



# **BUS TICKET MANAGEMENT SYSTEM**

A Report for the Evaluation 3 of Project 2

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*in partial fulfillment for the award of the degree*

*of*

**Bachelor of Technology**

**IN**

**Computer Science and Engineering**

**SCHOOL OF COMPUTING SCIENCE AND ENGINEERING**

**Under the Supervision of**

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**MAY – 2020**



**SCHOOL OF COMPUTER SCIENCE AND  
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**BONAFIDE CERTIFICATE**

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## **Abstract**

Bus Ticket Management System is a web based application that works within a centralized network. Bus Ticket Management System is built for managing and computerizing the traditional database ticket booking and tracking bus and travel made. It maintains all customer details, bus details, reservation details. There are various technologies that are used in implementing the system such as Java (for implementing the backend process of the system) and HTML/PHP (for implementing the frontend process or interface of the system). For managing or for implementing the transactions process of the bus ticket management system the technologies used are PHP forms and my SQL for the database management. The main objective of BTMS is to book or reserve a seat in bus for traveling from source to the destination including that it will book a bus from the middle of the route towards its destination and after the bus is fully booked then gate of the bus will automatic get closed and in the ERP of the system it shows the status i.e., not available. It is recommended that despite the present functionality of the designed software, an additional functionality such as the use of Email to send tickets and notifications to the customer and an online payment using credit cards/debit cards should be implemented into the system.

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## **1. Introduction**

### **1.1 Overall Description**

The Bus Ticket Management System Is an web based application used to book the bus tickets via web or online with the payment or booking done online. This system is established for all the office/home users after taking request from the administrator. Bus ticket management System provides bus transportation system, a facility to reserved seats, cancellation of seats and different types of enquiry which need an instant and quick reservation. This system can be used by the users in performing online reservation via internet for their all business purposes. Users can use this program directly on their websites and no need to install it.

The use of bus traveling is a large growing business in India and other countries; hence bus ticket management system deals with maintenance of records of each passenger who had reserved a seat for a journey. It also includes maintenance of information like schedule and details of each bus, Also, we get to know that there are many operations, which they have to do manually . It takes a lot of time and causes many errors. Due to this, sometimes a lot of problems occur and they were facing many disputes with customers. To solve the above problem, and further maintaining records of items, seat availability for customers, price of per seat, bill generation and other things, we are offering this proposal of reservation system. The reservation system has three modules. First module helps the customer to enquire the availability of seats in a particular bus at particular date, the second module helps him to reserve a ticket and with the third module he can cancel a reserved ticket.

### **1.2 Feasibility Study**

The Bus ticket management system has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardship face by this existing system. moreover this system is designed for the particular need of the company to carry out operations in smooth and effective manner. The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering the invalid data. No formal knowledge is needed for the user to use this system. Thus by all this it proves it is u

ser friendly. Bus ticket booking system, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources. Every organization, whether big or small, challenges to overcome and managing the information of tickets, Bus, customer, bus schedule, bus route. Every bus ticket management system has different bus need, therefore we design exclusive employee management system that are adopted to your managerial requirements. This is designed to assist in strategic planning and will help you ensure that your organization is equipped with the right level of information and details for your future goals. Also, for those busy executive who are always on the go, our system comes with remote access feature which will allow you to manage your workforce anytime, at all times. These systems will ultimately allow you to better manage resources.

### **1.3 Purpose**

The main purpose of the bus ticket management system is to manage the details of the bus, ticket booking, customer, bus route. It manages all the information about bus, bus schedule, bus routes, bus. The project is totally built at administrative end and thus the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the bus ticket, bus schedule and booking.

Functionalities provided by Bus ticket management system are-

- Provides the searching facilities based on various factors. Such as booking, customer, bus route.
- It also manages the bus schedule details online for customer details, bus route details etc.
- The bus ticket management system also includes some AI facilities, i.e., Automatic close of the door of the bus after picking up all the passengers or last passengers.
- It provides a unique bar code for each passenger which is used for the GPS and details verifications.

- Editing, adding and updating of bus records is improved which results in proper resource management of Bus data.

#### **1.4 Overview**

It may help collecting perfect management in details. In every short time the collection will be obvious, simple and sensible. It will help a person to know the management of passed years vividly. It also helps in current all works related to bus ticket management system. It will also reduced the cost of collecting the management procedure to go on smoothly.

My project aims at business process automation, i.e., we have tried to computerized various processes of bus ticket management system.

- In computer system the person has to fill the various forms & number of copies of the forms can be easily generated at a time.
- In a computer system, it is not necessary to create the manifest but we can directly print it, which saves out time.
- To assist the staff in capturing, the effort spend on their respective working areas.
- To utilize an resources in an efficient manner ny increasing their productivity through automation.

Currently, staff at the bus ticket counter is using an internal system to sell tickets at the counter and customers who are unable to buy bus ticket online at this moment would have to go to the counter to a buy bus ticket. Sometimes, customers' needs to queue up a long queue to buy bus ticket and ask for information and this brings a lot of inconveniences to customers.

However, Online Bus Ticket Reservation System enables the customer to buy bus ticket, make payment, and ask for information online easily. Furthermore, staff can sell bus ticket using Bus Ticket Reservation System after checking the bus ticket availability for the customer and print the bus ticket to the customer.

## **2. Proposed System**

The Bus Ticket Management System is currently maintaining the project Transport Company's process manually which is a very time consuming process. It deals with transport industry's ticket booking and transport maintenance, so it becomes a very tedious job for the ticket booking transporter to look after these particulars to complete the task at right time. The bus ticket booking system not only deals with transporters owned vehicles but also takes into consideration about the other types project of system transport vehicles available with other transporters .

To develop a software application that supports Specific to the project Travel Agency Automation that can solve all tedious tasks related to ticket booking in a travel agency.

- This system will lead to increase in the ticket booking efficiency of the project Staff and members of the Ticket Booking Agency with little throughput.
- This system project is made as user friendly as possible so that any one can use it with little knowledge of system computers.
- The ticket booking project will reduce the ticket booking tedious job of system paperwork by keeping all the project details of bus ticket booking, cancelling tickets are stored in the form database in computer's hard disk.
- Up-to-date information of the system Performance status and other enquires.
- We provide up to date information that is not possible manually.
- The objective of my project is to make easy the ticket booking project system of Ticket Booking Agency simple, reliable, user friendly, and corrective. Moreover less time consuming as compared to manual work.

Report of the ticket booking different aspects can be generated like Available sits, current status of booking Cancelling details monthly status report etc.

### **3. Existing System**

The purpose of Bus Ticket management system is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data can be stored for a longer period with easy accessing and



manipulations of the same. The required software and hardware are easily available and easy to work with.

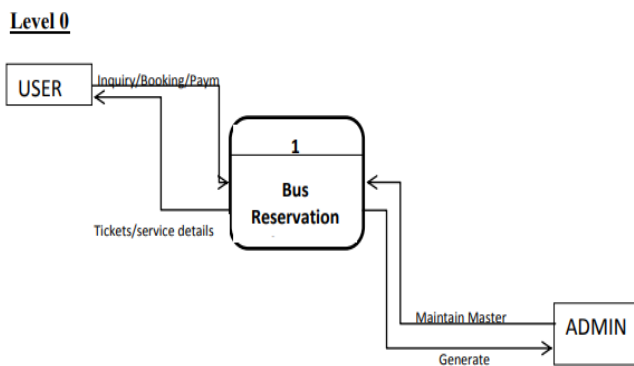
The aim is to automate its existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data can be stored for a long period with easy accessing and manipulation of the same. Basically the project describes how to manage for good performance and better services for the clients.

The Bus Ticket management system involved various software technologies for its implementation some of these are Machine learning, Artificial intelligence, Internet of things to make things more easier and more reliable.

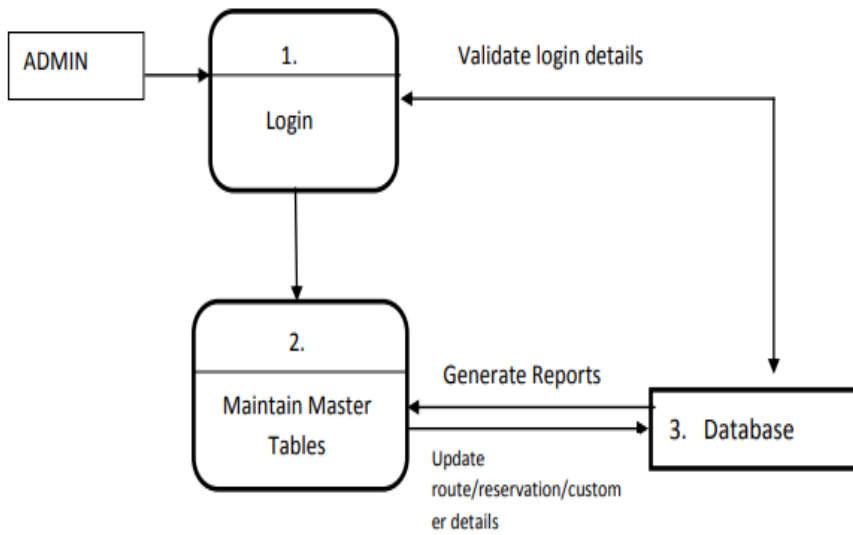
#### 4. Architecture Diagrams

The Architecture Diagrams of Bus Ticket management System includes various aspects of user case functions and actors. Below represents the user case as well as the relationship diagrams.

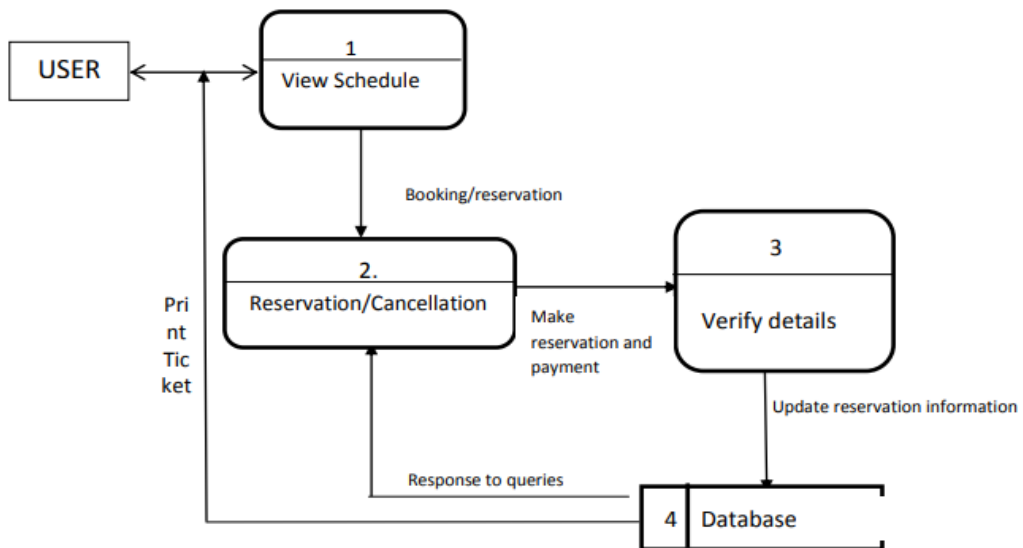
##### 4.1 Relationships diagram



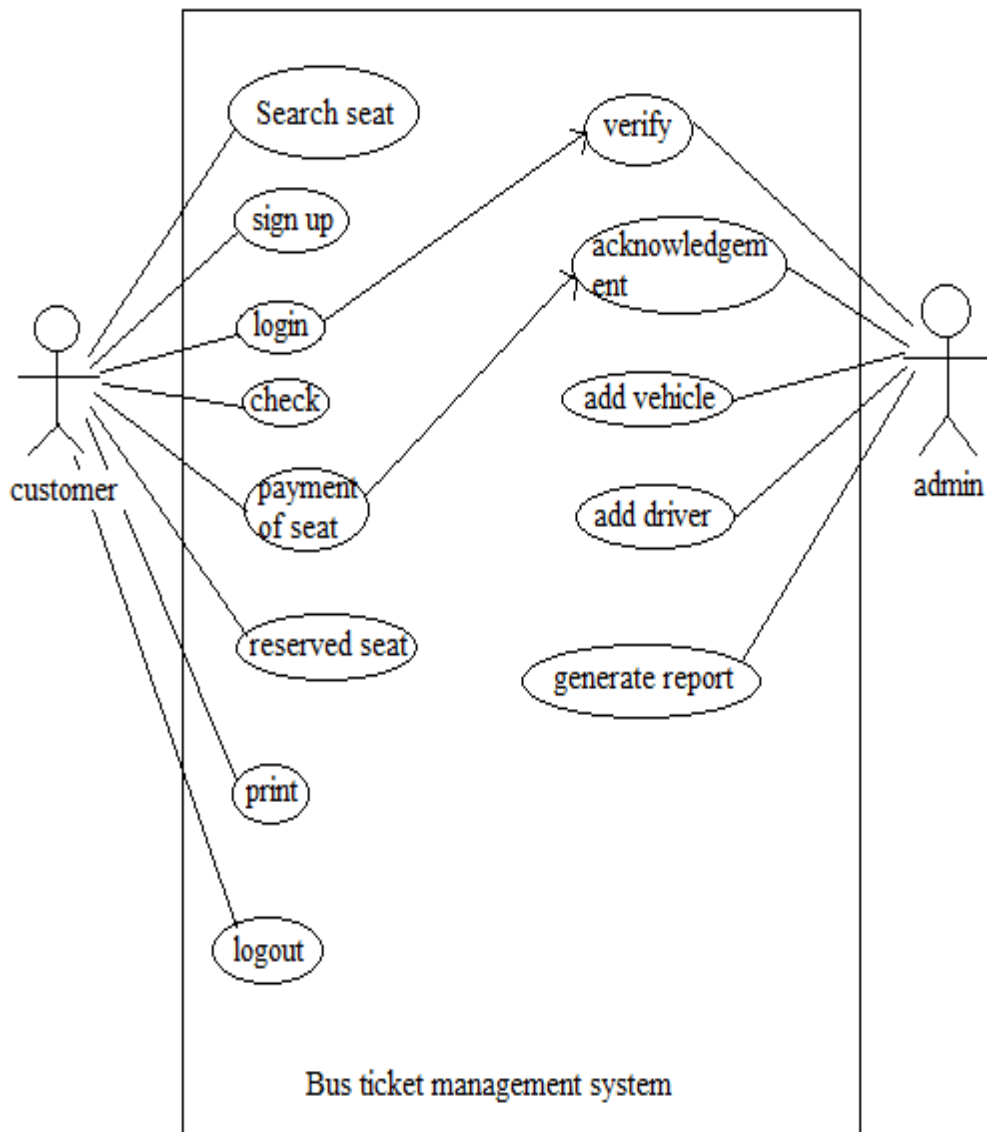
## LEVEL 1



## Level 2



## 4.2 User Case Diagram



## 5. Screenshots

After, the implementation process of the interface along with the functioning of the process. Below are some screenshots of the interface of the bus ticket management system.

Here are all the snapshots of the interface of the bus ticket management system.

## 5.1 The Login Page

**Login Here**

User Name

Password

**Login**

New Member? [SignUp](#) | [Forgot Password](#)

## 5.2 Dashboard

TrueBus

Online

Bus Management <

Route Details <

Board Point Details <

Drop Point Details <

Gallery

Agent <

Settings

Cancellation <

Booking Details

Seat Layout

Rating

Add Setting Details

Home > Settings > Add Settings

Add Setting Details

Title

SmtP Username

SmtP Host

SmtP Password

Sender Id

Sms username

Sms Password

Logo  No file selected.

Favicon  No file selected.

## 5.3 Book Ticket

**DATE & LOCATIONS** ▾

**One Way** **Roundtrip**

Departing:

From:

To:

**Check Availability**

Select trip type - one way or roundtrip. Then select Departing (and Returning) date. From the drop down menus select your departure and arrival cities. On the next screen you will see available buses, tickets and seats.

## 5.4 User Details

**Seat Number**   
Auto Generated [view seat](#)

**First Name**   
Enter first name

**Last Name**   
Enter last name

**Address**   
Enter Address

**Contact**   
Enter Contact Number

**Slip Number**   
Enter Bank Slip Number

**Amount Paid**   
Enter Amount Paid

**Confirm**

## 6. Conclusion

In most countries, the use of road transportation is of high demand by the citizens but some problems are associated to this mean of transportation. Typical problems such as the manual booking of tickets (intra and inter trips) from the cashier at bus terminals by long queue; the strenuous and time consumption factor; the tendency of misplacing bus tickets of customer and difficulty in the retrieval of this records. These problems can be solved by making life easier for the customers through the creation of an online booking system at their convenience and comfortability; this is the main reason for developing such a system.

The system is practically of great importance because it reduces the stress of queue to make ticket for booking and rental at the cashier counter; to generate an accurate and detailed profits details; and also management of booking seats effectively.

During the developing of the web application, we solved the following tasks:

- 1) The modern tools of web sites developing were selected and the comparative analysis of the content management system for web-development are performed.
- 2) The structure of the required database for online bus booking and rental system is developed.
- 3) The web-application was designed, implemented and tested. The testing including the functionality testing also known as component testing; the usability testing which was performed by multiple users and also the integration testing.

## 7. References

1. Java and software design concepts by Apress.
2. Google for problem solving.
3. Database programming with JDBC and java.
4. <http://www.jsp.net/>.
5. <http://www.tutorialspoint.com/sql/>
6. Adriana Harizanova, (2003), "Management Information System in tailoring industry" in Academic Open Internet Journal, Volume 9, 2003, [Online] <[www.acadjournal.com](http://www.acadjournal.com)>
7. Aeroline, (2006), [Online] <<https://www.aeroline.com.my/index.html>>, 5/4/2006.
8. Allen H., (2001), "Innovations in retail payments: e-payments", Bank's Market Infrastructure Division, pg 429.
9. Audrey Edwards, (2006), The Star, 19/10/2006.

