

TITLE: BUS RESERVATION SYSTEM

1.INTRODUCTION

Online Bus Ticket Reservation System is a Web based application that works within a centralized network. This project presents a review on the software program “Online Bus Ticket Reservation System” as should be used in a bus transportation system, a facility which is used to reserve seats, cancellation of reservation and different types of route enquiries used on securing quick reservations.

OBTRS 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. In order to achieve the design, Imo Transport Company (ITC) was chosen as a case study because of its strategic importance to Imo State.

The software achieved is capable of improving the customer hand and relationship management in ITC operations. Furthermore, other operations carried by ITC such as the courier services should also be integrated in order to enhance the system.

Electronic tickets or e-tickets give evidence that their holders have the permission to enter a place of entertainment, use a means of transportation, or have access to some Internet services. 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 buy a 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.PROBLEM STATEMENT AND OBJECTIVES

Problem statement:

Currently, the type of system being used at the counter is an internal system which is manually used in selling the bus tickets.

Customers will also have to queue up for a long time in order to secure a bus ticket and will also need to pay cash when they buy the bus tickets which may not be available with them due to several reasons.

Objectives:

The main purpose of this study is to automate the manual procedures of reserving a bus ticket for any journey made through Imo Transport Company (ITC). This system is an automatic system and customers can select seats by themselves.

This project will consist of:

- i) Providing a web-based bus ticket reservation function where a customer can buy bus ticket through the online system without a need to queue up at the counter to purchase a bus ticket.
- ii) Enabling customers to check the availability and types of busses online.
- iii) Customer can check the time departure for every ITC bus through the system.
- iv) Easing bus ticket payment by obtaining a bank pin after payments is made to the various designated banks.
- v) Ability of customers to cancel their reservation.
- vi) User privileges in updating and cancelling payment, route and vehicle records.

This project is to provide the better work efficiency, security, accuracy, reliability, feasibility. The error occurred could be reduced to nil and working conditions can be improved and also provide following features:

- Online Bus Ticket Booking Facility and Cancellation Facility.
- Enhance of the security level in centralized system.
- Register New Agent.

Bus Reservation System will increase the booking process faster, convenient, and comfortable. Customers can book their desired seats. They can check the availability of posts on a specific date. The customer can check availability, book a ticket, or cancel a ticket 24X7. The online system is available to use anytime. The user doesn't require to visit any office.

The purpose of the economic feasibility assessment is to determine the positive economic benefits to the organization that the proposed system will provide. It includes quantification and identification of all the benefits expected. This assessment typically involves a cost/ benefits analysis.

The concept is further developed to describe how the business will operate once the approved system is implemented, and to assess how the system will impact the administrator and user privacy. To ensure the products and /or services provide the required capability on time and within budget, project resources, activities, schedules, tools, and reviews are defined

3.METHODOLOGY

The C programming language was used to create the Bus Reservation System Project with Source Code. This C-based bus reservation system aids the user in reserving bus tickets. The user must first enter the bus number, after which the system will display the entire number of bus seats along with the passengers' names, and the user must then enter the number of tickets, seat number, and person's name.

Bus information, such as bus number and driver's name, may be uploaded by users. Furthermore, since the reservation is made in the passenger's name, it is quite straightforward.

In addition, the system displays all information about the buses and their corresponding seats. The system also displays the buses that may be reserved.

This C software for bus reservations also has a login system, which makes it more stable. There is no risk of data loss or abuse, and it only takes a few minutes. This bus reservation system mini project in C design is simple and uncomplicated, making it simple to learn, utilize, and navigate for users.

The code is basically built up with multiple looping techniques like if-else, for loop and various others.

In this project, we made use of multiple functions for its required actions, such as bus(), booking(), viewbus(), status(), cancellation().

4.IMPLEMENTATION AND RESULT

The beneficiaries of this system are the bus company and the people who travel through buses.

In this present era, online booking or reservation system has improved the operations of various sectors of a nation's economy deploying this system. Online Bus Ticket Reservation System being a web-based system that ensures that the company would be able to transform most of the processes carried out manually into automated, error-free and easy to use operations in the organization especially in the area of transportation. It would be able to generate report for the management decision purpose.

It is user friendly bus booking system where one can handle reservations, client data and passenger lists. There is no risk of data loss or abuse, and it only takes few minutes.

Outputs:

1. Enter choice

```
----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----  
  
Enter Choice 1 to View Bus List  
Enter Choice 2 to Book Tickets  
Enter Choice 3 to Cancel Booking  
Enter Choice 4 to Check your Ticket Status  
Enter choice 5 to EXIT  
  
Enter your choice:1^S_
```

Fig 4.1 Output- intial

2. Enter seat needed

```
Enter your choice:1
-----
KSRTC BUS RESERVATION PORTAL >> VIEW BUSES >>

BUS LIST
Source : Bangalore (Shanti Nagar Bus Stand)
Destination : Chennai (Koyembedu Satellite Bus Stand)
Time Duration : 6 Hrs 15 Min

Bus Number 1 - Airavat Club Class (A/C Seater)
Departure : 6:00 AM
Arrival : 12:15 PM
Price : Rs. 750 (1 Ticket)Seat Available:
1:Empty
2:Empty
3:Empty
4:Empty
5:Empty
6:Empty
7:Empty
8:Empty
9:Empty
10:Empty

Bus Number 2 - Ambagiri Dream Class (AC Sleeper)
Departure : 11:00 PM
Arrival : 5:15 AM
Price : Rs. 850 (1 Ticket)Seat Available:
1:Empty
2:Empty
3:Empty
4:Empty
5:Empty
6:Empty
7:Empty
8:Empty
9:Empty
10:Empty

Bus Number 3 - Rajahamsa (Non A/C Seater)
Departure : 1:00 PM
Arrival : 8:15 PM
Price : Rs. 550 (1 Ticket)Seat Available:
1:Empty
2:Empty
3:Empty
4:Empty
5:Empty
6:Empty
7:Empty
8:Empty
9:Empty
10:Empty
```

Fig 4.2 Output- second phase

```
Bus Number 3 - Rajahamsa (Non A/C Seater)
Departure : 1:00 PM
Arrival : 8:15 PM
Price : Rs. 550 (1 Ticket)Seat Available:
1:Empty
2:Empty
3:Empty
4:Empty
5:Empty
6:Empty
7:Empty
8:Empty
9:Empty
10:Empty

----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----

Enter Choice 1 to View Bus List
Enter Choice 2 to Book Tickets
Enter Choice 3 to Cancel Booking
Enter Cloice 4 to Check your Ticket Status
Enter choice 5 to EXIT

Enter your choice:
```

Fig 4.3 Output- third phase

```

----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----

Enter Choice 1 to View Bus List
Enter Choice 2 to Book Tickets
Enter Choice 3 to Cancel Booking
Enter Cloice 4 to Check your Ticket Status
Enter choice 5 to EXIT

Enter your choice:2
-----
KSRTC BUS RESERVATION PORTAL >> TICKET BOOKING >>

---> BUS LIST <---

Source : Bangalore
Destination : Chennai
Time Duration : 6 Hrs 15 Min
Bus Number 1 - AIRAVAT CLUB CLASS
Bus Number 2 - AMBAARI DREAM CLASS
Bus Number 3 - RAJAHAMSA
Enter the Bus Number:

```

Fig 4.4 Output- fourth phase

```

----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----

Enter Choice 1 to View Bus List
Enter Choice 2 to Book Tickets
Enter Choice 3 to Cancel Booking
Enter Cloice 4 to Check your Ticket Status
Enter choice 5 to EXIT

Enter your choice:2
-----
KSRTC BUS RESERVATION PORTAL >> TICKET BOOKING >>

---> BUS LIST <---

Source : Bangalore
Destination : Chennai
Time Duration : 6 Hrs 15 Min
Bus Number 1 - AIRAVAT CLUB CLASS
Bus Number 2 - AMBAARI DREAM CLASS
Bus Number 3 - RAJAHAMSA
Enter the Bus Number:2

1:Empty
2:Empty
3:Empty
4:Empty
5:Empty
6:Empty
7:Empty
8:Empty
9:Empty
10:Empty
Enter the Seat Number To be Book:

```

Fig 4.5 Output- fifth phase

```

Enter choice 5 to EXIT

Enter your choice:2
-----
KSRTC BUS RESERVATION PORTAL >> TICKET BOOKING >>

---> BUS LIST <---

Source : Bangalore
Destination : Chennai
Time Duration : 6 Hrs 15 Min
Bus Number 1 - AIRAVAT CLUB CLASS
Bus Number 2 - AMBAARI DREAM CLASS
Bus Number 3 - RAJAHAMSA
Enter the Bus Number:2

1:Empty
2:Empty
3:Empty
4:Empty
5:Empty
6:Empty
7:Empty
8:Empty
9:Empty
10:Empty
Enter the Seat Number To be Book:6
Enter the Name:Allan
Enter Age:19
Choode the Gender(M:Male,F:Female)M

Enter the 10 digit Phone Number:6364001926
Complete the payment of Rs.500
Ticket Booked Successfully
Happy & Safe Journey
-----

----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----

Enter Choice 1 to View Bus List
Enter Choice 2 to Book Tickets
Enter Choice 3 to Cancel Booking
Enter Cloice 4 to Check your Ticket Status
Enter choice 5 to EXIT

Enter your choice:

```

Fig 4.6 Output- sixth phase

```

----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----

Enter Choice 1 to View Bus List
Enter Choice 2 to Book Tickets
Enter Choice 3 to Cancel Booking
Enter Cloice 4 to Check your Ticket Status
Enter choice 5 to EXIT

Enter your choice:4
-----
KSRTC BUS RESERVATION PORTAL >> CHECK TICKET STATUS >>

---> BUS LIST <---

Source : Bangalore
Destination : Chennai
Time Duration : 6 Hrs 15 Min
Bus Number 1 - AIRAVAT CLUB CLASS
Bus Number 2 - AMBAARI DREAM CLASS
Bus Number 3 - RAJAHAMSA

Enter the Bus Number:

```

Fig 4.7 Output- seventh phase

```

Enter your choice:4
-----
KSRTC BUS RESERVATION PORTAL >> CHECK TICKET STATUS >>

---> BUS LIST <---
Source : Bangalore
Destination : Chennai
Time Duration : 6 Hrs 15 Min
Bus Number 1 - AIRAVAT CLUB CLASS
Bus Number 2 - AMBAARI DREAM CLASS
Bus Number 3 - RAJAHAMSA

Enter the Bus Number:2
Enter the Seat Number:6
Name of the Passanger: Allan
Age:19
Gender:M
Ticket No : 6
STATUS : BOOKED
-----

----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----

Enter Choice 1 to View Bus List
Enter Choice 2 to Book Tickets
Enter Choice 3 to Cancel Booking
Enter Cloice 4 to Check your Ticket Status
Enter choice 5 to EXIT
Enter your choice:

```

Fig 4.8 Output- eighth phase

```

----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----

Enter Choice 1 to View Bus List
Enter Choice 2 to Book Tickets
Enter Choice 3 to Cancel Booking
Enter Cloice 4 to Check your Ticket Status
Enter choice 5 to EXIT

Enter your choice:3
-----
KSRTC BUS RESERVATION PORTAL >> TICKET CANSCELLATION >>

---> BUS LIST <---
Source : Bangalore
Destination : Chennai
Time Duration : 6 Hrs 15 Min
Bus Number 1 - AIRAVAT CLUB CLASS
Bus Number 2 - AMBAARI DREAM CLASS
Bus Number 3 - RAJAHAMSA
Enter the Bus Number that to be Cancelled:2
Do you want to cancel the Ticket?
Enter '1' for 'Yes' & '0' for 'No'1
Enter the seat No. to be Cancelled:6
Ticket Cancelled Successfully!
-----

----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----

Enter Choice 1 to View Bus List
Enter Choice 2 to Book Tickets
Enter Choice 3 to Cancel Booking
Enter Cloice 4 to Check your Ticket Status
Enter choice 5 to EXIT
Enter your choice:_

```

Fig 4.9 Output- ninth phase

```
----- WELCOME TO KSRTC BUS RESERVATION PORTAL -----  
  
Enter Choice 1 to View Bus List  
Enter Choice 2 to Book Tickets  
Enter Choice 3 to Cancel Booking  
Enter Choice 4 to Check your Ticket Status  
Enter choice 5 to EXIT  
  
Enter your choice:5  
-----  
THANKYOU FOR VISITING  
  
Project by :  
Allan Srinaath (1BG21EC009)  
Anaghaa R (1BG21EC015)  
Bhoomika GB (1BG21EC023)  
Likith BG (1BG21EC044)  
-----  
D:\????\BNMIT\Semester 2\CPC\Practicals\BusReservation_Project\x64\Debug\BusReservation_Project.exe (process 23872) exited with code 0.  
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.  
Press any key to close this window . . .
```

Fig 4.10 Output- final phase

5.CONCLUSION

It can be observed that computer applications are very important in every field of human endeavour. Some of the difficulties encountered with the manual system are overcome. It will also reduce the workload of the staff, reduce the time used for making reservation at the bus terminal and also increase efficiency.

This project, as a whole, will give a new way in bus reservations and ticketing processes. The automation and management of seats and reservations will be done online. However, this project does not limit the walk-in passengers that is passengers who visit the company's counter because it also caters for them. This also lessens the use of papers like in the traditional way of ticketing and thus contributes to saving Earth.

Nowadays, bus agencies are taking important role in transportation, and to make reservation reliable they need a strong system that they will make reservation easier, faster and safer. This project is designed to meet requirements of a bus reservation system. XHTML, PHP, CSS, JAVASCRIPT and database with built in MySQL can be used to make the project better and more functional. By using this application, a company can provide reservation services and information to their customers without the limitation of office hours or manpower. Not only does it let customers book trips around the clock from any location with an internet connection but it is also designed for use by the company to internally manage their business processes, minimizing human errors, overcoming difficulties and problems.