



Green University of Bangladesh

*Department of Computer Science and Engineering (CSE)
Semester: (Spring, Year: 2023), B.Sc. in CSE (Day)*

Assistant of Traveler

*Course Title: Object Oriented Programming Lab
Course Code: CSE 202
Section: DD*

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<u>Lab Project Status</u>	
Marks:	Signature:
Comments:	Date:

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Chapter 1

1.1 Introduction

An online bus ticketing system is a simple automated system that allows passengers to process internet-based buying ticket from online through a branded website or mobile app. An online ticketing system enables a much quicker service and save much time. So, I have built this assistant system. The Online Buying System is aimed at providing a convenient platform for users to purchase bus tickets online. It simplifies the process of searching for available buses, selecting a suitable option, and making the purchase. The system is designed to be user-friendly and easy to manage for both users and administrators.

1.2 Objectives:

The primary objectives of the Online Buying System project are as follows:=

- To develop a application that allows users to search for available buses based on their present location and destination.
- To enable users to select and purchase bus tickets online, providing them with a hassle-free experience.
- To create an admin interface that allows easy management of bus records.
- To make a simple and easier system for customers to order food on online.
- To make easy to get ticket anytime at any place.

1.3 Features:

The Online Buying System offers the following key features:

- User-friendly Interface: The system provides a simple and intuitive interface for users to input their present location and destination.

- Bus Search: Based on the user's input, the system displays a list of available buses along with their names and relevant details.
- Ticket Purchase: Users can choose a bus from the list and proceed to purchase the tickets online, eliminating the need for physical ticket counters.
- Admin Panel: An administrative interface is available to the system administrator, allowing them to manage bus records and add bus stoppages easily.
- Easy to get all ticket purchasing data
- This system can be used from anywhere anytime

Chapter 2

2.1 Algorithm

```
1      #start-> Display the home page showing:  
2      i. Log In As Admin,      ii. log in as User
```

```
1      Log In as USER  
2  
3      1. Find Bus  
4      2. Change Password  
5      3. History of Buying Ticket
```

```
1      Find Bus  
2  
3      1. Take the present and destination stoppage name  
4          If present & destination is matched with any bus path,  
5              -->Display the buses name  
6      2. Take bus name and Go For Next Frame  
7      3. Go Confirmation process  
8      4. After being done payment process Display the ticket  
9      5. Add Buying history to database
```

```
1      Change Password  
2  
3      1. Take the current password and new password  
4          If current password is matched with the user data,  
5              --> Password may be changed in database
```

```
1      Show History of buying Tickets  
2  
3      1. Connect to database  
4      2. Match the Ticket buying data with logged in user name  
5          If matched,  
6              --> add object row to JTable
```

```
1      ADMIN Panel  
2  
3      1. Add New Bus Record  
4      2. Update Bus Path & Cost
```


Chapter 3

3.1 Methodology

- **Encapsulation:** Encapsulation in Java refers to integrating data (variables) and code (methods) into a single unit. In encapsulation, a class's variables are hidden from other classes and can only be accessed by the methods of the class in which they are found.
- **Exception Handling:** The Exception Handling in Java is one of the powerful mechanism to handle the runtime errors so that the normal flow of the application can be maintained.
- **static keywords:** The static keyword is used to represent the class member. It is basically used with methods and variables to indicate that it is a part of the class, not the object.
- **String, hashmap :** In Java, string is basically an object that represents sequence of char values. An array of characters works same as Java string. Java HashMap class implements the Map interface which allows us to store key and value pair, where keys should be unique.
- **Built in packages:** Packages in java are used to avoid naming conflict and to control the access of class, interface, sub-classes, etc. A package can be defined as a group of similar types of classes, sub-classes, interfaces or enumerations, etc. while using packages it becomes easier to locate or find the related classes and packages provides a good structure or outline of the project with a huge amount of classes and files.
- **Swing:** Java Swing is a part of Java Foundation Classes (JFC) that is used to create window-based applications. It is built on the top of AWT (Abstract Windowing Toolkit) API and entirely written in java.
- **MySQL Database:** MySQL is a relational database management system based on the Structured Query Language, which is the popular language for accessing and managing the records in the database. MySQL is open-source and free software under the GNU license.

3.2 Results

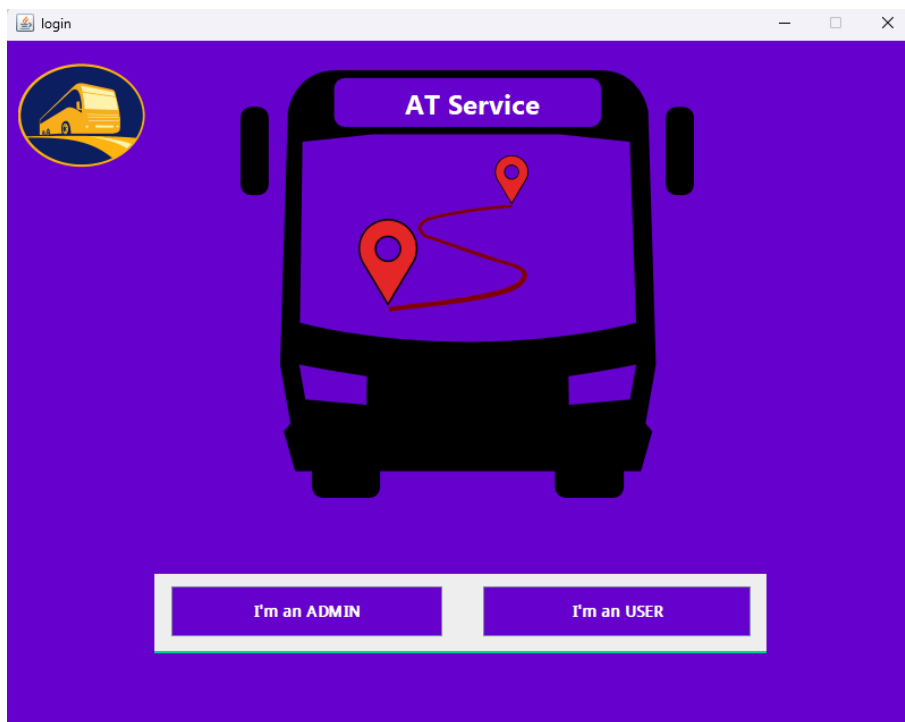


Figure 3.1: First Page

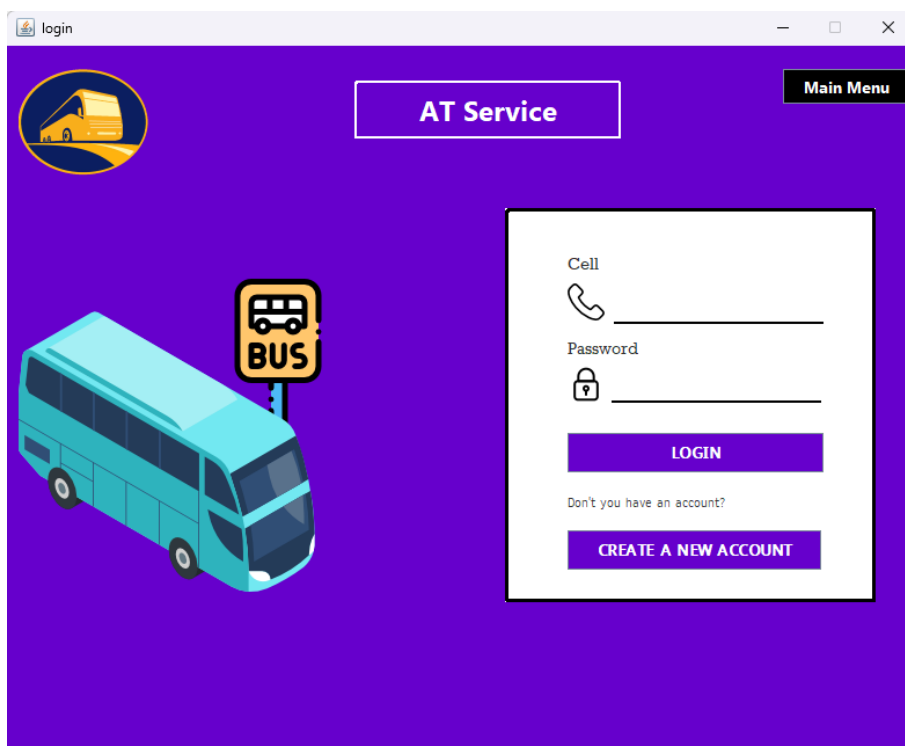


Figure 3.2: User Log In Page

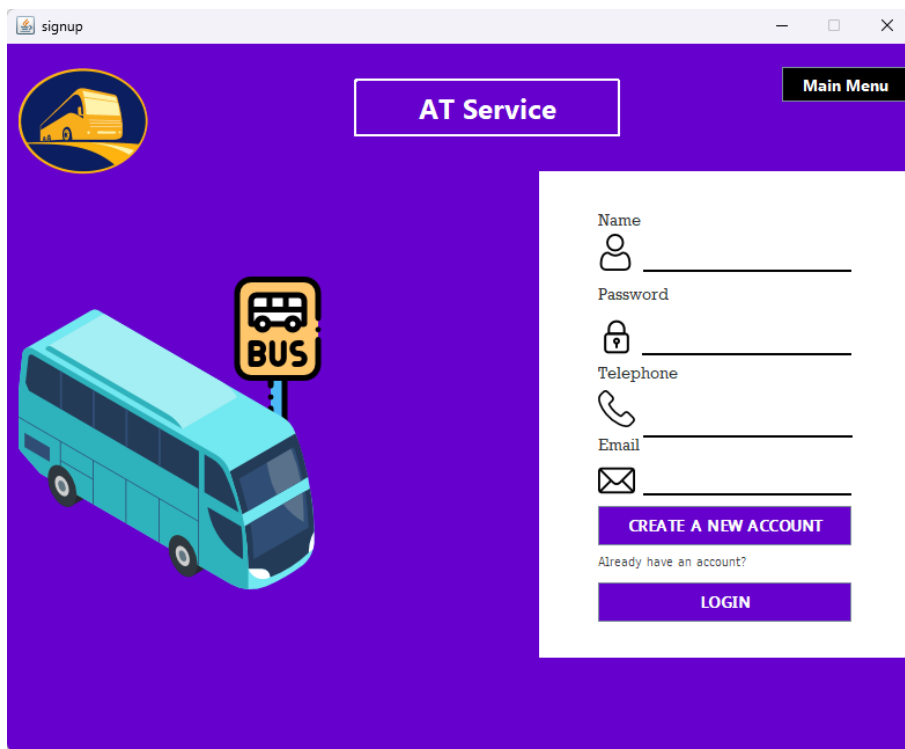


Figure 3.3: User Create Account Page

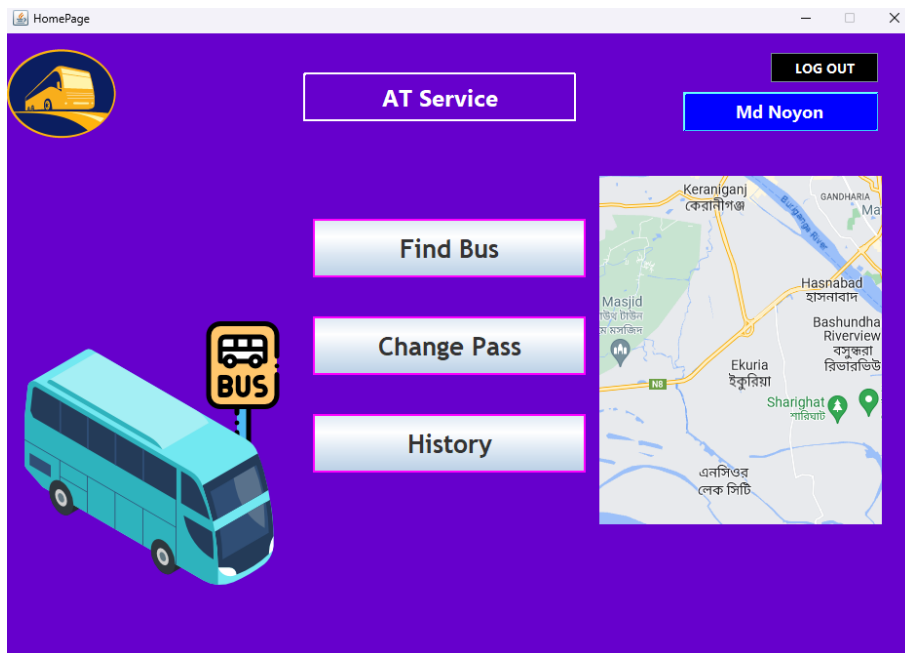


Figure 3.4: User Home Page

HomePage

BACK LOG OUT

Present Stoppage: Matuail Medical

Destination:

SEARCH

BUS NAME	COST (TK)	DISTANCE

BUY TICKET

Figure 3.5: Searching for Bus

HomePage

BACK LOG OUT

Present Stoppage: Vulta Gawsia

Destination: Kachpur

SEARCH BUS

BUS NAME	COST (TK)	DISTANCE (km)	PATH
Jubokollan	42	13	Vulta Gawsia --> Borpa --> Rupshi --> Tarabo Bissho Road --> Kachpur
Meghla	45	13	Vulta Gawsia -> Borpa -> Rupshi -> Tarabo Bissho Road -> Kachpur

BUY TICKET

Figure 3.6: Select from Bus list

HomePage

AT Service

BACK LOG OUT

Md Noyon

Bus, You Have Chosen:

BUS NAME: jubokollan

COST (TK): 42

FROM : Vulta Gawsia TO: Kachpur

Path: Gawsia --> Borpa --> Rupshi --> Tarabo Bissho Road --> Kachpur

GO FOR PAYMENT

Figure 3.7: Confirmation page

HomePage

AT Service

BACK LOG OUT

Md Noyon

Complete this process to get ticket:

Code:

Pin:

GET CODE

Message

Code has been sent to your mobile number.

OK

Figure 3.8: Payment page

HomePage

BACK LOG OUT

Md Noyon

Complete this process to get ticket:

BKash Number: 01928136893

Paying (TK): 42

Code: 4262

Pin:

CONFIRM PAY

Figure 3.9: payment page (2)

HomePage

BACK LOG OUT

Md Noyon

TICKET

SL: 1010

Bus Name: jubokollan

FROM: Vulta Gawsia

TO: Kachpur

Cost: 42

Time: 2023/06/20 06:33:08

GO BACK TO HOME

Figure 3.10: Ticket

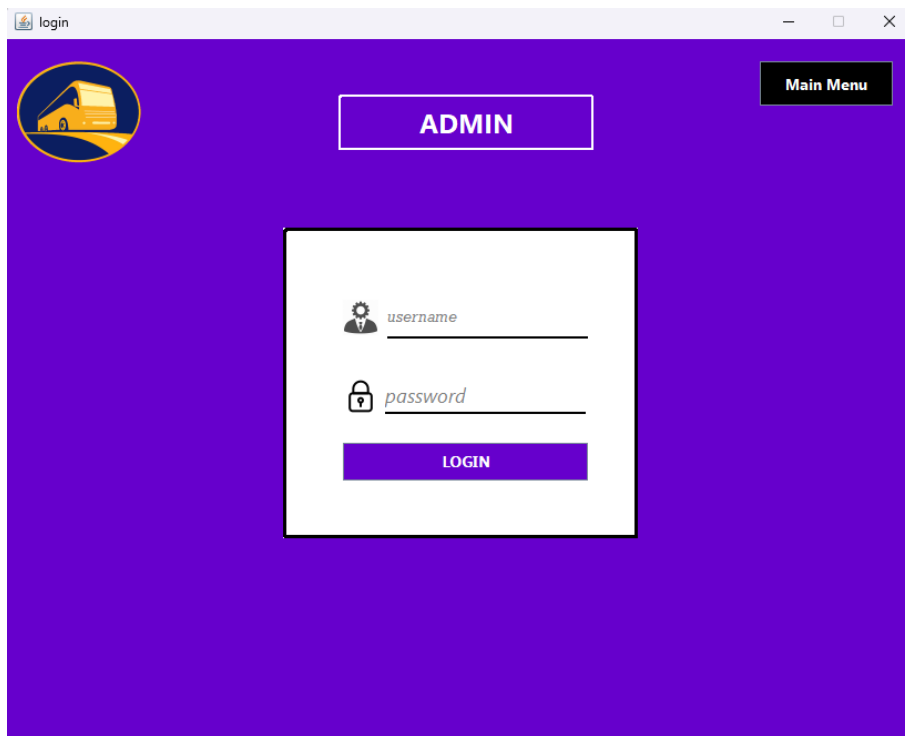


Figure 3.11: Admin Login Page

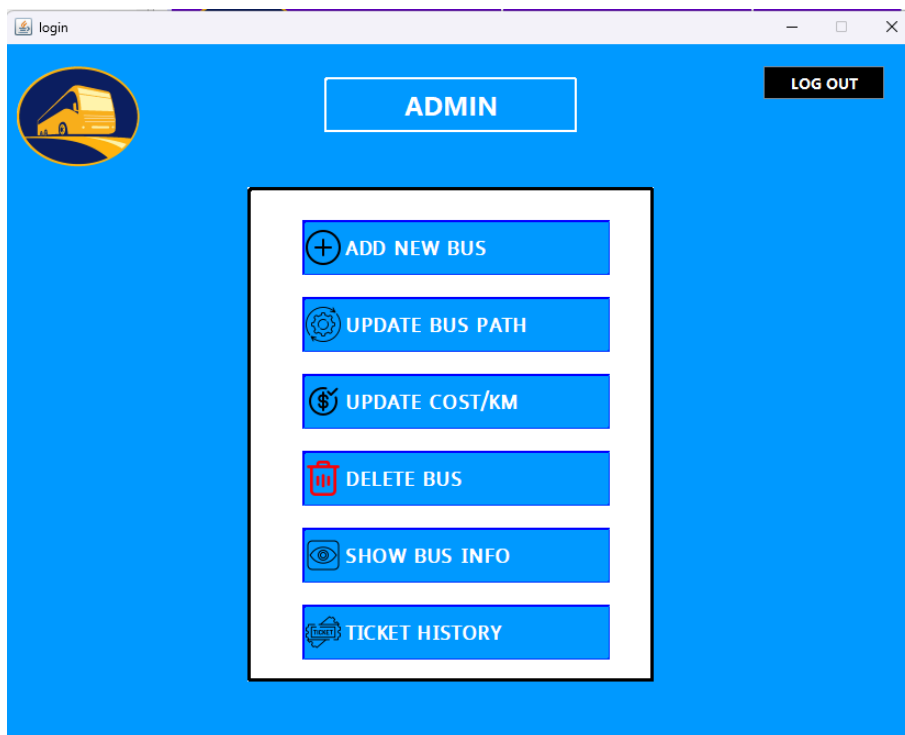


Figure 3.12: Admin Home panel

The screenshot shows a web browser window with a purple background. In the top left corner, there is a circular logo featuring a yellow bus. The title 'ADD NEW BUS' is centered at the top in white text. To the right of the title are two black buttons labeled 'Back' and 'LOG OUT'. The main form area is white and contains the following fields: 'Bus Name:' with a text input, 'Cost (/KM):' with a text input, 'Stations:' with a text input, and 'Distance:' with a text input. Below these fields are two buttons: a blue 'CONFIRM' button and a cyan 'ADD NEW STOPPAGE' button. At the bottom of the form is a 'Path:' label followed by a large cyan text area.

Figure 3.13: Add new bus

The screenshot shows a web browser window with a purple background. In the top left corner, there is a circular logo featuring a yellow bus. The title 'UPDATE STOPPAGE' is centered at the top in white text. To the right of the title are two black buttons labeled 'BACK' and 'LOG OUT'. The main form area is white and contains the following fields: 'Bus Name:' with a dropdown menu and a green refresh icon to its right, 'Stoppage:' with a dropdown menu, a dashed horizontal line, 'New Stoppage:' with a text input, 'New Distance:' with a text input, and two buttons: a blue 'DELETE' button and a cyan 'UPDATE STOPPAGE' button. At the bottom of the form is a 'Path:' label followed by a large cyan text area.

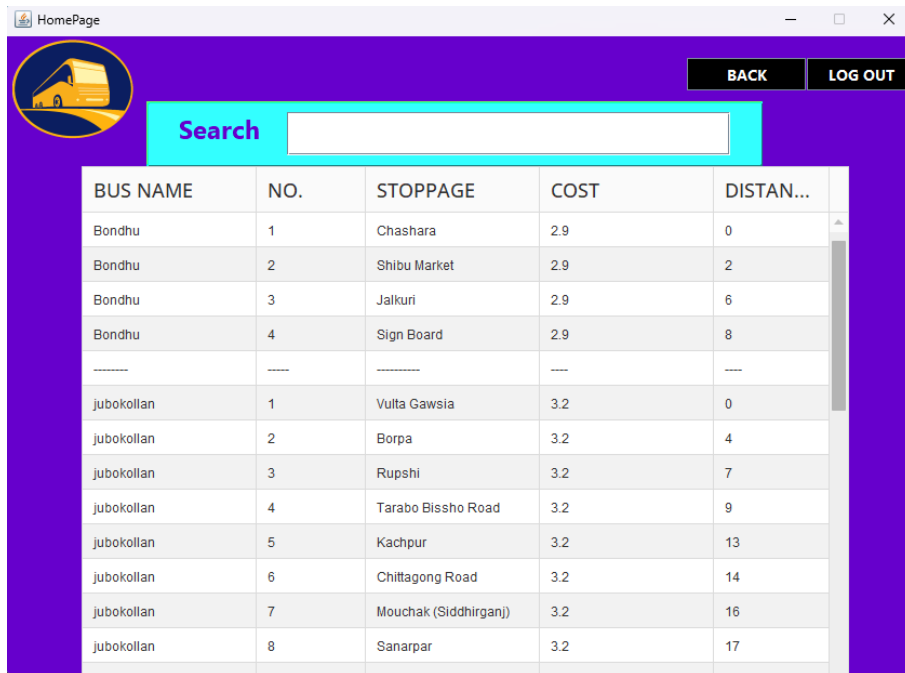
Figure 3.14: Update Stoppage page

The screenshot shows a web browser window titled 'login'. The page has a purple background. In the top left corner, there is a circular logo featuring a yellow bus. In the top right corner, there are two black buttons with white text: 'BACK' and 'LOG OUT'. The main heading 'UPDATE COST' is centered at the top in white, underlined. Below the heading is a white rectangular form box. Inside this box, the label 'Bus Name:' is followed by a dropdown menu showing 'Bondhu'. A dashed horizontal line separates this from the label 'New Cost (/KM):' followed by an empty text input field. At the bottom of the form box is a red button with the text 'UPDATE'.

Figure 3.15: Update cost

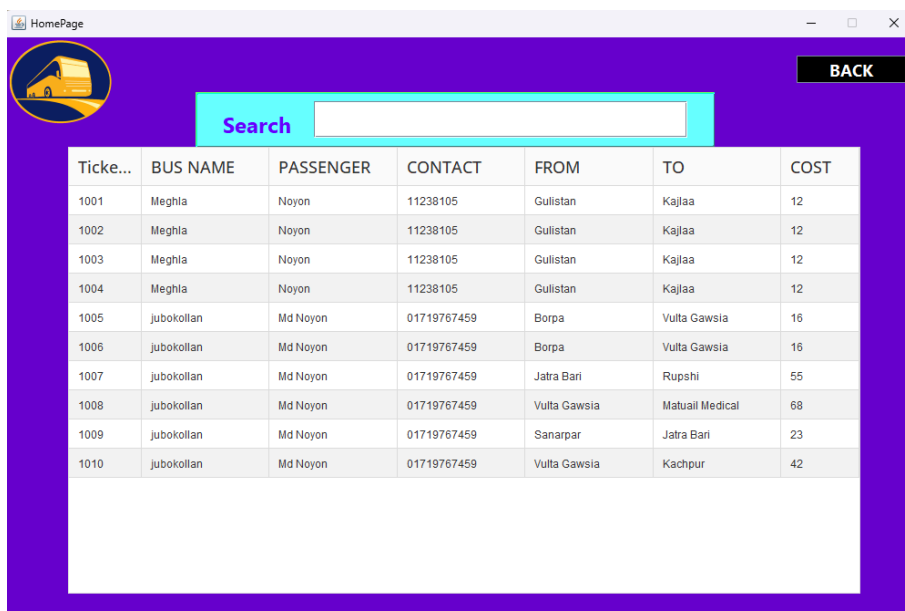
The screenshot shows a web browser window titled 'login'. The page has a purple background. In the top left corner, there is a circular logo featuring a yellow bus. In the top right corner, there are two black buttons with white text: 'BACK' and 'LOG OUT'. The main heading 'DELETE BUS RECORD' is centered at the top in white, underlined. Below the heading is a white rectangular form box. Inside this box, the label 'Bus Name:' is followed by a dropdown menu that is currently empty. At the bottom of the form box is a red button with the text 'DELETE'.

Figure 3.16: Delete bus record



BUS NAME	NO.	STOPPAGE	COST	DISTAN...
Bondhu	1	Chashara	2.9	0
Bondhu	2	Shibu Market	2.9	2
Bondhu	3	Jalkuri	2.9	6
Bondhu	4	Sign Board	2.9	8
-----	----	-----	----	----
jubokollan	1	Vulta Gawsia	3.2	0
jubokollan	2	Borpa	3.2	4
jubokollan	3	Rupshi	3.2	7
jubokollan	4	Tarabo Bissho Road	3.2	9
jubokollan	5	Kachpur	3.2	13
jubokollan	6	Chittagong Road	3.2	14
jubokollan	7	Mouchak (Siddhirganj)	3.2	16
jubokollan	8	Sanarpar	3.2	17

Figure 3.17: Bus data



Ticke...	BUS NAME	PASSENGER	CONTACT	FROM	TO	COST
1001	Meghla	Noyon	11238105	Gullistan	Kajlaa	12
1002	Meghla	Noyon	11238105	Gullistan	Kajlaa	12
1003	Meghla	Noyon	11238105	Gullistan	Kajlaa	12
1004	Meghla	Noyon	11238105	Gullistan	Kajlaa	12
1005	jubokollan	Md Noyon	01719767459	Borpa	Vulta Gawsia	16
1006	jubokollan	Md Noyon	01719767459	Borpa	Vulta Gawsia	16
1007	jubokollan	Md Noyon	01719767459	Jatra Bari	Rupshi	55
1008	jubokollan	Md Noyon	01719767459	Vulta Gawsia	Matuail Medical	68
1009	jubokollan	Md Noyon	01719767459	Sanarpar	Jatra Bari	23
1010	jubokollan	Md Noyon	01719767459	Vulta Gawsia	Kachpur	42

Figure 3.18: Ticket purchasing data

Chapter 4

4.1 Conclusion

The Online Ticket Buying System aims to purchase bus tickets by offering a user-friendly online platform. By allowing users to input their present location and destination, the system presents them with a list of available buses to choose from. This system also provides an admin panel for managing bus records and stoppages. This system provides a convenient and efficient solution for purchasing bus tickets online.

4.2 References:

- Connect Database: <https://youtu.be/sifEAuiVUac>
- Auto Complete JComboBox: <https://youtu.be/vHNc5vIIxxQ>
- Data From database to JTable: <https://youtu.be/frafcK6fhdQ>
- Search from JTable: <https://youtu.be/btA5RzD-Zn0>
- HashMap: <https://www.javatpoint.com/java-hashmap>
- MySQL connection: <https://stackoverflow.com/questions/2839321/connect-java-to-a-mysql-database>