

Online Bus Ticket Booking System

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Approval Certificate

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Abstract

Upgradation of technology and use of internet has a very significant impact on individual activities. In the modern day and age, internet has become an essential for everyone. Online bus ticket booking system is a Web based online bus ticket booking system. This is a user friendly online bus ticket booking system for both clients and service provider. This type of program helps people to book ticket at home in a very easy way by using internet. People don't need to go out to book ticket, they can easily use this web application at home or any other place. People don't face any struggle and they get their desired one.

Due to high density of traffic over our cities it takes a huge amount of time from our life to reach our daily activities .For our personal and professional purposes a large no of individuals are used to travel from city to city. Being a convenient and comfortable transportation, bus is a commonly used system for mass communication. This project is to simplify the physical activities regarding a bus ticket booking, payment and collection by using a web based application. By using this, application one can easily get a bus ticket booking-purchase collect from his place within a very minimal time and technological capacity.

Acknowledgement

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Chapter 1

Introduction

Now a day's traffic jam makes people's life much more difficult and the busy daily life schedules internet acts as a blessing, so that any internet based application makes people's life easier and updated. This application "**Online bus ticket booking system**" becomes a very easy to use and also makes bus travel across the country easier. In this online based ticket booking system, users could find a simple access to suitable bus seats, bus type, bus operator and availability of tickets then fully secured online payment in just few seconds (Nwakanma Ifeanyi Cosmas, 2015). Moreover by using this system ; travelling experience for users by selecting bus type, boarding points ,dropping destinations and operators to bus reservation at lowest fares. They can also select middle station of the journey with minimal fare and also select Ac/non Ac option on their own preferences. People has the option to use in the same date booking more than one ticket. Successful operation of this project will minimizes waiting for long hours at bus counters regarding booking and collection of tickets; just a user order following the system for a hassle-free travel experience.

1.1 Objective

This is a user friendly online bus ticket reservation and collection system. Due to better access of internet and Our daily life is very much depend on internet so that this type of system application will helps people to book ticket at home in a very easy way.

1.2 Motivation

My aim is to build a simple but effective program that help people to book bus ticket very easily at home by using internet.

1.3 Existing System

This application is for all type of people, who shows interest in exploring the service providers regarding the bus type, ticket prices, available seats, facility of the bus etc. has to search the website (bus company) for further information. This application helps to create a huge relief for the customer, to save their valuable time ensuring the best possible service.

Chapter 2

Background and Literature Review

2.1 Background

This system is developed to facilitate easier solution of booking ticket through a application. (Dr. Chaya Bagrecha, Jun 2016) It will upgrade and change the traditional process of ticket reservation system. Not only improve it will assist users for quality service that will change the whole experience of bus ticket booking system. The service provider information to know all the details about the travel issues. Admin will provide updated bus information and about the available tickets of each trips. It will also store purchase history of a individual user; so thus it will track that how many tickets a client have been purchased. After selecting the desired destination people just have to buy the ticket through a very simple procedure and received booking of the ticket then have to pay the fare through b-kash and then admin will issue the ticket. A distant user or client will get this e-ticket (confirmation) by his email. Thus no one don't have to wait in a queue to buy the ticket. This project leads the whole thing much simpler that anyone deserved.

2.2 Literature review

Up growing uses of internet and dependency of web applications is the source of the idea to make an application for the travel support. Huge number of users are regularly travels inter cities for their business and recreations are the prime target of this sort of application (Dr. Chaya Bagrecha, Jun 2016). More over due to incredible traffic hours this a time demanding approach to our communication industry to simpler the ticket management and supply chain (Niteesh Joshi, November 2016).

Some of our reputed communication /transport companies has already been started their operation, specifically in ticketing and payment management. Due to the procedure and lack of marketing approaches mass community is still managing this task in physical manner (U.F. Eze, 2009).Recently some service provider solutions are introduced with the bus ticketing solutions like: BD tickets, this platforms are operating with the small scale in terms of huge user demand due to lack of users friendliness and payment complexity. This project is to carry out a better solution for the end users, whose are the most frequent travelers inter cities. Causes with simple and secured service this type of application could be an ideal solution for the mass community. This project “Online Bus ticket Booking System” is designed to simplify bus ticket purchasing through use of information Technology and internet. With the bus ticket booking system, you can

manage bookings and purchase from home with a comparatively simply system (TechwareSolutions , 28 November 18). Even the service providers will also be able to store client data, and passenger lists for their further offers.

Chapter 3

Methodology

3.1 Tools uses

Operating system: Windows
Software tool: Wordpress
Database: MySql
Desktop base server: XAMP
Hardware tool: Desktop Computer or Laptop
Internet connection

3.2 Layout

- This system has two layout which is admin panel and the website. In this website user can find all their desire information about routes with starting point and dropping destination with their minimal fair.
- User can search by bus name and see the availability of seats and time.
- In admin panel admin can handle user orders and all the bookings, send email to the user about their ticket confirmation.

3.3 Features

- **Bus routes:**
This software helps to navigate routes with start point and stop destination.
- **Bus tickets and seats booking:**
The system will allow the clients to select seats from the availability. Here also available ticket rates.
- **Payment methods:**
Customers can pay in both way cash and mobile banking payment channels (Bkash, Rocket and others).
- **Email notification:**
This system can send Email and SMS notifications both to customers and admin.

3.4 Functional Specification

User panel:

- This application basically provides a Bus ticket booking, availability of seats, routes, starting and dropping destination.
- A user will first see the entire website in detail also able to book a bus ticket and find out if the seat is available or not.
- There is a login option which user can also registered for member of the site.
- User can search by bus name, destination to see the available seats and time also.

Admin panel:

- Using this application admin can oversee all the bookings and trip accounts management easily.
- And also admin can maintain all the registered users' information, manage bookings requests, confirm bookings, send email to the customers and manage the total booking system easily.

3.5 Interphase Specifications

Registration:

This system provide some facility user could be registered in this application. User can make a registration first for any sort of request and details.

Login:

Login module shows some terms which is used for login in the system as a user guide. User name and individual password is needed for a registered user login.

Book the Ticket:

User can book ticket easily here by selecting destination of a specific bus.

Update Bus information:

From admin panel admin can add bus or update bus details. It contains the information about the Bus type, photo, description of the destination, available seats, updated fare for the bus etc.

Cancel the Booking Ticket: In this application both user and admin can cancel the booking Ticket.

3.6 System Flow chart

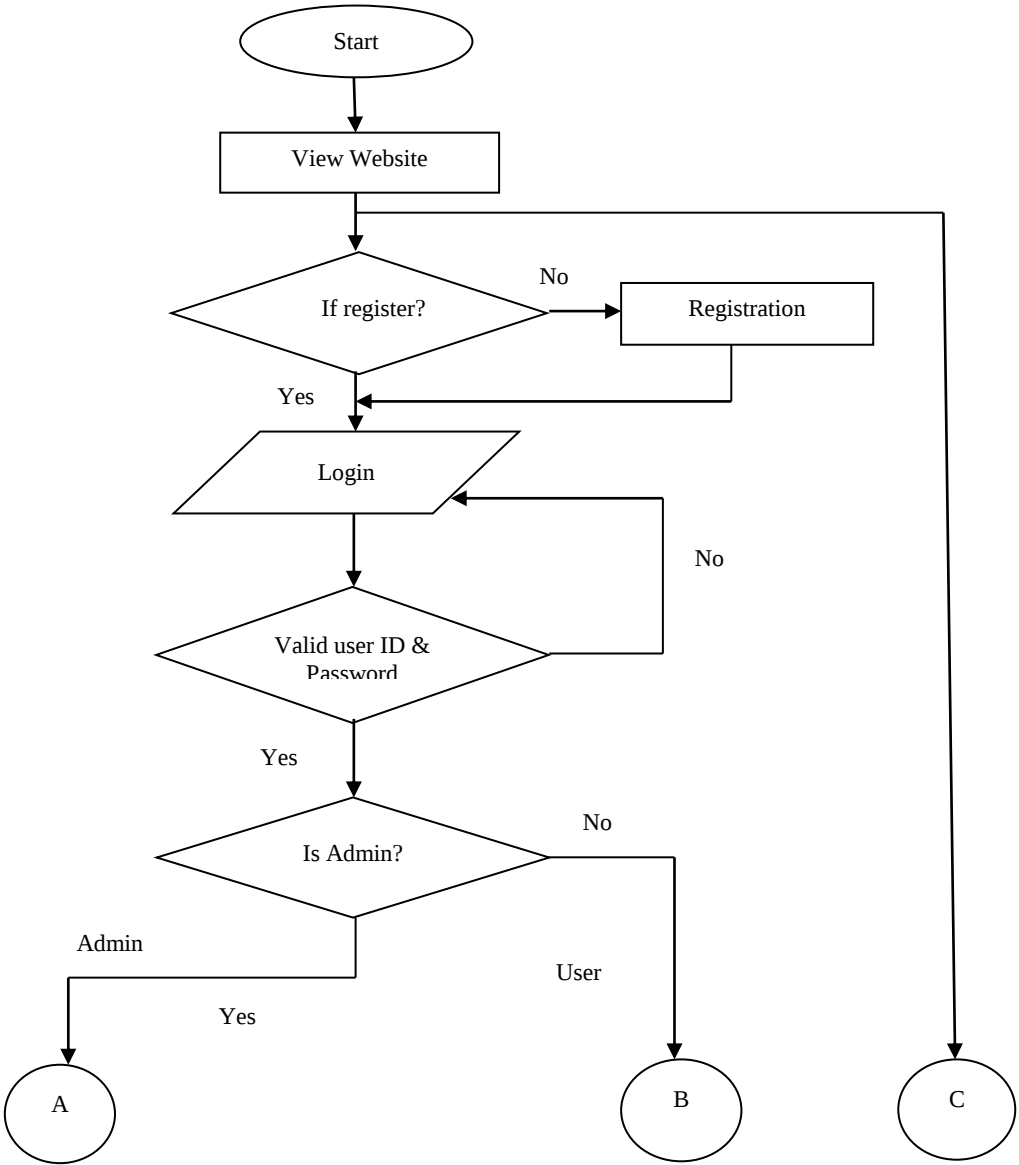


Figure 1.1: System flow chart

This figure shows the overall system flow chart from starting to ending.

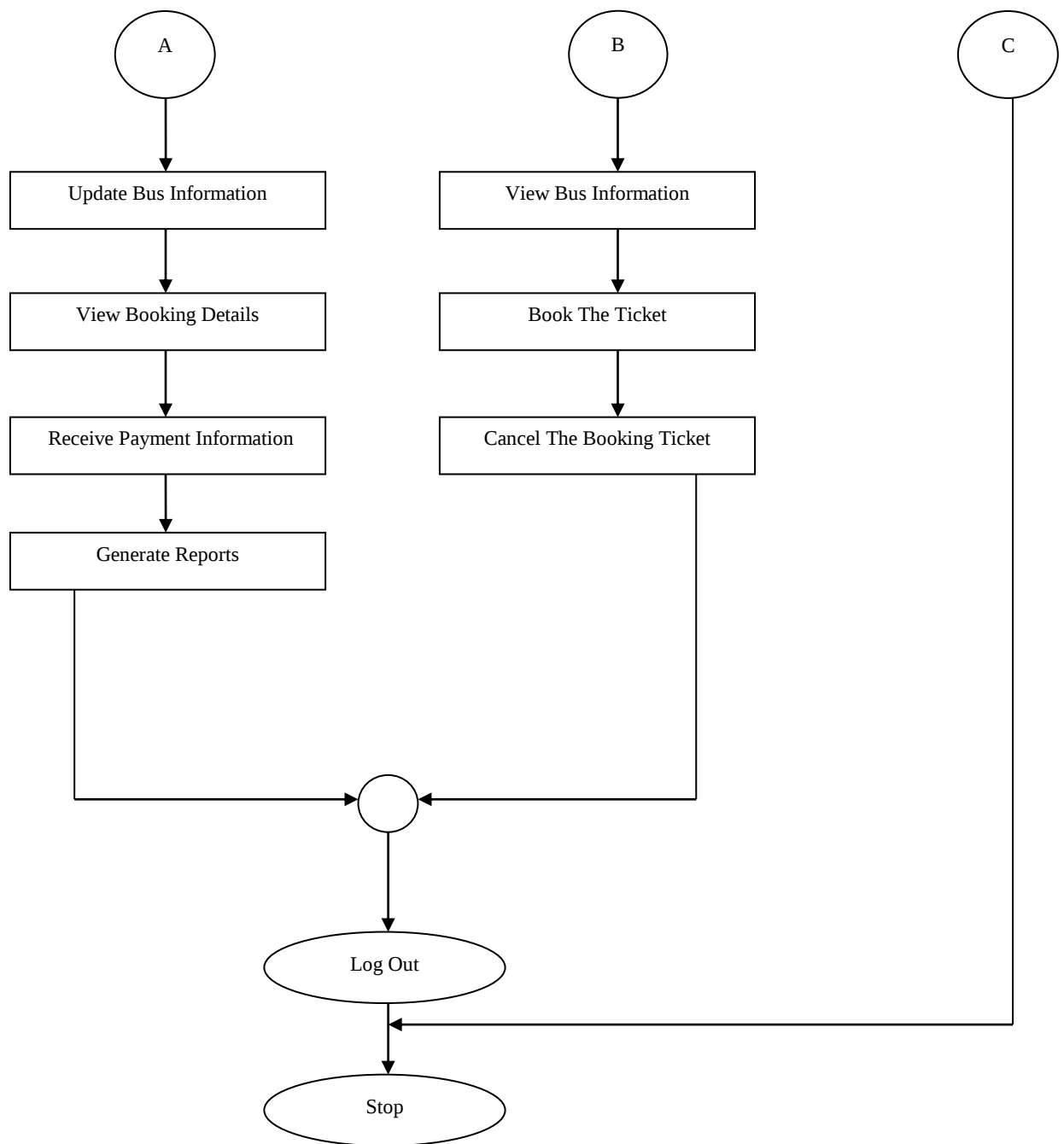
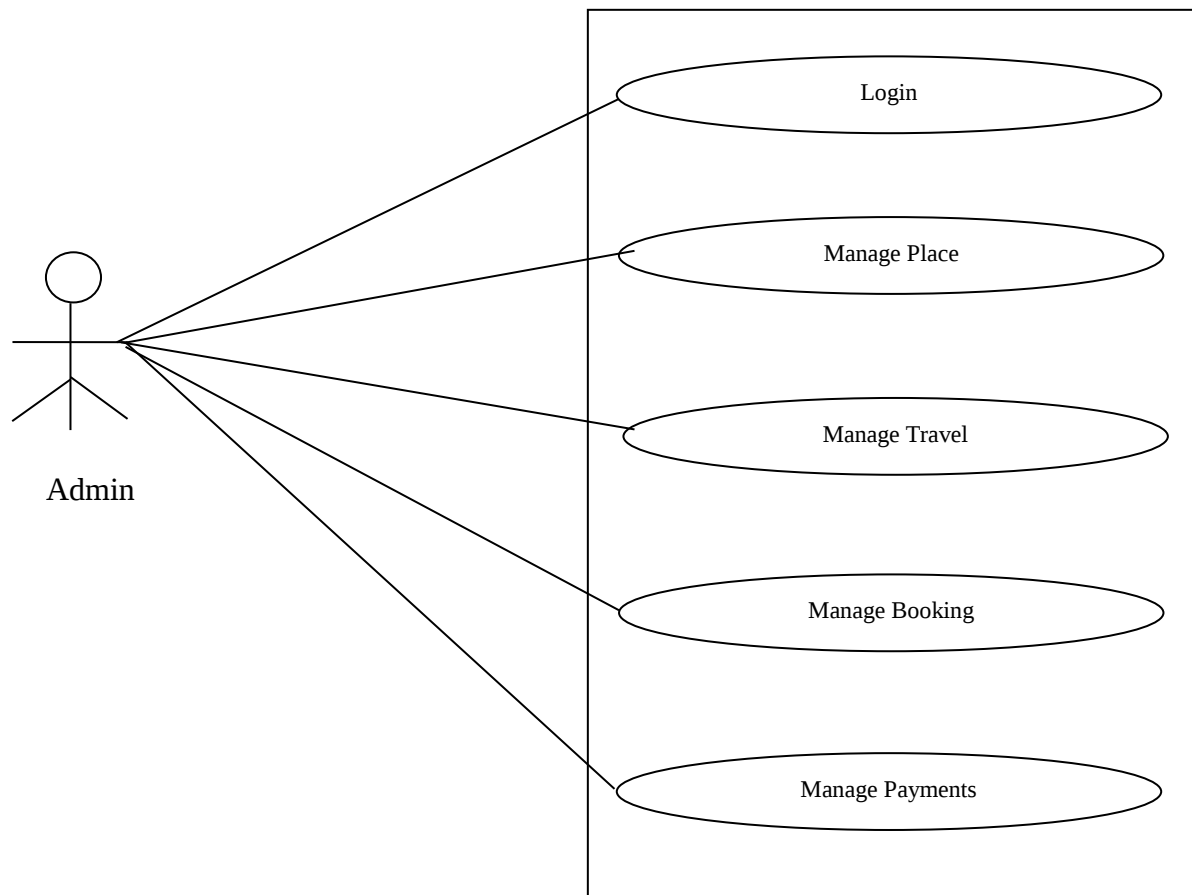


Figure 1.2: System flow chart

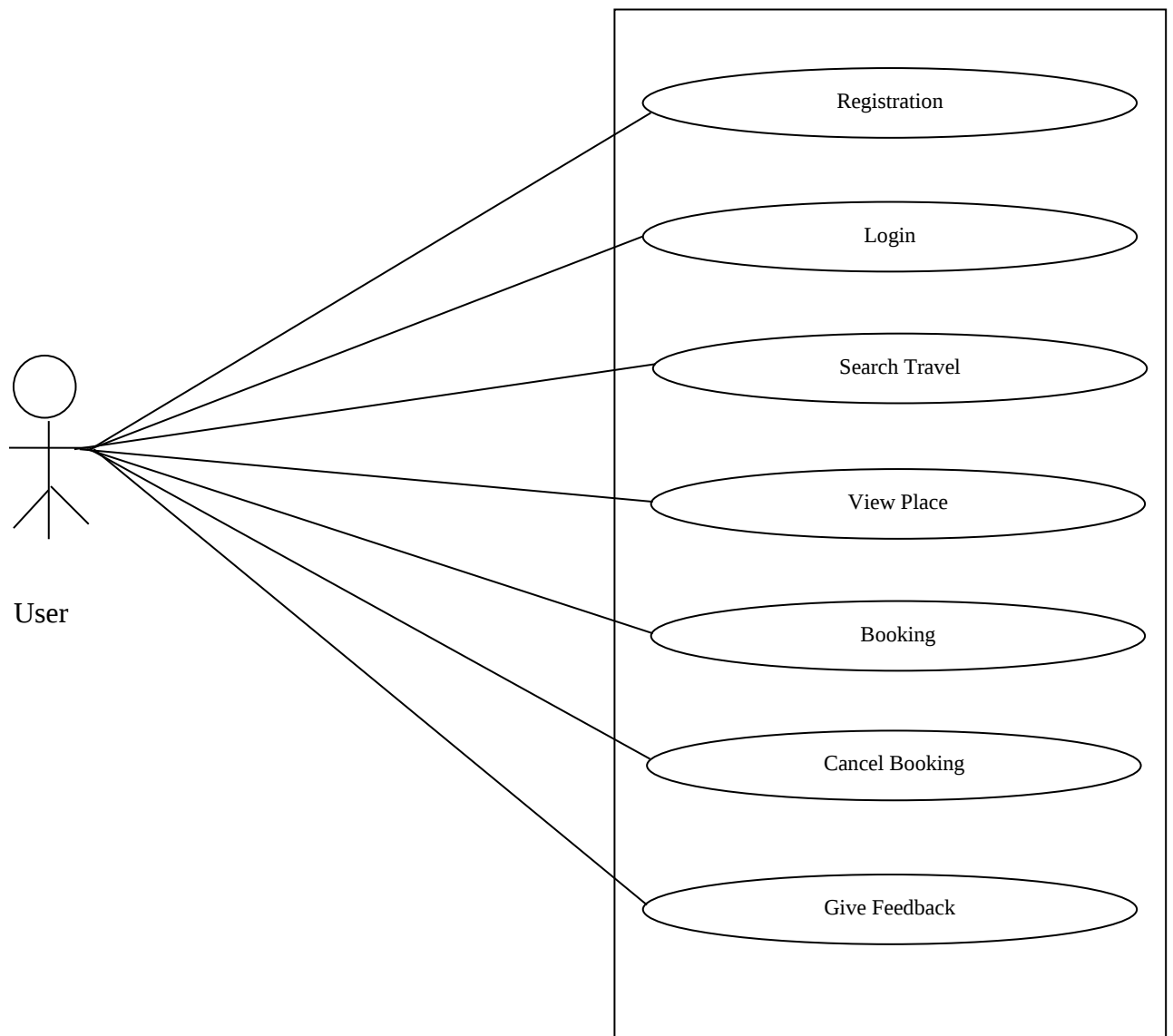
3.7 Use-case Diagram For Admin



In this diagram here shows admin's processing steps how admin can manage booking, payments etc.

Figure 1.3: Use-case diagram for admin

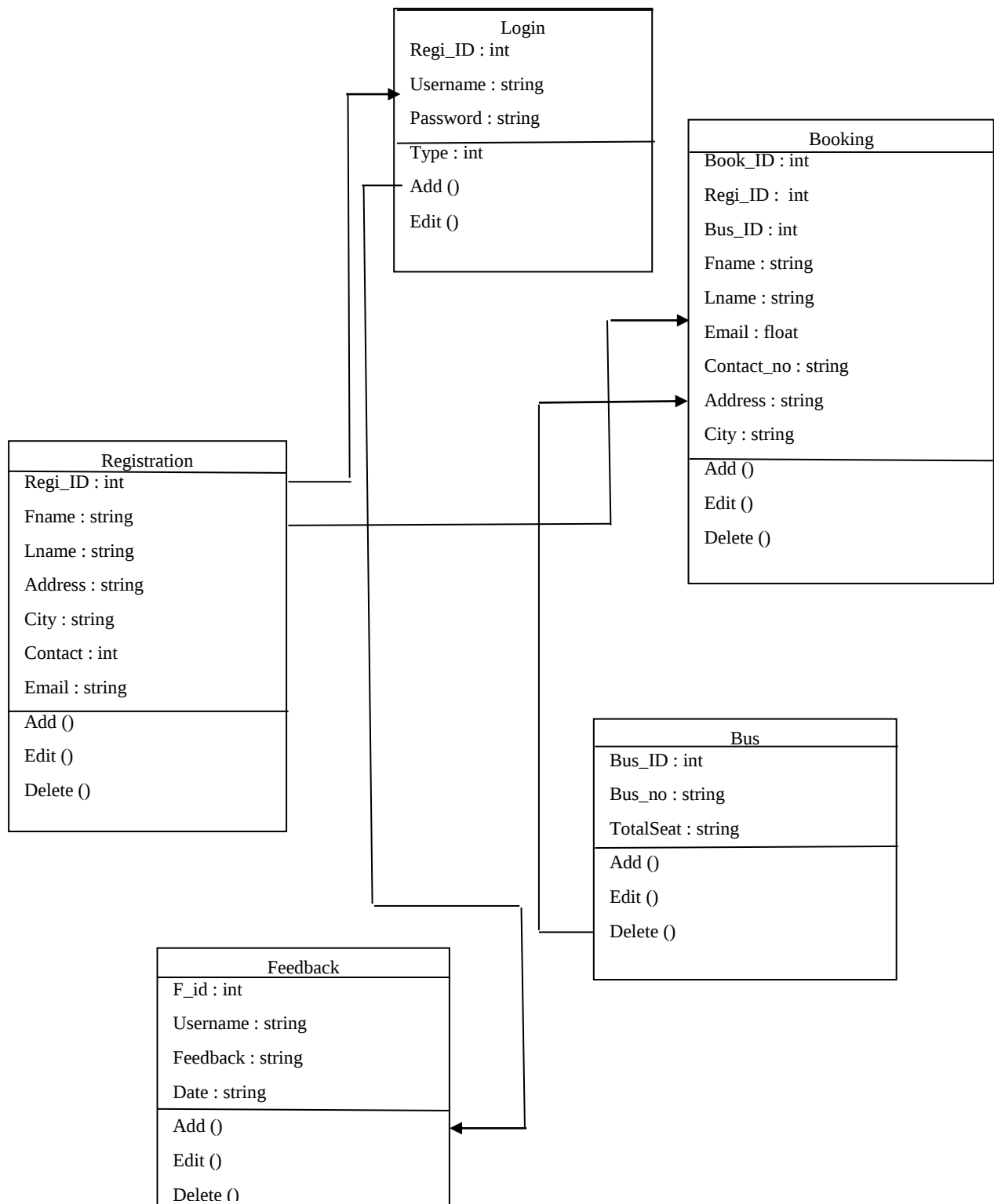
3.8 Use-case Diagram For User



In this diagram here shows how user can perform registration and find out the booking, cancel booking and give feedback etc.

Figure 1.4: Use-case diagram for user

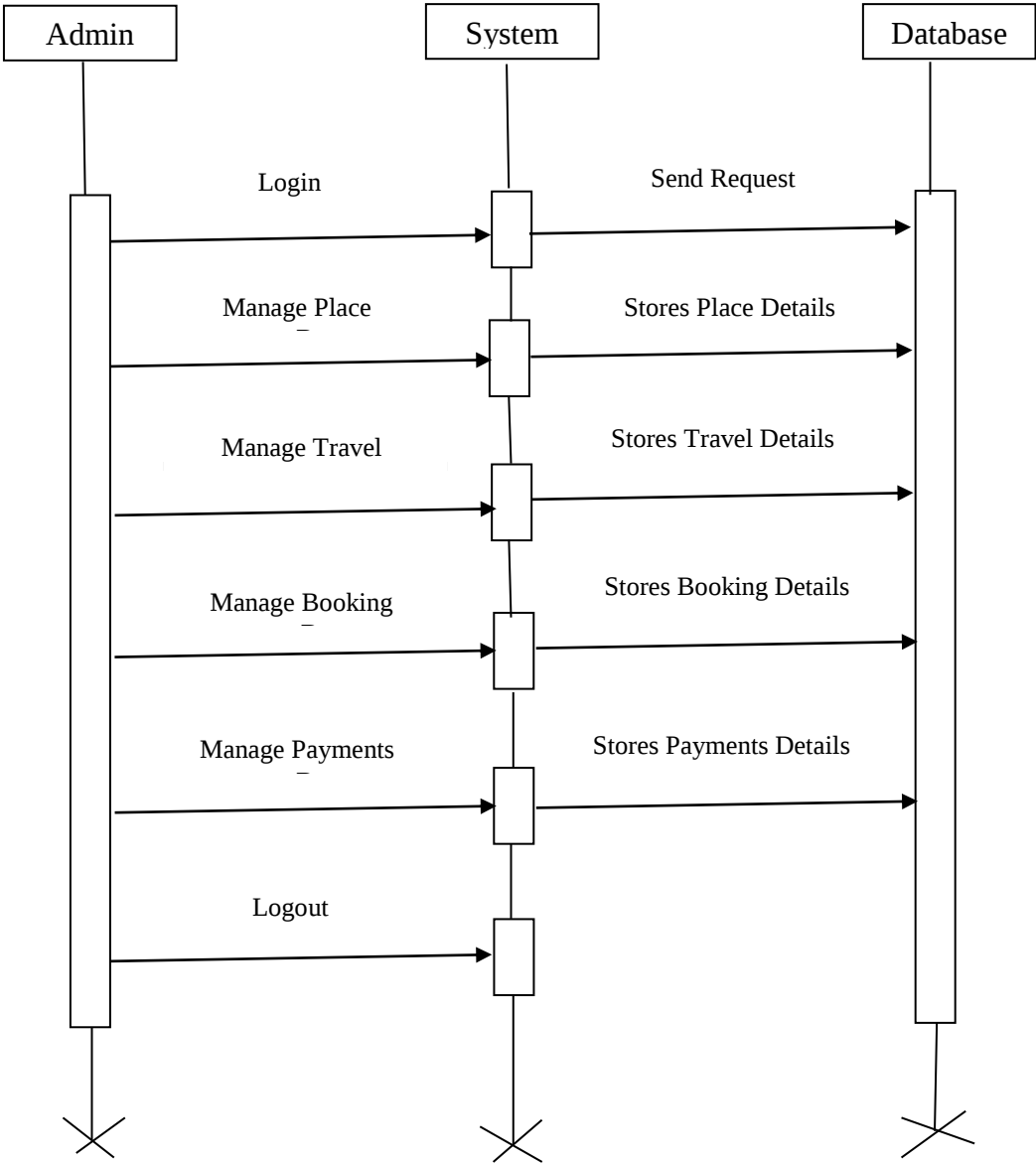
3.9 Class Diagram



This is the class diagram.

Figure 1.5: Class diagram

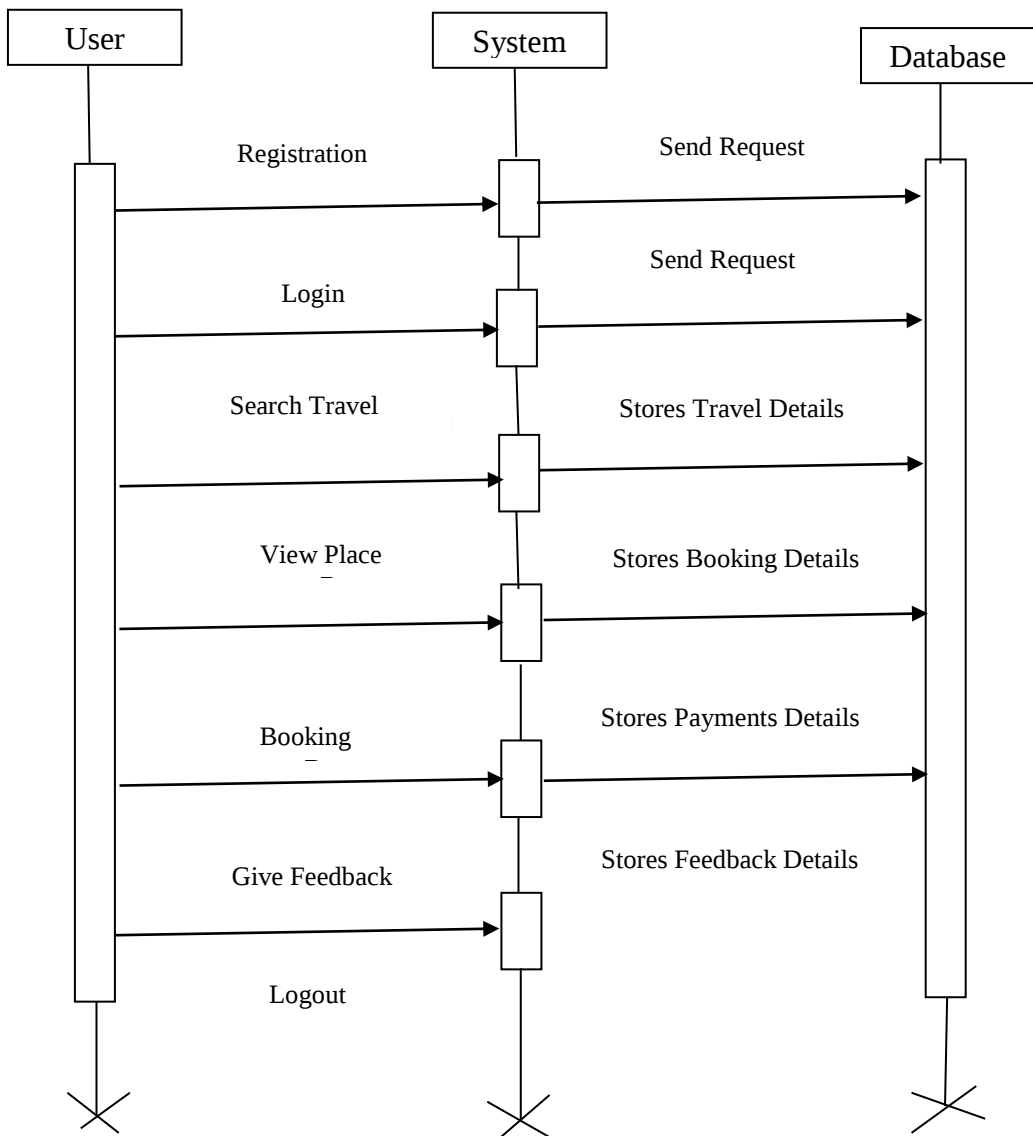
3.10 Time Sequence Diagram for Admin



This is the time sequence diagram for admin.

Figure 1.6: Time sequence diagram for admin

3.11 Time Sequence Diagram for User



This is the time sequence diagram for user.

Figure 1.7: Time sequence diagram for user

Chapter 4

Result

4.1 User interface



Figure: 1.8 : Home page

- This is the home page of the website.
- Here showing 3 easy steps to buy tickets these are: search buses, book seats, buy tickets.
- This page has 5 menu options.
- Using these steps user can search their desire bus tickets.

Search Buses for Your Desired Destination

BUY TICKET

Form

Please Select

To:

Please Select

Date of Journey:

2019-01-18

SEARCH BUSES

Figure : 1.9: Bus search

- In this section people can search their starting destination, dropping destination and they can also search by dates.
- In the lower part of this section some bus lists are available, where people can see bus type, destination fare so that they can choose easily their desire bus.

 Desh Travels Type: AC Bus No: Start From: Bogura End at: Dhaka Fare: ₳ 1000	 Nabil Paribahan Type: AC Bus No: NP-19 Start From: Dhaka End at: Rangpur Fare: ₳ 1500	 Hanif Premium Type: AC Bus No: HP-23 Start From: Dhaka End at: Khulna Fare: ₳ 1600
		

Figure: 1.10 : Available buses

BUS SEARCH LIST

From: To: Date of Journey:

Route Dhaka → Coxs Bazar Date: Sun, 20 Jan 2019

	DEPARTING	COACH NO	STARTING	END	FARE	TYPE	ARRIVAL	SEATS AVAILABLE	VIEW
	Shohag Elite	Dhaka	SE-14	09:00 AM	Coxs Bazar	₹ 1800	AC	05:00 PM	24 VIEW SEATS

Figure: 1.11 : Bus search list

- After searching their desire bus from the bus list there shows the route they want to go for .
- There is View seats option present where user see the available seats and book seats easily.


Easyway
Home Bus Search Cart Checkout Feedback

	Shohag Elite	Dhaka	SE-14	09:00 AM	Coxs Bazar	₹ 1800	AC	05:00 PM	24	VIEW SEATS
---	--------------	-------	-------	----------	------------	--------	----	----------	----	---



Route	Date	Start & Arrival Time
Dhaka → Coxs Bazar (₹ 1800)	20th January, 2019	09:00 AM → 05:00 PM

Seat No	Fare	Remove
B3	₹ 1800	X
B2	₹ 1800	X
Total 2	₹ 3600	

Figure; 1.12 : View Seats

- After select seat no there shows a chart where total seat fare available.
- Then user click on Book Now option to book the seats.

		Product	Price	Quantity	Total
		Shohag Elite • Seat List:B3,B2, • Journey Date: 2019-01-20 • Journey Time: 09:00 AM • Boarding Point: Dhaka • Dropping Point: Cox's Bazar	₹ 3,600.00	1	₹ 3,600.00

[UPDATE CART](#)

Cart totals

Subtotal	₹ 3,600.00
Total	₹ 3,600.00

[Proceed to checkout](#)

Figure:1.13: View cart

- After booking seats there is a option to view cart ,user should click on this button.
- In this section cart total is available and the further process is Proceed to checkout.

CHECKOUT

Billing details

First name *

Last name *

Country *

Bangladesh

Street address *

Town / City *

Additional information

Order notes (optional)

Notes about your order, e.g. special notes for delivery.

Figure : 1.14 : Checkout

- In checkout section Billing details are present.
- User should fill the form putting their personal information.

Product	Total
Shohag Elite × 1 • Seat List: B3, B2, • Journey Date: 2019-01-20 • Journey Time: 09:00 AM • Boarding Point: Dhaka • Dropping Point: Cox's Bazar	৳ 3,600.00
Subtotal	৳ 3,600.00
Total	৳ 3,600.00

☒ bKash Mobile Banking 

☐ Rocket [DBBL Mobile Banking] 

Your personal data will be used to process your order, support your experience throughout this website, and for other purposes described in our [privacy policy](#).

PLACE ORDER

Figure:1.15 : Place order

- In the last section of this checkout menu is to select the billing process type and place the order.

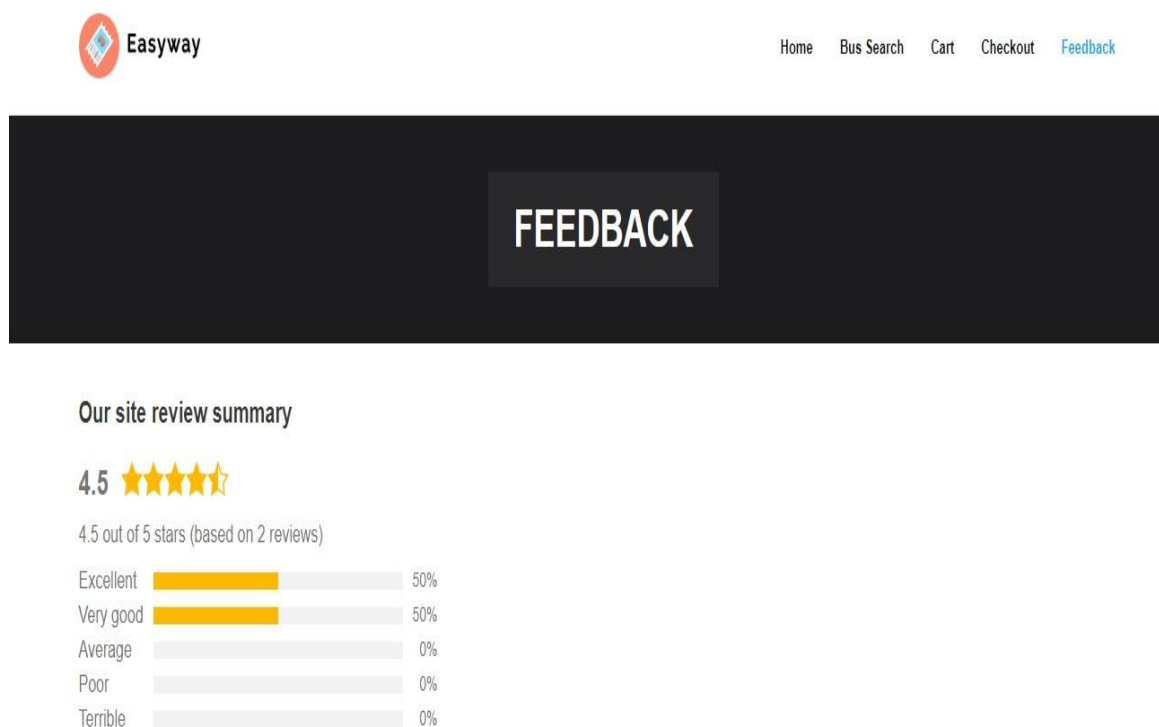


Figure: 1.16 : Feedback

- The last part of this website is to give feedback it is good service or not

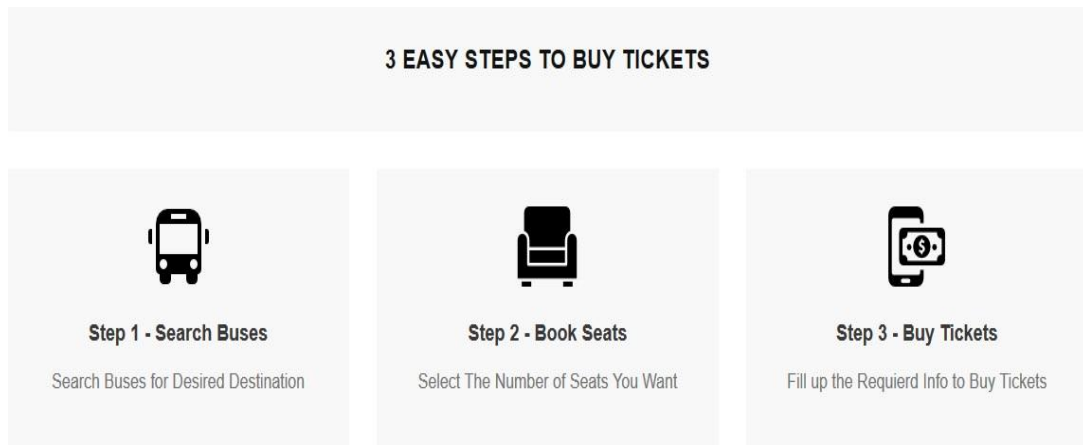
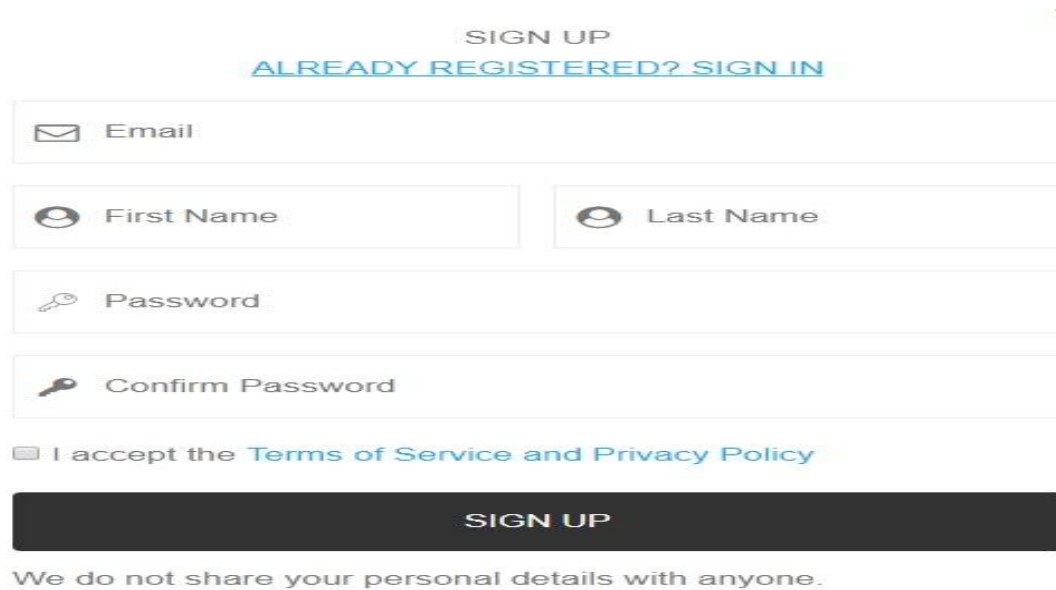


Figure: 1.17 : My account registration

- There is a Myaccount option is present where user create an account but he/she must be a registered member.
- After registration they can login with their valid username and password and this helps them to see their order confirmation and the pdf format of the order which pdf they also can download as an invoice.
- User also get email from admin there is an option to get the pdf of the order.



The registration form is titled "SIGN UP" in bold black text. Below the title is a link "ALREADY REGISTERED? SIGN IN" in blue. The form contains four input fields: "Email" with an envelope icon, "First Name" and "Last Name" with person icons, "Password" with a key icon, and "Confirm Password" with a key icon. Below these fields is a checkbox labeled "I accept the Terms of Service and Privacy Policy" in blue. At the bottom is a large black button with the text "SIGN UP" in white. Below the button is a line of text: "We do not share your personal details with anyone."

SIGN UP

[ALREADY REGISTERED? SIGN IN](#)

Email

First Name Last Name

Password

Confirm Password

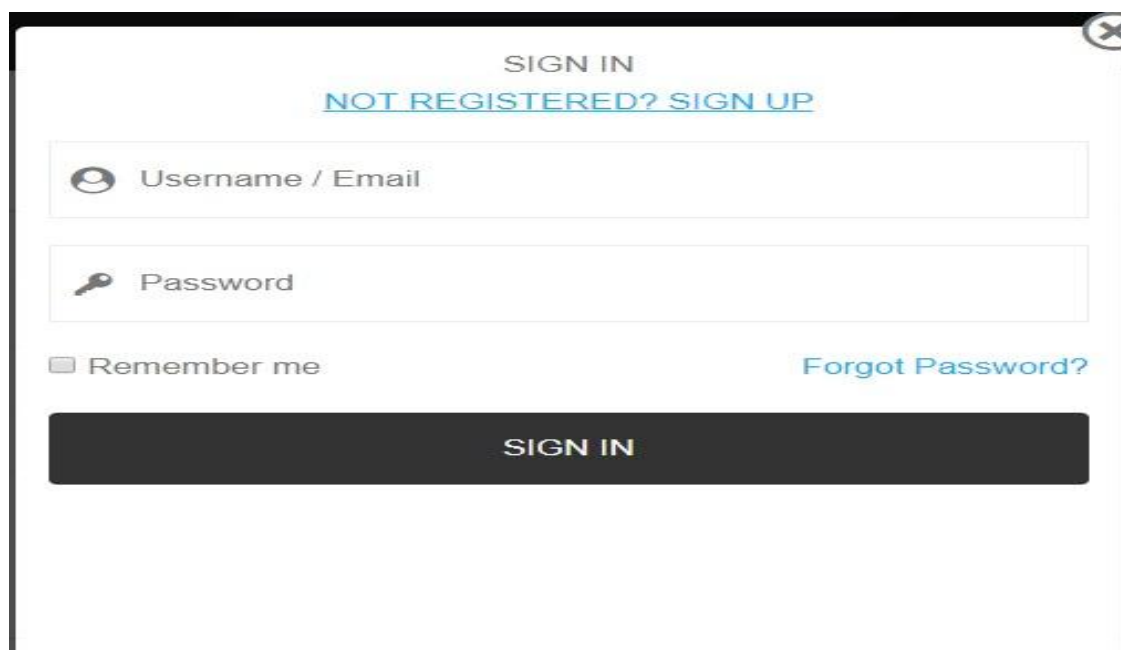
☐ I accept the [Terms of Service and Privacy Policy](#)

SIGN UP

We do not share your personal details with anyone.

Figure:1.18 : Registration form

- User should fill this registration form.



The login form is titled "SIGN IN" in bold black text. Below the title is a link "NOT REGISTERED? SIGN UP" in blue. The form contains two input fields: "Username / Email" with a person icon and "Password" with a key icon. Below these fields is a checkbox labeled "Remember me" and a link "Forgot Password?" in blue. At the bottom is a large black button with the text "SIGN IN" in white.

SIGN IN

[NOT REGISTERED? SIGN UP](#)

Username / Email

Password

☐ Remember me [Forgot Password?](#)

SIGN IN

Figure: 1.19: Login as a user

MY ACCOUNT

- [Dashboard](#)
- [Orders](#)
- [Addresses](#)
- [Account details](#)
- [Logout](#)

✓ No order has been made yet.

[Go shop](#)

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[Logout](#) | [My account](#)

Figure: 1.20: My Account

- To view the order.

MY ACCOUNT

- [Dashboard](#)
- [Orders](#)
- [Addresses](#)
- [Account details](#)
- [Logout](#)

Order	Date	Status	Total	Actions
#343	January 19, 2019	Completed	₹ 700.00 for 1 item	View Invoice
#342	January 18, 2019	Completed	₹ 4,600.00 for 2 items	View Invoice

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[Logout](#) | [My account](#)

Figure: 1.21: User orders

EasyWay

Invoice

PAID

Invoice #: 00343-2019
Invoice Date: January 19, 2019
Order Date: January 19, 2019
Order Number: 343
Payment Method: bKash Mobile Banking

Bill to:
Arma Mahzabeen
2/3, khulna
Dhaka
Dhaka
0000

Ship to:

Description	Qty	Total
Shohag Elite • Seats: C2, • Start: Dhaka • End: Madaripur • Date: 2019-01-18 • Time: 01:00 PM	1	৳ 700.00
Subtotal:		৳ 700.00
Total:		৳ 700.00

Figure: 1.22: Pdf format of the order

Chapter 5

System testing

5.1 Introduction

System testing is a type of testing where a complete software is tested. The purpose of these test is to consider how the application is processing or there is any other complications observed in the processing (Muhammad Abid Jamil, 2016). Without demonstration of the application it is difficult to take the next step forward for furthermore development or use.

5.2 Application Testing

Application testing process that is carried out to demonstrate that the system confirmation to the specification and meets the requirements of the users, namely bus operators and users is testing of a software /apps. Testing is conducted not only in the end of the coding but also during the development of the prototype system. For demonstrating this application; functional and interface testing were carried out for the module or for the whole system (Muhammad Abid Jamil, 2016). Each and every link had been checked to get the status that all the links are working correctly, then it could is right state. Moreover, interface testing is approved out to identify that the interface works correctly and faults are not showed because of interface or coding errors.

5.3 Admin panel testing

- As admin login in with valid username and password in the admin panel which help to redirect to the admin home where system checks username as a verified ID.
- If the username and password put wrong, error message is displayed of wrong login ID.

5.4 Integration Testing

This involves testing of each individual code section. To ensure the distinct components or links of the application still work in accordance to project requirements is the focal aim of this testing. It is crucial to test each section because any application or software program contain several section to test. Integration test could be said as effective when actual result and expected results are found in line or differences are explainable or acceptable based on the individual user inputs.

5.5 System Testing

System testing is needed before publishing the final outcome of the application. System testing is act on the complete system or some sort of specifications. It is also important to observe that validation of the system or successful processing meets the functional and non-functional requirements.

In this system we used visual testing. In visual testing it will visualize the problem rather than describing it. After observing any error is resolved by reviewing the coding of the segment until the complete and successful application.

Chapter 6

Conclusion and Recommendations

6.1 Conclusion

Technology is the key to make our daily life easier and comfortable in terms of services. Modern web based solutions are make our efforts more efficient and less time consuming and this project is supposed to influence our regular travel more convenient. At only figure distant our travel solutions for booking a bus tickets .Just a internet connected device could solve a lots of steps to collect a bus tickets with payment methods and confirmation.

Users friendly application for bus ticketing is also need fully efficient for the service providers (bus companies) to manage their system more smoother (Weikimedia foundation, 16 Feb 2019). Total accountability and customer service could be arranged within a very small investments.

Each and every technology needs more research and real life experience to develop up to the satisfactory and efficient manner. This project is just a simpler solution for the end users and administrative end furthermore development and testing could manage a better solution for the whole system.

6.2 Recommendations

- Multi language option is in process.
- Comparison between different web solutions to choose the best offer is the future goal.
- For further development voice command could be integrated to this project.
- More user friendly module and easier accessibility is the next process to be improved.

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