and links to Dashboard, Staffs / Admins, and Bus Schedules. The main area is titled 'Edit Bus Schedules'. It contains the following form fields:

- Bus Schedule ID: 16
- Bus Route: 1 - Malacca to Kuala Lumpur
- Bus Schedule Date: 06/01/2023
- Departure Time: 09:00 AM
- Arrival Time: 12:00 AM

At the top right, there are 'Log Out' and user profile buttons for 'Adrea_23Rd SuperAdmin'.

Figure 4.2.2: Admin Bus Schedule (Edit Bus Schedule Details – Part 1)

The screenshot shows the 'Edit Bus Schedules' page. The sidebar and title are identical to Part 1. The main area contains the following form fields:

- Departure Time: 09:00 AM
- Arrival Time: 12:00 AM
- Fare: 12
- Gate: G
- Bus Operator: 1 - City Express

At the bottom are 'Back to List' and 'Save' buttons.

Figure 4.2.2: Admin Bus Schedule (Edit Bus Schedule Details – Part 2)

Figure 4.2.2 - Admin Bus Schedule (Edit Bus Schedule Details – Part 1 and Part 2) shows the page that can edit an existing bus schedule if an Admin or Superadmin has pressed the edit button in Admin Bus Schedule Page. This page will let the Admin or Superadmin edit the bus schedule details. It also has a back button if the Admin or Superadmin wants to quit editing the bus schedule's details and a save button if Admin or Superadmin wants to save.

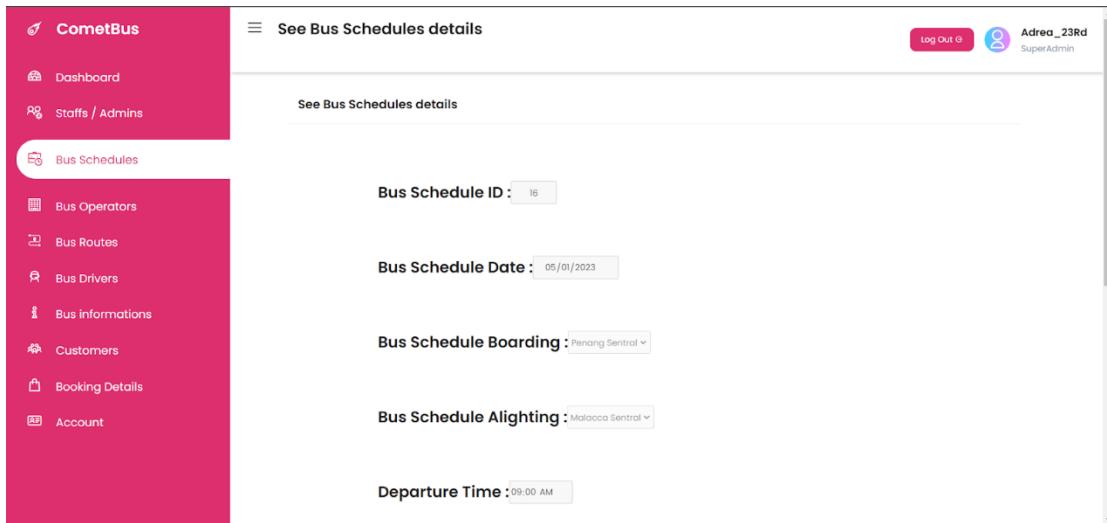


Figure 4.2.2: Admin Bus Schedule (See all Bus Schedule details – Part 1)

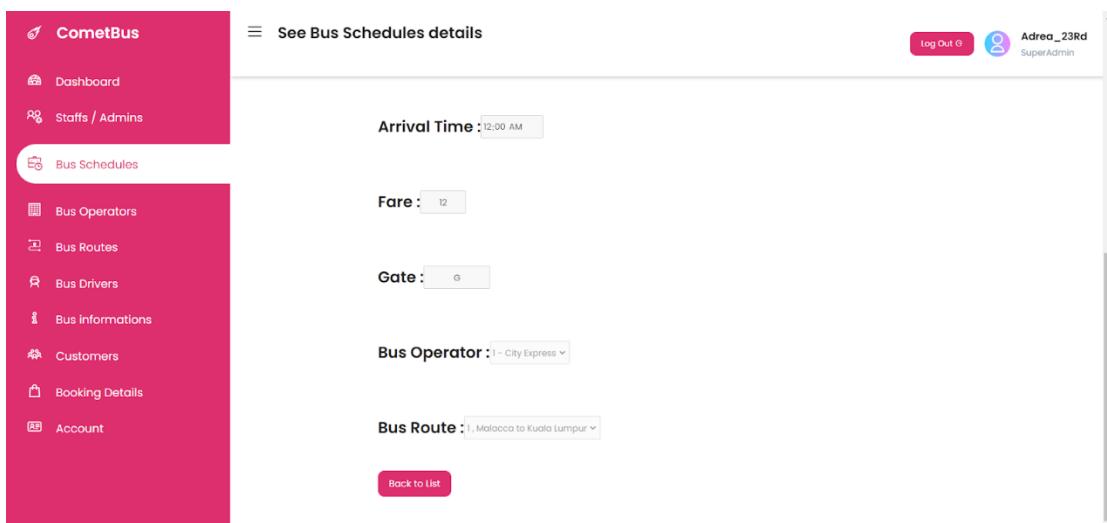


Figure 4.2.2: Admin Bus Schedule (See all Bus Schedule details – Part 2)

Figure 4.2.2 - Admin Bus Schedule (See all Bus Schedule details – Part 1 and Part 2) shows the page that can view an existing bus schedule if an Admin or Superadmin has pressed the See all button in Admin Bus Schedule Page. This page will let the Admin or Superadmin view all of the bus schedule details. It also has a back button if the Admin or Superadmin wants to quit viewing the bus schedule's details.

The screenshot shows the 'Add Bus Schedules' form. On the left is a sidebar with 'CometBus' logo and links: Dashboard, Staffs / Admins, Bus Schedules, Bus Operators, Bus Routes, Bus Drivers, Bus Informations, Customers, Booking Details, and Account. The main area has a title 'Add Bus Schedules'. It contains fields: 'Bus Route' dropdown (Malacca to Kuala Lumpur), 'Bus Schedule Date' date input, 'Departure Time' time input, 'Arrival Time' time input, and 'Fare' RM input.

Figure 4.2.2: Admin Bus Schedule (Add Bus Schedule details – Part 1)

The screenshot shows the 'Add Bus Schedules' form. The sidebar is identical to Part 1. The main area has fields: 'Departure Time' time input, 'Arrival Time' time input, 'Fare' RM input, 'Gate' dropdown (Gate), and 'Bus Operator' dropdown (City Express). At the bottom are 'Back to List' and 'Save' buttons.

Figure 4.2.2: Admin Bus Schedule (Add Bus Schedule details – Part 2)

Figure 4.2.2 - Admin Bus Schedule (Add Bus Schedule details – Part 1 and Part 2) shows the page that can add a new bus schedule if an Admin or Superadmin has pressed the add button in Admin Bus Schedule Page. This page will let the Admin or Superadmin add a new bus schedule. It also has a back button if the Admin or Superadmin wants to quit adding a new bus schedule or a save button if Admin or Superadmin wants to save.

The screenshot shows the 'Bus Operators' section of the CometBus Admin interface. On the left is a sidebar with various navigation links. The main area displays a table of bus operators with columns for ID, Operator Name, Operator Picture, Status, and Actions. The table contains four entries:

No	Operator Name	Operator Picture	Status	Actions
1	tetsing 2		Active	<button>Edit</button>
2	Tetsing		Active	<button>Edit</button>
3	Yellow Star		Active	<button>Edit</button>
4	Mayang Sari		Active	<button>Edit</button>

Total of 7 data in Database

Figure 4.2.3: Admin Bus Operators Main Page

Figure 4.2.3 shows the Admin Bus Operators' Main Page. This page shows the details of Bus Operators. The page can search specific Bus Operators, sort the Bus Operators by ID, show desired rows from admin or Superadmin, active or deactivate Bus Operators, edit Bus Operators, and add Bus Operators.

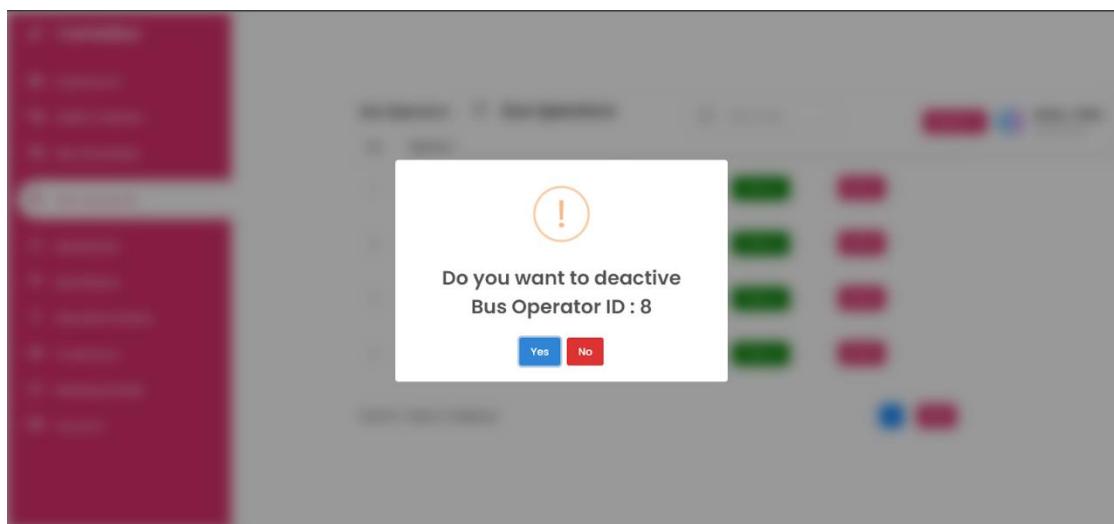


Figure 4.2.3: Admin Bus Operators Main Page (Bus Operator Status Button)

Figure 4.2.3 – Admin Bus Operators Main Page (Bus Operator Status Button), shows that if the admin or Superadmin pressed the Bus Operator Status button, it would display the prompt to make sure that if the Admin or Superadmin wanted to active or deactivate a bus operator.

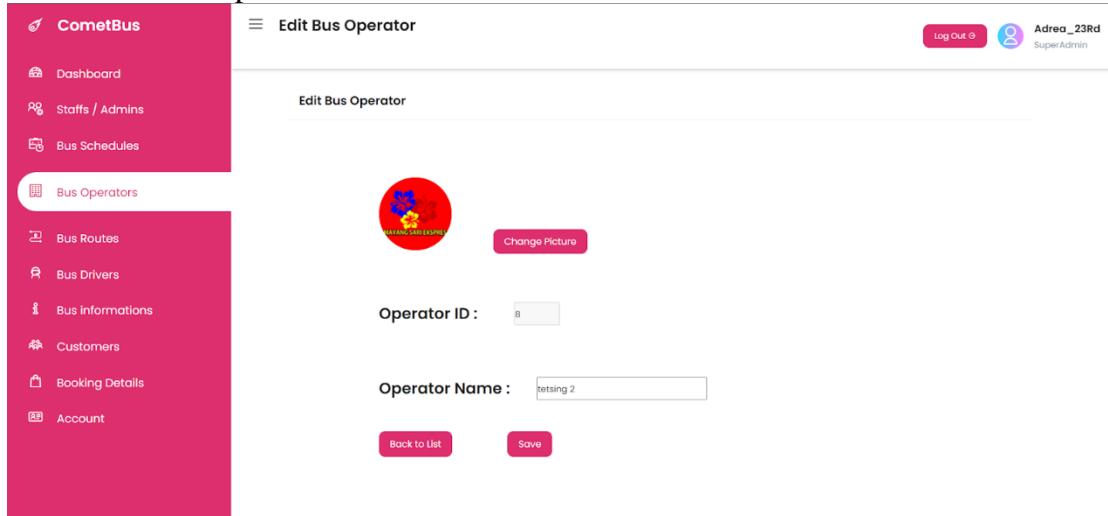


Figure 4.2.3: Admin Bus Operators (Edit Bus Operator Details)

Figure 4.2.3 – Admin Bus Operators (Edit Bus Operator Details) shows the page that can edit an existing bus operator if an Admin or Superadmin has pressed the edit button in Admin Bus Operators Page. This page will let the Admin or Superadmin edit the bus operator's details. It also has a back button if the Admin or Superadmin wants to quit editing the bus operator's details and a save button if Admin or Superadmin wants to save.

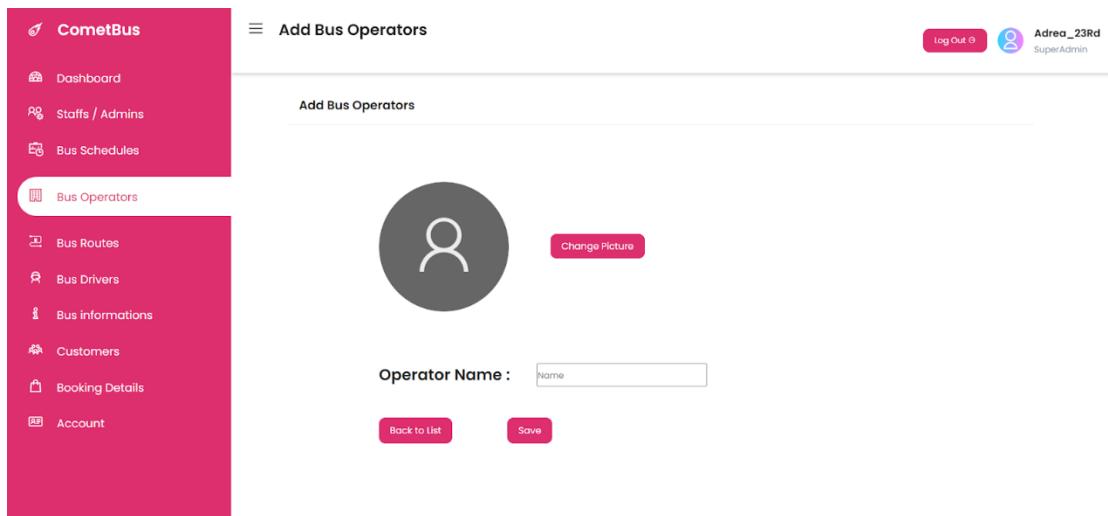


Figure 4.2.3: Admin Bus Operators (Add Bus Operator Details)

Figure 4.2.3 – Admin Bus Operators (Add Bus Operator Details) shows the page that can add a new bus operator if an Admin or Superadmin has pressed the add button in Admin Bus Operators Page. This page will let the Admin or Superadmin add a new bus operator. It also has a back button if the Admin or Superadmin wants to quit or a save button if Admin or Superadmin wants to save.

The screenshot shows the Admin Bus Routes Main Page. The left sidebar contains navigation links for CometBus, including Dashboard, Staffs / Admins, Bus Schedules, Bus Operators, Bus Routes (which is selected), Bus Drivers, Bus Informations, Customers, Booking Details, and Account. The main content area is titled "Bus Routes" and displays a table of bus routes. The table has columns for No., Starting Points, and Destinations. The data in the table is as follows:

No.	Starting Points	Destinations
1	Penang	Johor Bahru
2	Penang	Kuala Lumpur
3	Johor Bahru	Kuala Lumpur
4	Penang	Malacca

Total of 12 data in Database

Log Out | Adrea_23Rd SuperAdmin

Figure 4.2.4: Admin Bus Routes Main Page

Figure 4.2.4 shows the Admin Bus Routes Main Page. This page shows the details of Bus Routes. The page can search specific bus routes, sort the bus routes by ID and show desired rows from admin or.

The screenshot shows the Admin Bus Drivers Main Page. The left sidebar contains navigation links for CometBus, including Dashboard, Staffs / Admins, Bus Schedules, Bus Operators, Bus Routes (selected), Bus Drivers (which is selected), Bus Informations, Customers, Booking Details, and Account. The main content area is titled "Bus Drivers" and displays a table of bus drivers. The table has columns for No., Full Name, License Expiry Date, and Actions. The data in the table is as follows:

No.	Full Name	License Expiry Date	Actions
1	Mr Low Fong Zhi	2027-09-16	Edit ↗ Delete ✖ See all ➔
2	Ng Chun Hong	2025-10-30	Edit ↗ Delete ✖ See all ➔
3	Wesley Ser Wei Jie	2025-09-01	Edit ↗ Delete ✖ See all ➔
4	K. R.Arumugam	2023-11-19	Edit ↗ Delete ✖ See all ➔

Total of 13 data in Database

Log Out | Adrea_23Rd SuperAdmin

Figure 4.2.5: Admin Bus Drivers Main Page

Figure 4.2.5 shows the Admin Bus Drivers Main Page. This page shows the details of Bus Drivers. The page can search for a specific bus driver, sort the bus driver by ID, show desired rows from admin or Superadmin, edit the bus schedule, delete the bus schedule, view all bus schedule details, and add new bus drivers.

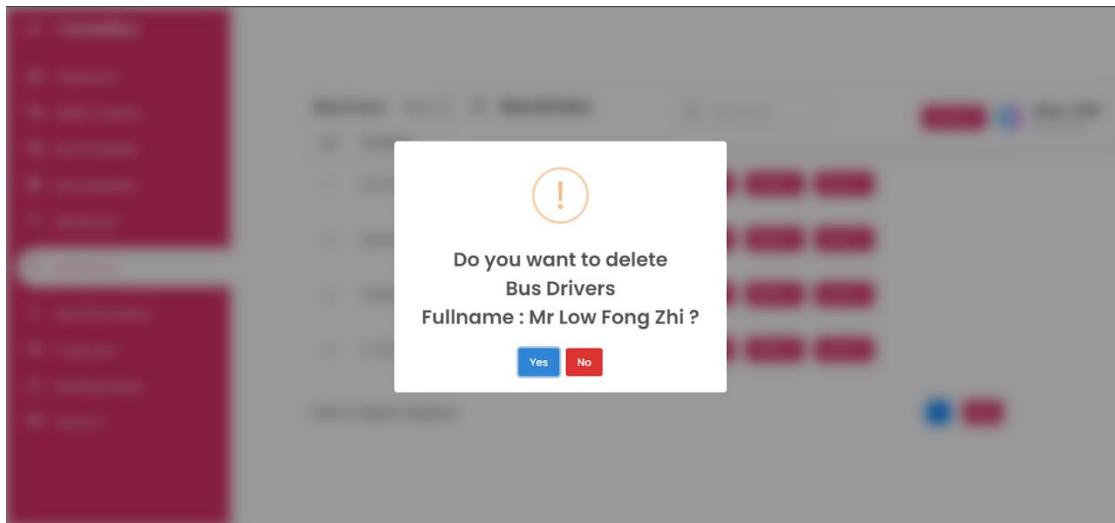


Figure 4.2.5: Admin Bus Drivers Main Page (Bus Driver Delete Button)

Figure 4.2.5 – Admin Bus Drivers Main Page (Bus Driver Delete Button), shows that if the admin or Superadmin presses the Bus Driver Delete button, it will display the prompt to make sure that if the Admin or Superadmin wants to delete the bus driver.

Figure 4.2.5: Admin Bus Drivers (Edit Bus Driver Details)

Figure 4.2.5 - Admin Bus Drivers (Edit Bus Driver Details) shows the page that can edit an existing bus driver if an Admin or Superadmin has pressed the edit button in Admin Bus Drivers Page. This page will let the Admin or Superadmin edit the bus driver's details. It also has a back button if the Admin or Superadmin wants to quit editing bus driver details and a save button if Admin or Superadmin wants to save.

See Driver's details

Driver ID : 14

Driver Fullname : Mr Low Fong Zhi

Driver Contact Number : 601265524339

Driver License expiry date : 09/16/2027

Driver Email : fongzhi00sf12@gmail.com

[Back to List](#)

Figure 4.2.5: Admin Bus Drivers (See All Bus Driver Details)

Figure 4.2.5 - Admin Bus Drivers (See All Bus Driver Details) shows the page that can view an existing bus driver if an Admin or Superadmin has pressed the See all button in Admin Bus Drivers Page. This page will let the Admin or Superadmin view all of the details of the bus driver. It also has a back button if the Admin or Superadmin wants to quit viewing bus driver details.

Add Bus Driver

Driver Fullname :

Driver Contact Number :

Driver License expiry date : mm/dd/yyyy

Driver Email :

[Back to List](#) [Save](#)

Figure 4.2.5: Admin Bus Drivers (Add Bus Driver Details)

Figure 4.2.5 - Admin Bus Drivers (Add Bus Driver Details) shows the page that can add a new bus driver if an Admin or Superadmin has pressed the add button in Admin Bus Drivers Page. This page will let the Admin or Superadmin add a new bus driver. It also has a back button if the Admin or Superadmin wants to quit adding a new bus driver or a save button if Admin or Superadmin wants to save.

The screenshot shows the 'Bus Informations' page of the CometBus system. On the left is a sidebar with various administrative links. The main area has a header 'Bus Informations' with a search bar and user info. Below is a table listing bus information with columns: No, Bus Number Plate, Bus Route ID with Starting Point, Bus Schedule ID with Boarding, and Actions. The table contains four rows of data.

No	Bus Number Plate	Bus Route ID with Starting Point	Bus Schedule ID with Boarding	Actions
1	WHA2597	1 - Malacca Driver name: S. A. Patto	II - Johor Bharu Sentral	<button>Edit ↎</button>
2	GG	1 - Malacca Driver name: Kasthuriarani a/l Rehman	3 - Kuala Lumpur Sentral	<button>Edit ↎</button>
3	HJF7612	1 - Malacca Driver name: Ngan Chung Say	6 - Penang Sentral	<button>Edit ↎</button>
4	WHY1567	1 - Malacca Driver name: Syed Zulman bin Wan Azizan Soberi	5 - Malacca Sentral	<button>Edit ↎</button>

Total of 8 data in Database

Figure 4.2.6: Admin Bus Informations Main Page

Figure 4.2.6 shows the Admin Bus Informations Main Page. This page shows the details of the bus information. The page can search specific bus information, sort the bus information by ID, show desired rows from admin or Superadmin, edit, and add new bus information.

The screenshot shows the 'Edit Bus Information' page. It has a similar sidebar to the main page. The main area has a header 'Edit Bus Information' with user info. It contains several input fields: 'Bus ID : 9', 'License Plate : WHA2597', 'Route ID : 1 - From Malacca to Kuala Lumpur', 'Bus Schedule ID : II - From Johor Bharu Sentral to Malacca Sentral', and 'Bus Driver : 7 - Driver Name : S. A. Patto'. At the bottom are 'Back to List' and 'Save' buttons.

Figure 4.2.6: Admin Bus Information (Edit Bus Informations Details)

Figure 4.2.6 - Admin Bus Information (Edit Bus Informations Details) shows the page that can edit existing bus information if an Admin or Superadmin has pressed the edit button on Admin Bus Informations Page. This page will let the Admin or Superadmin edit the bus information details. It also has a back button if the Admin or Superadmin wants to quit editing bus information's details and a save button if Admin or Superadmin wants to save.

The screenshot shows the 'Add Bus Informations' page. On the left is a sidebar with the 'CometBus' logo and various menu items: Dashboard, Staffs / Admins, Bus Schedules, Bus Operators, Bus Routes, Bus Drivers, Bus informations (which is selected), Customers, Booking Details, and Account. The main content area has a title 'Add Bus Informations'. It contains four input fields: 'Bus License Plate' (with a placeholder 'License Plate'), 'Route ID' (with a placeholder 'None'), 'Bus Schedule ID' (with a dropdown menu), and 'Bus Driver' (with a dropdown menu showing '9 - Driver Name : M. G. Samarasan'). At the bottom are two buttons: 'Back to List' and 'Save'.

Figure 4.2.6: Admin Bus Information (Add Bus Informations Details)

Figure 4.2.6 - Admin Bus Information (Add Bus Informations Details) shows the page that can add new bus information if an Admin or Superadmin has pressed the add button in Admin Bus Informations Page. This page will let the Admin or Superadmin add new bus information. It also has a back button if the Admin or Superadmin wants to quit adding new bus information or a save button if Admin or Superadmin wants to save.

The screenshot shows the 'Customers' page. The left sidebar is identical to Figure 4.2.6. The main area has a search bar with placeholder 'Search here'. Below it is a table with the following data:

No	Full Name	Username	Email Address	Actions
1	Boon Cheng Wai	BoonSewRt	BoonSewRt@gmail.com	See all →
2	Lok Ching Yi	LokTheBest12LL	LokChingYist4523@gmail.com	See all →
3	Chang Jia Xing	JiaXingIwe	ChangJiaXingIwe@gmail.com	See all →

At the bottom, there is a message 'Total of 3 data in Database' and a navigation bar with '1' and 'Next' buttons.

Figure 4.2.7: Admin Customer Main Page

Figure 4.2.7 shows the Admin Customer Main Page. This page shows the details of Bus Customers. The page can search for a specific customer, sort the Customer by ID ascending or descending, show desired rows from admin, and view all details of the customers.

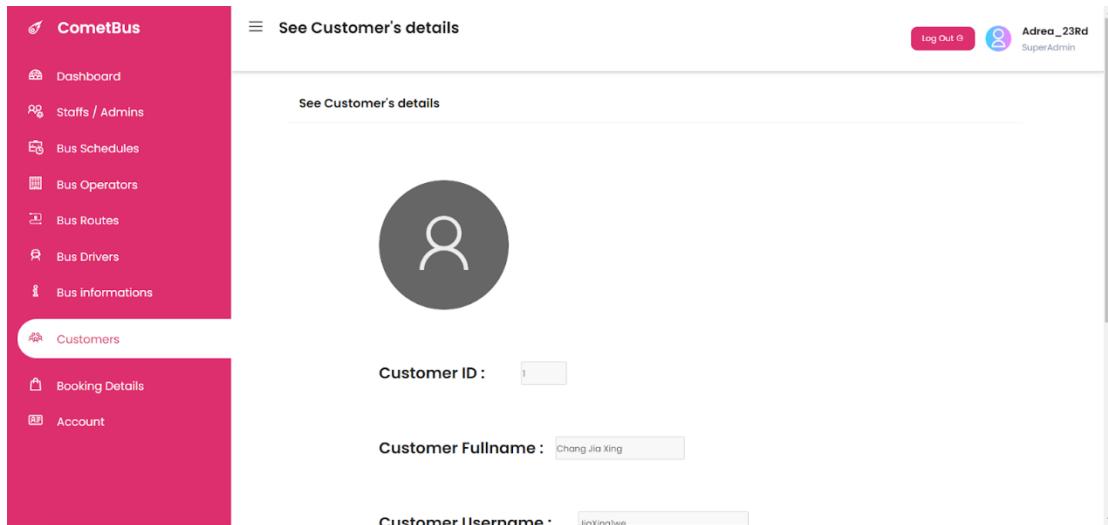


Figure 4.2.7: Admin Customer Page (See all Customer Details – Part 1)

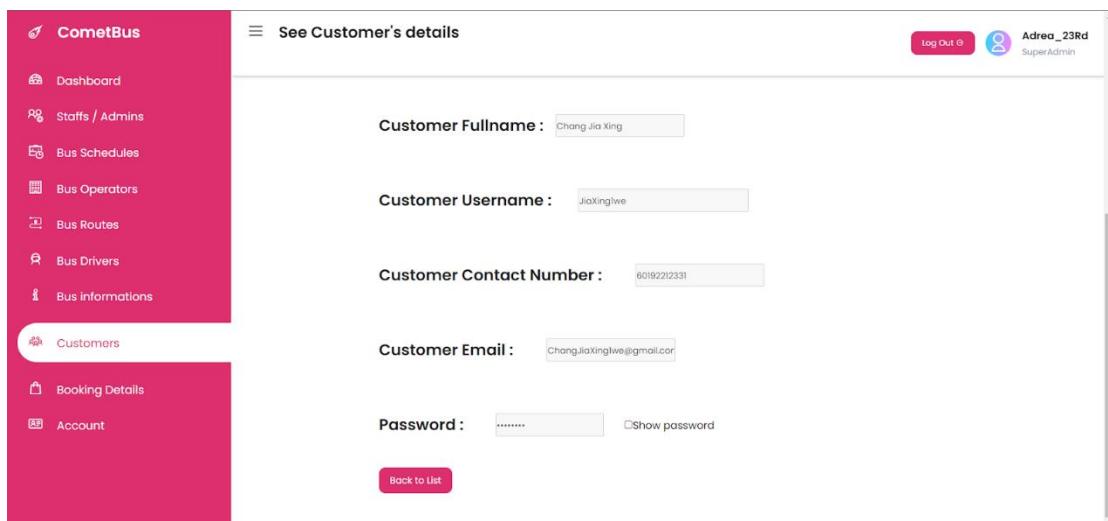


Figure 4.2.7: Admin Customer Page (See all Customer Details – Part 2)

Figure 4.2.7 - Admin Customer Page (See all Customer Details – Part 1 and Part 2) shows the page that can view existing customer details if an Admin or Superadmin has pressed the See all button in Admin Customers Page. This page will let the Admin or Superadmin view all of the details of the customers. It also has a back button if the Admin or Superadmin wants to quit viewing the Customer's details.

The screenshot shows the Admin Booking Details Main Page. On the left is a sidebar with navigation links: Dashboard, Staffs / Admins, Bus Schedules, Bus Operators, Bus Routes, Bus Drivers, Bus Informations, Customers, and the current selected link, Booking Details. Below these are Account and Logout links. The main content area has a header 'Booking Details' with a search bar and a dropdown menu 'DESC BY ID'. It displays a table with 4 rows of booking details:

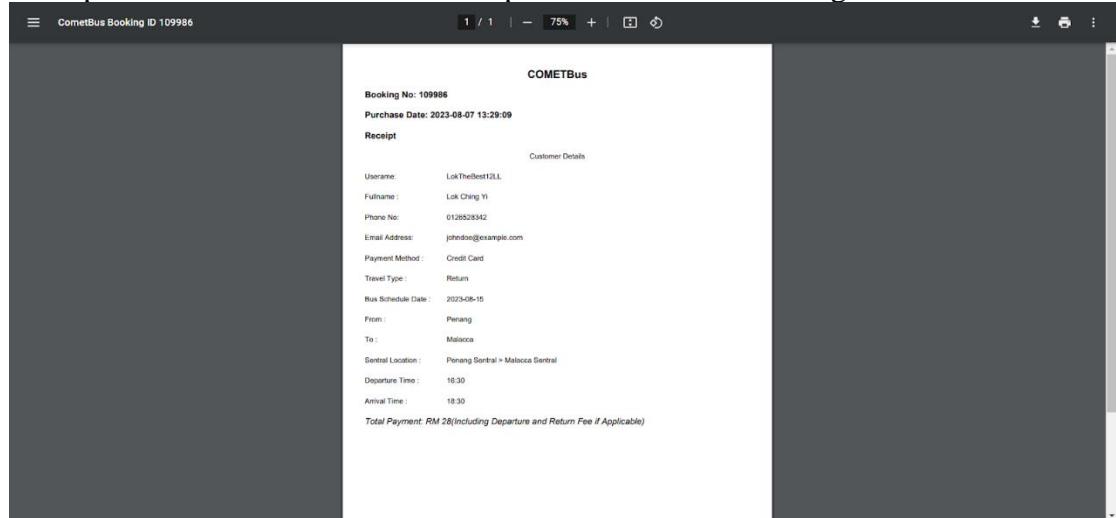
No	Fullname	User Contact Number	Total Payment	Payment Method	Departure Time (24-hour time notation)	Boarding	Alighting	Actions
1	Lok Ching Yi	0126528342	RM 28	Credit Card	16:30	Penang Sentral	Malacca Sentral	<button>See all</button> <button>Print</button>
2	Lok Ching Yi	0126528342	RM 28	Credit Card	14:00	Malacca Sentral	Penang Sentral	<button>See all</button> <button>Print</button>
3	Boon Cheng Wai	0182263543	RM 77	Credit Card	12:30	Johor Bharu Sentral	Kuala Lumpur Sentral	<button>See all</button> <button>Print</button>
4	Boon Cheng Wai	0182263543	RM 77	Credit Card	10:00	Kuala Lumpur Sentral	Johor Bharu Sentral	<button>See all</button> <button>Print</button>

Total of 7 data in Database

Figure 4.2.8: Admin Booking Details Main Page

Figure 4.2.8 shows the Admin Booking Details Main Page. This page shows the details of the booking details. The page can search for a specific booking detail, sort the booking details by ID in ascending or descending, show desired rows from admin or Superadmin, view all the booking details, and print booking details.

Example of print booking details:



Booking Details

Booking ID :	7
Booking Name :	Lok Ching Yi
Customer Contact Number :	0126528342
Customer Email Address :	john.doe@example.com
Customer Username :	LokTheBest123
Total Pay : RM	28
Payment Method :	Credit Card
Payment Date :	08/07/2023 01:29:09 PM
Booking Number:	109986
Booking Name for Seat:	John Doe
Travel Type:	Return

Figure 4.2.8: Admin Booking Details Page (See all Booking Details – Part 1)

Booking Details

Travel Type :	Return
Booking Seat :	D1
Booking Schedule ID :	6
Gate :	G
Booking Schedule Date :	08/15/2023
Booking Schedule Boarding Location :	Penang Sentral
Booking Schedule Alighting Location :	Malacca Sentral
Booking Schedule Departure Time :	04:30 PM
Booking Schedule Arrival Time :	06:30 PM
Booking Rating :	3

Figure 4.2.8: Admin Booking Details Page (See all Booking Details – Part 2)

Figure 4.2.8 - Admin Booking Details Page (See all Booking Details – Part 1 to Part 2) shows the page that can view existing booking details if an Admin or Superadmin has pressed the See all button in Admin Booking Details Page. This page will let the Admin or Superadmin view the booking details. It also has a back button if the Admin or Superadmin wants to quit viewing booking details.

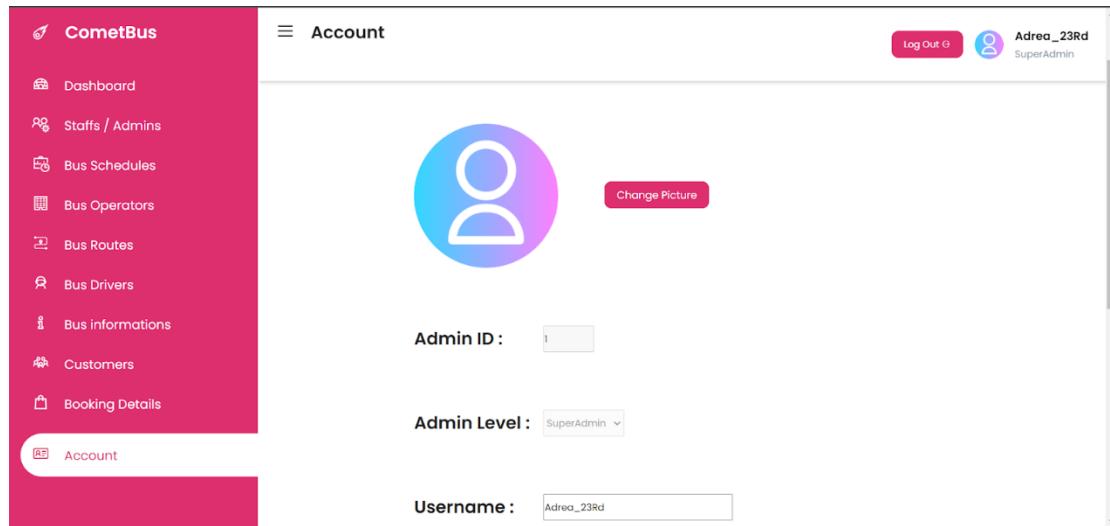


Figure 4.2.9: Admin Account Page – Edit Account (Part 1)

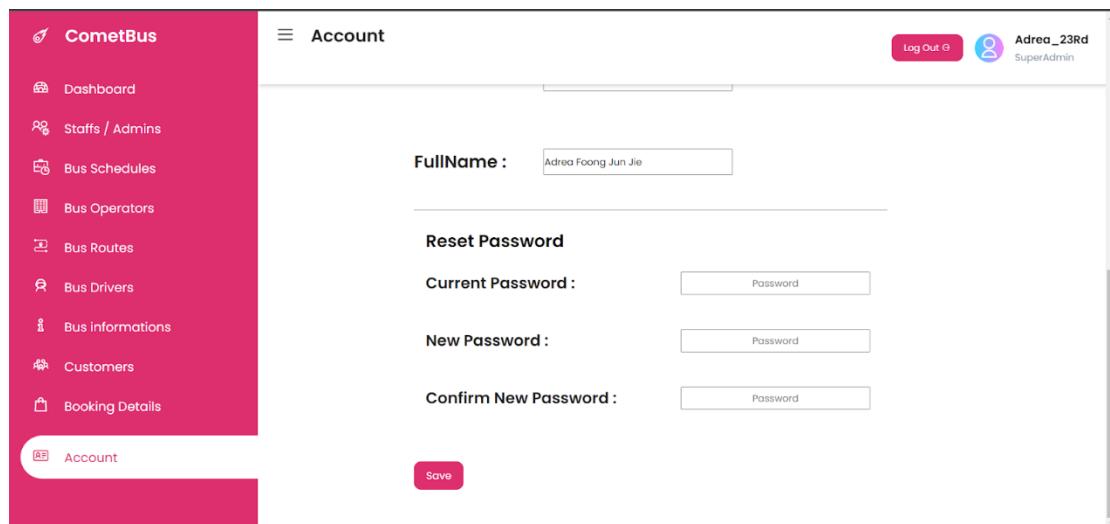


Figure 4.2.9: Admin Account Page – Edit Account (Part 2)

Figure 4.2.9 - Admin Account Page – Edit Account (Part 1 and Part 2) is the Admin Account details. On this page, logged-in admins can edit and save their account if Admin or Superadmin wants to save it. Admin or Superadmin also can reset their password if needed.

Part V:

System Testing

5.1 System Testing

Test ID	Test Case	Expected Result	Actual Result	Status
1	<p><u>Register</u></p> <p>Enter valid fullname, phone number, email address, username, password and confirm password.</p> <p>Click the “Sign Up” button.</p>	<ul style="list-style-type: none"> • Users should be able to register an account. 	<ul style="list-style-type: none"> • User is able to register an account 	Pass
2	<p><u>Login:</u></p> <p>Enter valid username and valid password.</p> <p>Click the “Login” button.</p>	<ul style="list-style-type: none"> • Users should be able to login to the user page. If the user's username and password match with the admin's username and password it will login to the admin page. 	<ul style="list-style-type: none"> • User is able to login. 	Pass
3	<p><u>Forgot Password</u></p> <p>Enter valid email address and enter verification code to reset password.</p>	<ul style="list-style-type: none"> • User should be able to reset their password if the email address is in our database and the verification 	<ul style="list-style-type: none"> • User is able to reset their password. 	Pass

		<p><i>code is correct. Users will receive the verification code via email if the email address is in our database.</i></p>		
4	<p><u>User Profile</u></p> <p><i>View user profile and edit user profile.</i></p>	<ul style="list-style-type: none"> ● <i>User should be able to view and edit their profile. If user want to change password it will check the old password entered by user is correct or not if correct user able to change their password.</i> ● <i>User is able to view and edit their profile.</i> 	Pass	
5	<p><u>Booking</u></p> <p><i>Choose valid origin, destination and departure date. Return date is optional.</i></p>	<ul style="list-style-type: none"> ● <i>User should be able to select the bus schedule and book the seat.</i> ● <i>User is able to select the bus schedule and book the seat.</i> 	Pass	

	<p><i>Click “SEARCH” button.</i></p>	<p><i>If user has select return date</i></p> <ul style="list-style-type: none">● <i>User should be able to select the return bus schedule and book the seat.</i>	<p><i>If user has select return date</i></p> <ul style="list-style-type: none">● <i>User is able to select the return bus schedule and book the seat.</i>	
6	<p><u><i>Fill Up Passenger Info</i></u> <i>Enter a valid name, age, email address and phone number.</i> <i>Click “PROCEED TO PAY” button.</i></p>	<ul style="list-style-type: none">● <i>User should be able to go to the payment page with correct information.</i>	<ul style="list-style-type: none">● <i>User is able to go to the payment page with correct information.</i>	Pass
7	<p><u><i>Make Payment</i></u> <i>Enter a valid payment method.</i> <i>Click “MAKE PAYMENT” button.</i></p>	<ul style="list-style-type: none">● <i>User should be able to key in payment information.</i>● <i>User should be able to make payment with correct information.</i>	<ul style="list-style-type: none">● <i>User is able to key in the payment information.</i>● <i>User is able to make payment with correct information.</i>	Pass
8	<p><u><i>Transaction Details</i></u> <i>Email will be sent to email address entered by user.</i></p>	<ul style="list-style-type: none">● <i>User should be able to receive an email if the email is valid.</i>	<ul style="list-style-type: none">● <i>User is able to receive an email if the email is valid.</i>	Pass

	<i>View the transaction details.</i>	<ul style="list-style-type: none"> ● User should be able to view the transaction details. 	<ul style="list-style-type: none"> ● User is able to view the transaction details. 	
9	<p><u><i>View Order History</i></u></p> <p><i>View their order history and rate for a trip.</i></p>	<ul style="list-style-type: none"> ● User should be able view their order history and rate for a trip. 	<ul style="list-style-type: none"> ● User able to view order history and rate for a trip. 	Pass
10	<p><u><i>Logout</i></u></p> <p><i>Click the “Logout” button.</i></p>	<ul style="list-style-type: none"> ● User should be able logout their account and cannot go back, even click the browser's back button. 	<ul style="list-style-type: none"> ● User able to log out their account and after logout user unable to use the back button to go back to the previous page. 	Pass
11	<p><u><i>Add, Edit, View all, Deactivate or Activate, and Delete Staff</i></u></p> <p><i>Superadmin can add, edit, deactivate or activate, and delete staff.</i></p>	<ul style="list-style-type: none"> ● Superadmin should be able add, edit, deactivate or activate, and delete staff. 	<ul style="list-style-type: none"> ● Superadmin is able to add, edit, deactivate or activate, and delete staff. 	Pass
12	<p><u><i>Add, Edit, View all, Deactivate or Activate, and Delete Bus Schedule</i></u></p>	<ul style="list-style-type: none"> ● Admin or Superadmin should be able to add, edit, 	<ul style="list-style-type: none"> ● Admin or Superadmin is able to add, edit, 	Pass

	<i>Admin or Superadmin can add, edit, deactivate or activate, and delete bus schedules.</i>	<i>deactivate or activate, and delete bus schedules.</i>	<i>deactivate or activate, and delete bus schedules.</i>	
13	<p><u>Add, Edit, Deactivate or Activate Bus Operator</u></p> <p><i>Admin or Superadmin can add, deactivate or activate, edit bus operator</i></p>	<ul style="list-style-type: none"> ● Admin or Superadmin should add, deactivate or activate,edit bus operator 	<ul style="list-style-type: none"> ● Admin or Superadmin be able to add, deactivate or activate, edit bus operator 	Pass
14	<p><u>View Bus Routes</u></p> <p><i>Admin or Superadmin can view bus route</i></p>	<ul style="list-style-type: none"> ● Admin or Superadmin can view bus route 	<ul style="list-style-type: none"> ● Admin or Superadmin view bus route 	Pass
15	<p><u>Add, Edit, Delete, View all Bus Drivers</u></p> <p><i>Admin or Superadmin can add, edit, delete, and view all bus driver</i></p>	<ul style="list-style-type: none"> ● Admin or Superadmin should be able to add, edit, delete, and view all bus drivers 	<ul style="list-style-type: none"> ● Admin or Superadmin be able to add, edit, delete, and view all bus drivers 	Pass
16	<p><u>Add, Edit, Delete Bus information</u></p> <p><i>Admin or Superadmin can add, edit, and delete bus information</i></p>	<ul style="list-style-type: none"> ● Admin or Superadmin should be able to add, edit, and delete bus information 	<ul style="list-style-type: none"> ● Admin or Superadmin be able to add, edit, and delete bus information 	Pass

17	<u><i>View all Customers</i></u> Admin or Superadmin can view all customers' details	• Admin or Superadmin should be able to view all customers' details	• Admin or Superadmin should be able to view all customers' details	Pass
18	<u><i>View all, print booking details</i></u> Admin or Superadmin can view, and print booking details	• Admin or Superadmin should be able to view, and print booking details	• Admin or Superadmin be able to view, and print booking details	Pass
19	<u><i>Edit own Admin account</i></u> Admin or Superadmin can edit their own admin account	• Admin or Superadmin should be able to edit their own admin account	• Admin or Superadmin be able to edit their own admin account	Pass
20	<u><i>Admin Logout:</i></u> Logout and clear user session	• Admin should be to log out of the Admin page	• Admin should be to log out of the Admin page	Pass

Table 5.1.1: System Testing

Part VI:

Conclusion

6.1 Conclusion

In conclusion, our bus ticket booking system has successfully achieved its objectives of providing a convenient and efficient method for customers to purchase tickets online. By utilizing our system, customers can save a significant amount of time and effort compared to traditional ticket booking methods. They can easily browse and select their desired bus routes, including the origin and destination, time, and day of travel. To ensure a seamless experience, we have implemented a user registration process. Customers are required to sign up or log in before using the system to purchase tickets. This registration process eliminates the need for customers to manually enter their personal information each time they make a ticket purchase. It provides a streamlined and hassle-free ticket booking experience.

Our system offers a user-friendly interface, allowing customers to navigate through the ticket selection process without any difficulties. Customers have the flexibility to choose from a variety of available buses and seats, providing them with a hassle-free ticket booking experience. Furthermore, our system provides efficient operations for the staff managing the bus ticket booking process. Staff members have access to manage various aspects of the system, such as bus information and bus schedules. They can also view and check customer profiles and payment history, contributing to effective management of the system.

Throughout the project, we faced several challenges, including debugging errors, refining the design and functionality of the system, and ensuring that the system met our expectations. We gained valuable experience in problem-solving, communication, and teamwork while working together to overcome these challenges.

Despite the challenges, we are proud of the project's outcome. In conclusion, we thank our advisor and fellow group members for contributing to

this project. Our collective efforts have allowed us to create a system we are proud of, and we look forward to applying the knowledge and skills gained from this project to future projects.

6.2 Future Enhancements

In our system, we firstly did not include SMS notifications. This is because we use email features as a gateway to communicate with the users. Additionally, if users made the wrong payment after making a reservation, our system does not offer a refund. This is a result of our payment gateway's carelessness. Therefore, before booking a ticket, users should double-check the information. After that, live chat features were not covered in our system. Users occasionally ask us questions, but we are unable to immediately respond to them. We can only respond to their inquiries via system email. Moreover, the e-wallet payment option was not supported by our system. In addition, there is no QR code on the ticket to make it more convenient for users. We will have more enhancements in the future.

For the admin part, our system will undergo an exciting enhancement that aims to revolutionize the way bus operators manage their operations. One crucial aspect of this upgrade will be the introduction of separate admin pages for each bus operator, providing them with personalized control and efficiency. With this advanced system, bus operators will gain access to their dedicated admin page, tailored specifically to their unique needs and requirements. This specialized interface will empower operators to efficiently oversee various aspects of their operations, including scheduling, ticketing, fleet management, and passenger data analysis.

Part VII:

References

(n.d.). SweetAlert2 - a beautiful, responsive, customizable and accessible (WAI-ARIA) replacement for JavaScript's popup boxes. Retrieved June 8, 2023, from <https://sweetalert2.github.io/#examples>

(n.d.). FPDF. Retrieved June 8, 2023, from <http://www.fpdf.org/>

Part VIII:

Appendix

Appendix A: Meeting minutes

Meeting 1

Date : 8 November 2022

Time : 12.00 p.m. to 12.30 p.m.

Venues : MBMR3001

Members : Tay Han Chung, Mah Qi Xiang, ADREA
FOONG JUN JIE

Present :	Absent
1. Tay Han Chung 2. Mah Qi Xiang 3. Adrea Foong Jun Jie	

Minute	Item	Action By
1.0	<u>Minutes of previous meeting.</u> 1.1 Meet in MBMR3001	All Members

2.0	<u>Report on progress</u> 2.1 All members showed system proposal to Ms. Lim and asked for some suggestions to improve it.	All Members
3.0	<u>Discussion items</u> 3.1 Discuss the system proposal.	All Members
4.0	<u>Goals for the coming week</u> 4.1 Improve the contents of the system proposal.	All Members
5.0	<u>Meeting adjournment and next meeting</u> 5.1 The next meeting will be held on 27 March 2023 at 2:30 p.m.	All Members

Prepared by:

Checked by (Supervisor) :



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(Tay Han Chung)

(Miss Lim Liyen)

Meeting 2

Date : 27 March 2023

Time : 2.30 p.m. to 3.00 p.m.

Venues : MBMR3001

Members : Tay Han Chung, Mah Qi Xiang, ADREA
FOONG JUN JIE

Present :	Absent
4. Tay Han Chung 5. Mah Qi Xiang 6. Adrea Foong Jun Jie	

Minute	Item	Action By
1.0	<u>Minutes of previous meeting.</u> 1.1 Meet in MBMR3001	All Members
2.0	<u>Report on progress</u> 2.1 All members showed html progress to Ms. Lim and asked for some suggestions to improve it.	All Members

3.0	<u>Discussion items</u> 3.1 Discuss the system flow for user site and admin site and ask for suggestions.	All Members
4.0	<u>Goals for the coming week</u> 4.1 Improve the interface design for user site and admin site.	All Members
5.0	<u>Meeting adjournment and next meeting</u> 5.1 The next meeting will be held on 10 April 2023 at 2:30 p.m.	All Members

Prepared by:



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(Tay Han Chung)

Checked by (Supervisor) :

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(Miss Lim Liyen).

Meeting 3

Date : 10 April 2023

Time : 2.30 p.m. to 3.00 p.m.

Venues : MBMR3001

Members : Tay Han Chung, Mah Qi Xiang, ADREA
FOONG JUN JIE

Present :	Absent
7. Tay Han Chung 8. Mah Qi Xiang 9. Adrea Foong Jun Jie	

Minute	Item	Action By
1.0	<u>Minutes of previous meeting.</u> 1.1 Meet in MBMR3001	All Members
2.0	<u>Report on progress</u> 2.1 All members showed the system interface design to Ms. Lim and asked for some suggestions to improve it.	All Members

3.0	<u>Discussion items</u> 3.1 Discuss the system flow for user site and admin site and ask for suggestions.	All Members
4.0	<u>Goals for the coming week</u> 4.1 Improve the booking process, log in and sign up process for the user site.	All Members
5.0	<u>Meeting adjournment and next meeting</u> 5.1 The next meeting will be held on 18 April 2023 at 2:30 p.m.	All Members

Prepared by:



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(Tay Han Chung)

Checked by (Supervisor) :

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(Miss Lim Liyen).

Meeting 4

Date : 18 April 2023

Time : 2.30 p.m. to 3.00 p.m.

Venues : MBMR3001

Members : Tay Han Chung, Mah Qi Xiang, ADREA
FOONG JUN JIE

Present :	Absent
10. Tay Han Chung 11. Mah Qi Xiang 12. Adrea Foong Jun Jie	

Minute	Item	Action By
1.0	<u>Minutes of previous meeting.</u> 1.1 Meet in MBMR3001	All Members
2.0	<u>Report on progress</u> 2.1 All members showed their own progress to Ms. Lim and asked for some suggestions to improve it.	All Members

3.0	<u>Discussion items</u> 3.1 Discuss the system flow for user site and admin site and ask for suggestions.	All Members
4.0	<u>Goals for the coming week</u> 4.1 Improve the booking process for the user site and complete the one-way trip and round-trip schedule.	All Members
5.0	<u>Meeting adjournment and next meeting</u> 5.1 The next meeting will be held on 2 May 2023 at 2:30 p.m.	All Members

Prepared by:

Checked by (Supervisor) :



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(Tay Han Chung)

(Miss Lim Liyen).

Meeting 5

Date : 2 May 2023

Time : 2.30 p.m. to 3.00 p.m.

Venues : MBMR3001

Members : Tay Han Chung, Mah Qi Xiang, ADREA
FOONG JUN JIE

Present :	Absent
13. Tay Han Chung 14. Mah Qi Xiang 15. Adrea Foong Jun Jie	

Minute	Item	Action By
1.0	<u>Minutes of previous meeting.</u> 1.1 Meet in MBMR3001	All Members
2.0	<u>Report on progress</u> 2.1 All members showed php progress and interface outcome to Ms. Lim and asked for some suggestions to improve it.	All Members

3.0	<u>Discussion items</u> 3.1 Discuss the system flow for user site and admin site and ask for suggestions.	All Members
4.0	<u>Goals for the coming week</u> 4.1 Complete the payment process for the user site and view records in the admin site.	All Members
5.0	<u>Meeting adjournment and next meeting</u> 5.1 The next meeting will be held on 16 May 2023 at 4:00 p.m.	All Members

Prepared by:



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(Tay Han Chung)

Checked by (Supervisor) :

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(Miss Lim Liyen).

Meeting 6

Date : 16 May 2023

Time : 4.00 p.m. to 4.30 p.m.

Venues : MBMR3001

Members : Tay Han Chung, Mah Qi Xiang, ADREA
FOONG JUN JIE

Present :	Absent
16. Tay Han Chung 17. Mah Qi Xiang 18. Adrea Foong Jun Jie	

Minute	Item	Action By
1.0	<u>Minutes of previous meeting.</u> 1.1 Meet in MBMR3001	All Members
2.0	<u>Report on progress</u> 2.1 All members showed their own progress to Ms. Lim and asked for some suggestions to improve it.	All Members

3.0	<u>Discussion items</u> 3.1 Discuss the system flow for user site and admin site and ask for suggestions.	All Members
4.0	<u>Goals for the coming week</u> 4.1 Complete the validation and send email function in the user site and add new records in the admin site.	All Members
5.0	<u>Meeting adjournment and next meeting</u> 5.1 The next meeting will be held on 22 May 2023 at 2:30 p.m.	All Members

Prepared by:

Checked by (Supervisor) :

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(Tay Han Chung)

(Miss Lim Liyen).

Meeting 7

Date : 22 May 2023

Time : 2.30 p.m. to 3.00 p.m.

Venues : MBMR3001

Members : Tay Han Chung, Mah Qi Xiang, ADREA
FOONG JUN JIE

Present :	Absent
19. Tay Han Chung 20. Mah Qi Xiang 21. Adrea Foong Jun Jie	

Minute	Item	Action By
1.0	<u>Minutes of previous meeting.</u> 1.1 Meet in MBMR3001	All Members
2.0	<u>Report on progress</u> 2.1 All members showed their own progress to Ms. Lim and asked for some suggestions to improve it.	All Members

3.0	<u>Discussion items</u> 3.1 Discuss the validation and email function for user site and buttons function in admin site and ask for suggestions.	All Members
4.0	<u>Goals for the coming week</u> 4.1 Enhance the validation and email template in the user site and edit records in the admin site.	All Members
5.0	<u>Meeting adjournment and next meeting</u> 5.1 The next meeting will be held on 6 June 2023 at 12:30 p.m.	All Members

Prepared by:

Checked by (Supervisor) :



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(Tay Han Chung)

(Miss Lim Liyen).

Meeting 8

Date : 6 June 2023

Time : 12.30 p.m. to 1.50 p.m.

Venues : MBMR3001

Members : Tay Han Chung, Mah Qi Xiang, ADREA
FOONG JUN JIE

Present :	Absent
22. Tay Han Chung 23. Mah Qi Xiang 24. Adrea Foong Jun Jie	

Minute	Item	Action By
1.0	<u>Minutes of previous meeting.</u> 1.1 Meet in MBMR3001	All Members
2.0	<u>Report on progress</u> 2.1 All members showed the combined system to Ms. Lim and asked for some suggestions to improve it.	All Members

3.0	<u>Discussion items</u> 3.1 Discuss the combined system functions.	All Members
4.0	<u>Goals for the coming week</u> 4.1 Proceed with a rehearsal.	All Members
5.0	<u>Meeting adjournment and next meeting</u> 5.1 The next meeting will be held on 12 June 2023 at 2:00 p.m.	All Members

Prepared by:


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(Tay Han Chung)

Checked by (Supervisor) :

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(Miss Lim Liyen).

Appendix B: Website Samples/Questionnaire/Forms

The screenshot shows a payment form divided into two main sections: 'BILLING ADDRESS' on the left and 'PAYMENT' on the right.

BILLING ADDRESS:

- Full Name: john deo
- Email: example@example.com
- Address: room - street - locality
- City: mumbai
- State: india
- Zip Code: 123 456

PAYMENT:

- Cards Accepted: PayPal, MasterCard, American Express, VISA
- Name On Card: mr. john deo
- Credit Card Number: 1111-2222-3333-4444
- Exp Month: january
- Exp Year: 2022
- CVV: 1234

Proceed To Checkout

Figure 8.1: Example Payment Form