



1.1 Introduction

Prima bus is an application that lets you search, book bus ticket, view your booked tickets and cancel booked tickets. Those who are interested in inquiring about the Bus Type, its Tickets Price, available seats, facility of the bus etc. has to walk to the Booking office. This application makes this easy, now you can enquire about the bus, book bus ticket and cancel your ticket sitting at your home.

A new system is helpful to both employees as well as the customers. New system provides help to the customer as they can inquire about the Bus model, its Ticket price, available Seats, facility of the bus etc. and they don't need to walk to the office. There is login and password service for employee and Regular customers can use this system .The implementation uses Java which is a set of computer software and specifications developed by Sun Microsystems, which was later acquired by the Oracle Corporation, that provides a system for developing application software and deploying it in a cross-platform computing environment. Java is used in a wide variety of computing platforms from embedded devices and mobile phones to enterprise servers and supercomputers. While they are less common than standalone Java applications, Java applets run in secure, sandboxed environments to provide many features of native applications and can be embedded in HTML pages.

Following are terms used throughout this documentation:

❖ **Sign Up: -**

Sign Up is used to create an account for a new customer so that he/she can use the features available in the application such as searching buses from one place to another , to check if seats are available in the bus he/she wants to travel , to book as many tickets he/she wants, to view his/her bookings and to cancel a booked ticket and this can be done by simply clicking on the Sign Up button and providing his/her information to store in the database.

❖ **Login: -**

Login is the procedure used to get access to an application so that he/she can use the features available in the application such as searching buses from one place to another , to check if seats are available in the bus he/she wants to travel , to book as many tickets he/she wants , to view his/her bookings and to cancel a booked ticket and this can be done by simply clicking on the Login button provided he has a registered User Id and password.

❖ **Search Bus:-**

Search Bus button is used to search buses for a journey from one place to another. The customer can see all the buses available and chose the bus, which he finds most suitable according to the bus departure time, its fare or bus, type i.e. AC or non-AC. This can be simply done by entering the information of your journey and clicking the Book Ticket button.

❖ **View Bookings: -**

View Bookings is used to view all the booking details of the customer required that the customer has logged in a has booked at least one ticket in any bus. This can be simply done by clicking on the View Bookings button once you are logged in.

2.2 System Requirements: -

2.2.1 Hardware Requirements Specification:-

2.2.1.1 Minimum User Requirement:

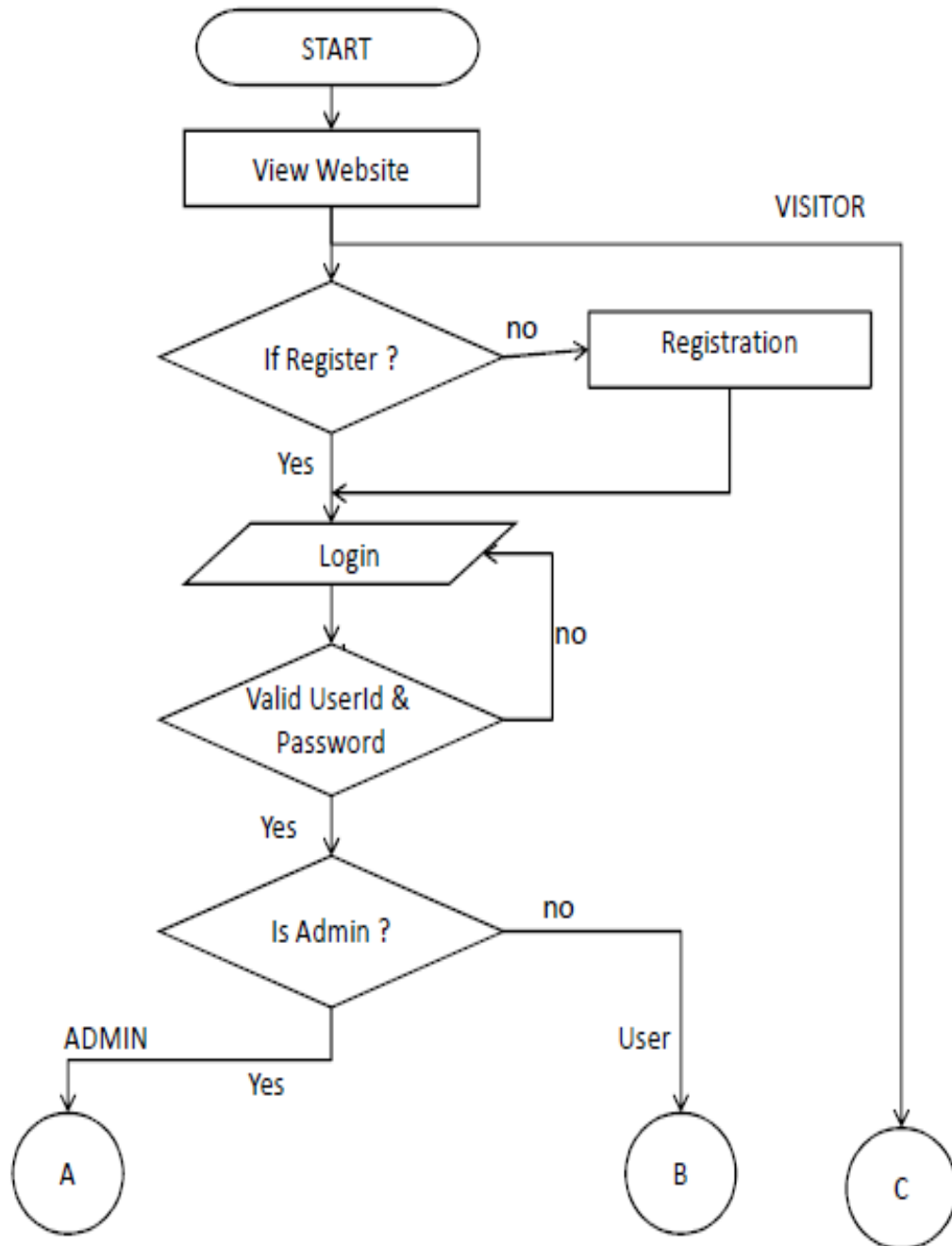
- Processor 2 GHZ
- RAM 1 GB
- Disk Space 15 GB Of Free Space

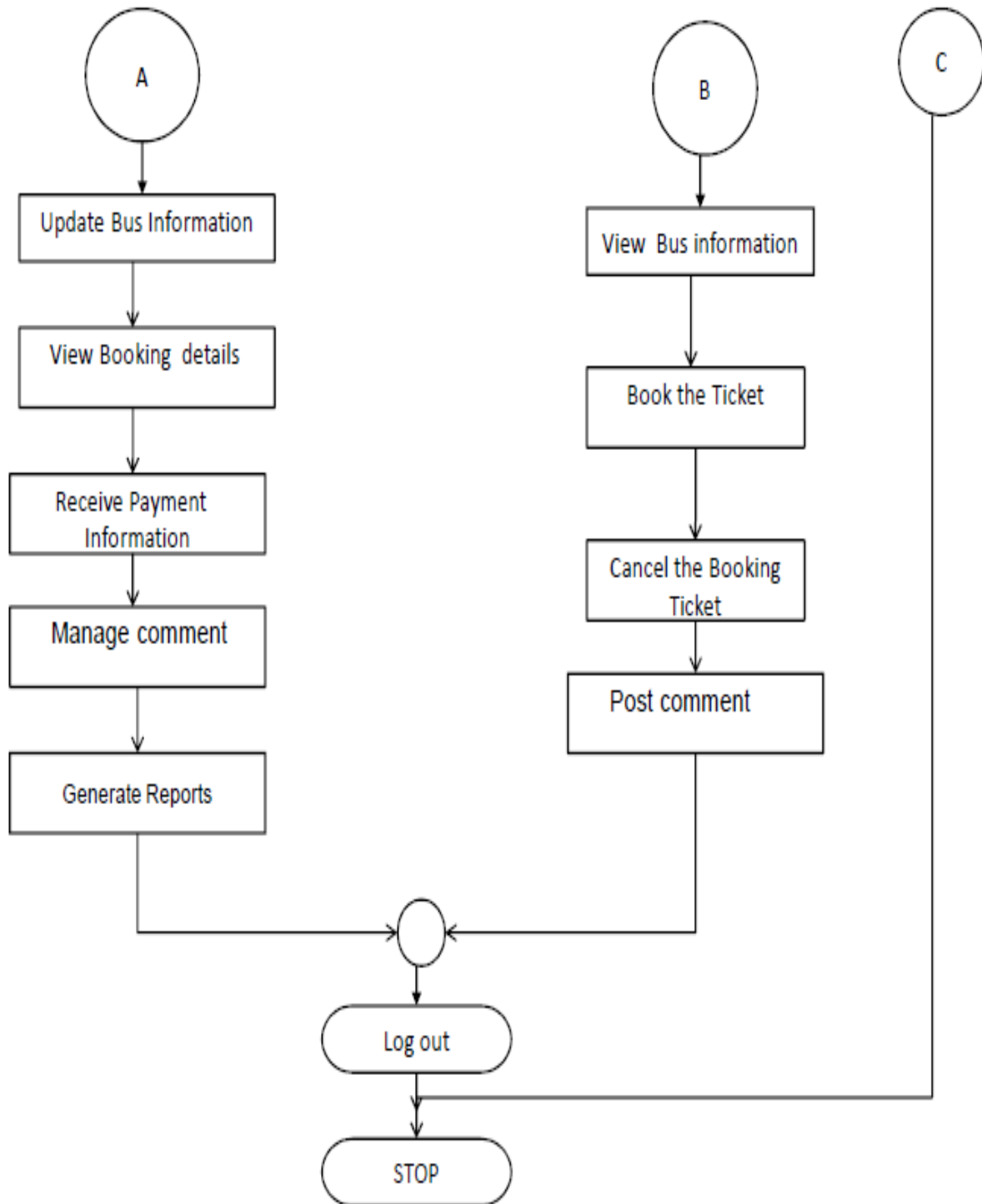
2.2.2 Software Requirements Specification:-

2.2.2.1 Minimum User Requirement:

- Net Beans IDE 8.1 or more
- MySQL

2.3 DATA FLOW DIAGRAM: -





2.5 Data Dictionary: -

Table Name: user

user						
Result Grid						
Filter Rows: <input type="text"/> Edit: Export/Import: Wrap Cell Content:						
	First name	Last name	Email	password	Date of Birth	Gender
▶	aditya	saxena	a	a	2/3/4	male
	aditya	saxena	aditya@gmail.com	aditya@gmail.com	9/october/1996	male
	aditya	saxena	aditya@gmail.com	asd	9/october/1996	male
	Aditya	Saxena	adityasaxena1997@gmail.com	aditya	9/october/1996	male
	aditya	saxena	adityasaxena@gmail.com	aditya	9/october/1996	male
	anmol	dsafhjfd	anmol@gmail.com	assd	6/june/1977	male
	a	a	fg	dsf	5/september/1971	male
	a	a	jk	s	5/september/2000	male
	a	a	kl	sc	5/september/1971	male
	Prabhat	saxena	saxena5891@gmail.com	aditya	10/december/1985	male
	a	a	sd	zd	5/september/2000	male
★	NULL	NULL	NULL	NULL	NULL	NULL

user - Table										
Table Name: <input type="text" value="user"/> Schema: bus										
Collation: <input type="text" value="utf8 - default collation"/> Engine: <input type="text" value="InnoDB"/>										
Comments: <input type="text"/>										
Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
First name	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Last name	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Email	VARCHAR(30)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
password	VARCHAR(30)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Date of Birth	VARCHAR(35)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gender	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Table Name: available bus

availablebus								
Limit to 1000 rows								
Result Grid								
Filter Rows:								
Edit:								
Export/Import:								
Wrap Cell Content:								
ID	Source	Destination	TYPE	Departure Time	Arrival Time	Date	Fare	
1001	delhi	mumbai	ac	9:00AM	11:00AM	15/9/2016	5000	
1002	delhi	mumbai	ac	11:00AM	02:00PM	15/9/2016	5000	
1013	delhi	mumbai	non-ac	01:00PM	04:00PM	15/9/2016	2000	
1014	delhi	mumbai	ac	04:00PM	11:00PM	15/9/2016	5000	
1015	delhi	mumbai	ac	06:00AM	11:30PM	15/9/2016	5000	
1016	delhi	jaipur	non-ac	9:00AM	11:00AM	15/9/2016	300	
1017	delhi	jaipur	ac	10:00AM	12:00AM	15/9/2016	3300	
1018	delhi	jaipur	ac	11:00AM	01:00PM	15/9/2016	1200	
1019	delhi	jaipur	non-ac	3:00AM	11:00AM	15/9/2016	1100	
1020	delhi	jaipur	ac	5:00AM	8:00AM	15/9/2016	200	
1021	mumbai	shirdi	ac	8:00AM	3:00PM	15/9/2016	1200	
1022	mumbai	shirdi	non-ac	9:00AM	11:00AM	15/9/2016	1200	
1023	mumbai	shirdi	ac	12:00AM	01:00PM	15/9/2016	2300	
1024	mumbai	shirdi	ac	9:00AM	11:00AM	15/9/2016	1200	
1025	mumbai	shirdi	non-ac	9:00AM	11:00AM	15/9/2016	2000	
1026	goa	mumbai	ac	9:00AM	11:00AM	15/9/2016	4000	
1027	goa	mumbai	ac	10:00AM	1:00PM	15/9/2016	300	
1028	goa	mumbai	ac	12:00AM	04:00PM	15/9/2016	500	
1029	goa	mumbai	non-ac	2:00PM	04:00PM	15/9/2016	500	
1030	patiala	mumbai	ac	9:00AM	11:00AM	15/9/2016	1200	

availablebus - Table





Table Name: availablebus

Schema: bus

Collation: utf8 - default collation

Engine: InnoDB

Comments:



Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
ID	INT(8)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Source	VARCHAR(50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Destination	VARCHAR(50)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
TYPE	VARCHAR(10)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Departure Time	VARCHAR(20)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Arrival Time	VARCHAR(20)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
Date	VARCHAR(25)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fare	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Table Name: reserve

reserve									
Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:									
	ID	First Name	Last Name	Email	From	Destination	Journey Date	Seats	Total Amount
▶	1015	Aditya	Saxena	adityasaxena1997@gmail.com	delhi	mumbai	15/9/2016	i1,	5000
	1014	Aditya	Saxena	adityasaxena1997@gmail.com	delhi	mumbai	15/9/2016	i1,i2,j2,j1,	20000
	1015	Aditya	Saxena	adityasaxena1997@gmail.com	delhi	mumbai	15/9/2016	j1,j2,	10000
	1014	aditya	saxena	a	delhi	mumbai	15/9/2016	k1,k1,k1,k1,	5000
	1015	Aditya	Saxena	adityasaxena1997@gmail.com	delhi	mumbai	15/9/2016	k1,k2,	10000
	1019	Aditya	Saxena	adityasaxena1997@gmail.com	delhi	jaipur	15/9/2016	k1,k2,j2,	3300
	1014	Aditya	Saxena	adityasaxena1997@gmail.com	delhi	mumbai	15/9/2016	k2,	5000
	1019	Prabhat	saxena	saxena5891@gmail.com	delhi	jaipur	15/9/2016	l1,l2,	2200
	1014	aditya	saxena	a	delhi	mumbai	15/9/2016	l2,	5000
	1015	aditya	saxena	a	delhi	mumbai	15/9/2016	l2,l1,	10000
★	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

user - Table										
		Table Name: <input type="text" value="user"/>	Schema: bus							
		Collation: <input type="text" value="utf8 - default collation"/>	Engine: <input type="text" value="InnoDB"/>							
		Comments: <div></div>								
Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression
First name	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Last name	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Email	VARCHAR(30)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
password	VARCHAR(30)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Date of Birth	VARCHAR(35)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gender	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2.6 Output Screenshots: -

2.6.1 Sign Up: -

PRIME BUS

Email or Phone

Password

LOG IN

Signup

Its Free And Always Will Be

Birthday

☒ Male ☐ Female

Signup

2.6.2 Log in: -

PRIMEBUS

Email or Phone

Password

LOG IN

Signup

Its Free And Always Will Be

aditya

saxena

aditya@gmail.com

aditya@gmail.com

Birthday

9

▼

january

▼

2000

▼


☒ Male


☐ Female


Signup

2.6.3 Search Bus: -

BUS BOOKING SYSTEM



From :-  delhi

To :-  mumbai

Journey Date :- 15 september 2016


NEXT

VIEW YOUR OTHER BOOKINGS

Windows taskbar: Ask me anything, 2:34 AM 9/4/2016

2.6.4 Buses Available: -

BUS BOOKING SYSTEM



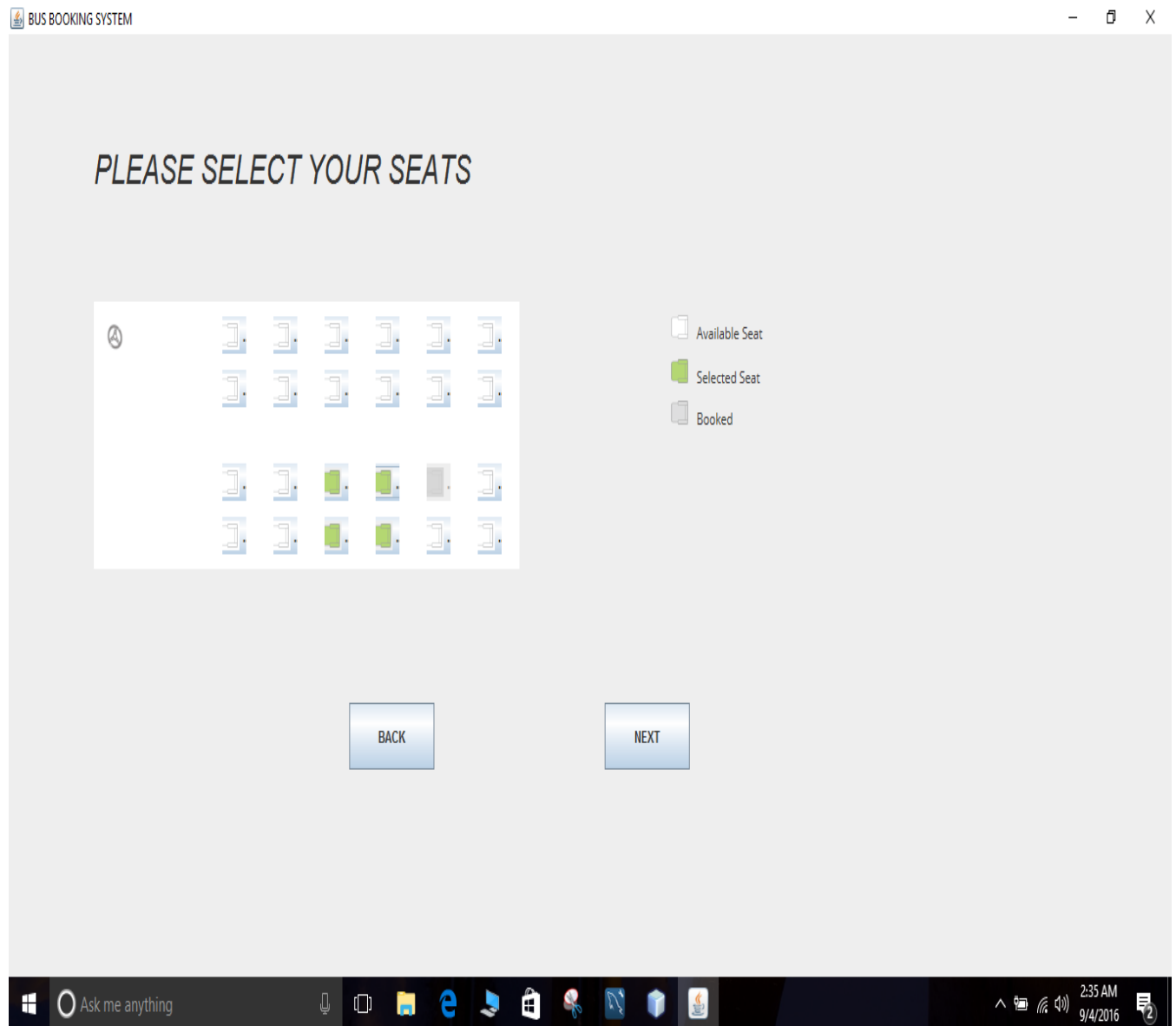
BUS ID	Source	Destination	Type	Departure Time	Arrival time	Fare
1001	delhi	mumbai	ac	9:00AM	11:00AM	5000
1002	delhi	mumbai	ac	11:00AM	02:00PM	5000
1013	delhi	mumbai	non-ac	01:00PM	04:00PM	2000
1014	delhi	mumbai	ac	04:00PM	11:00PM	5000
1015	delhi	mumbai	ac	06:00AM	11:30PM	5000

BACK NEXT

Ask me anything

2:35 AM
9/4/2016


2.6.5 Selecting Seats: -



2.6.6 Booking Confirmation: -



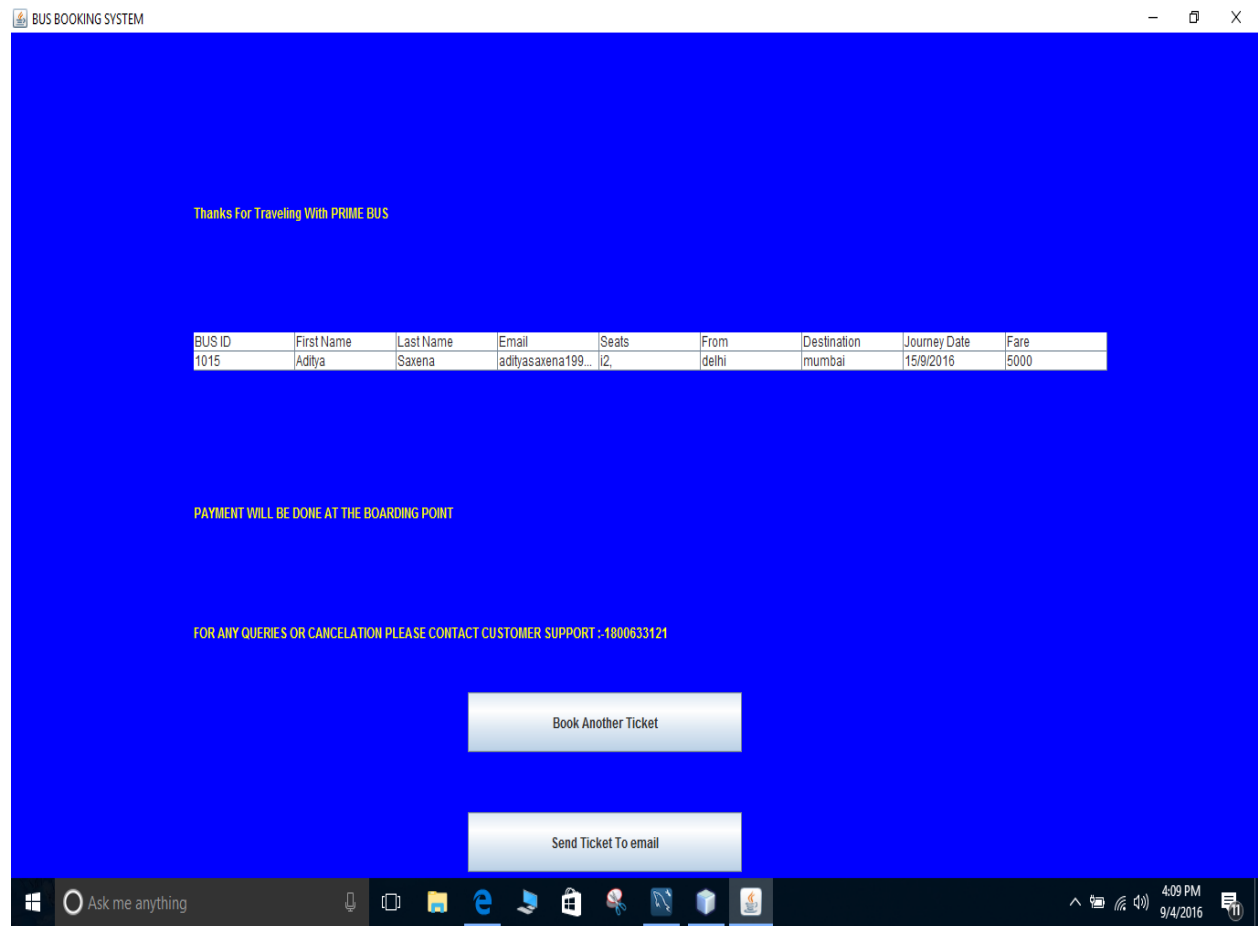
2.6.7 View Booking Details: -

 BUS BOOKING SYSTEM- □ X

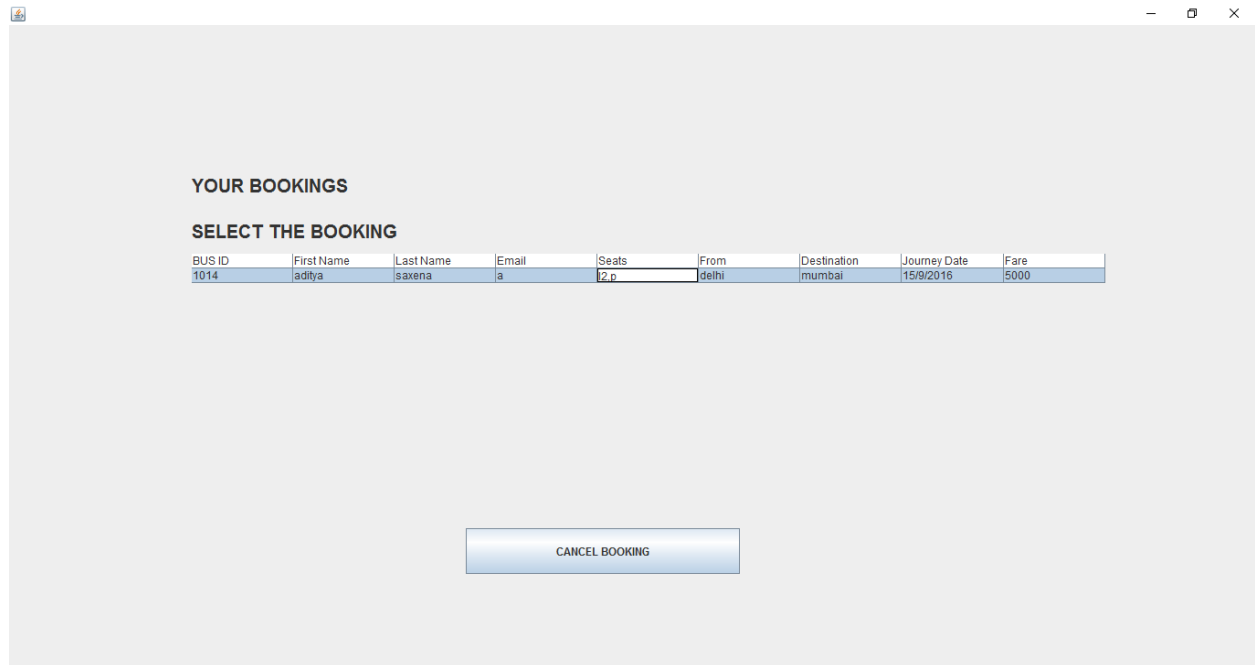
YOUR BOOKINGS

BUS ID	First Name	Last Name	Email	Seats	From	Destination	Journey Date	Fare
1014	Aditya	Saxena	adityasaxena199...	1,12,2,1,	delhi	mumbai	15/9/2016	20000

2.6.8 Send Ticket to Email Id: -



2.6.9 View Booking Details: -



The screenshot shows a web application window with a light gray background. At the top left is a small icon, and at the top right are standard window controls (minimize, maximize, close). The main content area contains the following elements:

- YOUR BOOKINGS**: A heading in bold black text.
- SELECT THE BOOKING**: A heading in bold black text.
- | BUS ID | First Name | Last Name | Email | Seats | From | Destination | Journey Date | Fare |
|--------|------------|-----------|-------|-------|-------|-------------|--------------|------|
| 1014 | aditya | saxena | a | 12 p | delhi | mumbai | 15/9/2016 | 5000 |
- CANCEL BOOKING**: A button with a blue gradient and a black border, centered below the table.

2.7 FUTURE ENHANCEMENT: -

- ❖ Creating an Android/IOS application .
- ❖ Inclusion of METRO UI for desktop application
- ❖ Linking our booking system with other centralized bus services
- ❖ GPS tracking of the bus using special link provided to users.
- ❖ Cloud database
- ❖ Website
- ❖ More data for visitors

3 BIBLIOGRAPHY: -

During the development of my system, I have taken the reference from Books and journals, which I would like to mention in this section.

These books acted as my tutors during the system development.

- **JavaBeans: Developing Component Software in Java** by John Osborn
- **Java Network Programming** by 'O'Reilly & Associates
- **The Java Developer's Resource** by Elliott Hardy

Besides these I was referring the online manuals from the sites.

www.google.com
www.GSRTC.com
www.neeta.com
www.gujrat.com
www.paswanath.com