DON BOSCO INSTITUTE OF TECHNOLOGY



Skill Lab: C++ and Java Programming MINI PROJECT REPORT 2021-22

On

"Bus Reservation System C++"

Submitted By:

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Mini Project Title : Bus Reservation System C++ Project

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INTRODUCTION

Bus reservation system is a very simple project showing the implementation of class along with the object of C++ language. This project is very simple to understand, and it will help you learn how to create class and object in your C++ project/mini project. Here, the user can perform tasks like install bus information, reserve bus seat, show reservation information and show information regarding the buses available.

Basically four features are available in this project. The focus of the project is to computerize traveling company to manage data, so that all the transactions become fast and there should not be any error in transaction like calculation mistake, bill generation and other things. It replaces all the paper work. It keeps records of all bills also, giving to ensure 100% successful implementation of the computerized Bus reservation system.

Problem Definition Modules

In order to build the system, all the processes in the business should be studied, System study helps us under the problem and needs of the application. System study aims at establishing requests for the system to be acquired, development and installed. It involves studying and analyzing the ways of an organization currently processing the data to produce information.

1)Existing system is totally on book and thus a great amount of manual work has to be done. The amount of manual work increases exponentially with increase in services.

It Needs a lot of working staff and extra attention on all the records.

In existing system, there are various problems like keeping records of items, seats available, prices of per/seat and fixing bill generation on each bill.

Finding out details regarding any information is very difficult, as the user has to go through all the books manually.

Major problem was lack of security.

2)Proposed bus reservation system

The system is very simple in design and to implement. The system requires very low system resources and the system will work in almost all configurations. It has got following features:

√Doesnt require a lot of working staff and extra attention on all the records.

√Ensure data accuracy.
√Records can be efficiently maintained.
√Any person across the world, having internet can access this service.
✓Availability of seats can be enquired very easily.
✓Minimum time needed for the various processing
√Better Service
✓Minimum time required

IMPLEMENTATION

By the implementation of this Bus Reservation System Project, The following features can be achieved:

1)Install Bus Information

This feature allows you to install a typical bus information before it can be reserved by the passengers or shown in buses available. It includes the bus no., driver's name, arrival time, departure time and destination (from and to) of the bus.

2)Reservation

This feature is very simple; it includes the bus no., seat number and the passenger's name. The seat number of the particular bus is reserved under the passenger's name.

3)Show Reservation Information

With this feature, you can show all the information regarding the buses and their respective seats. It contains all the information stored by the previous two function of this project. It also enlists the no. of empty seats in a bus along with the seat number registered to a particular passenger.

4)Buses Available

This feature simply shows the buses available for reservation, and the information regarding the bus no. stored under the first feature.

RESULTS:

Screenshots of The Output:-

```
1.Install
2.Reservation
3.Show
4.Buses Available.
5.Exit
Enter your choice:-> 1

Enter Driver's name: Hari
Arrival time: 10:00

Departure: 3:00

From: Kathmandu

Io: Butwal
```

```
1.Install
2.Reservation
3.Show
4.Buses Available.
5.Exit
                                     Enter your choice:-> 3
Enter bus no: 1
                   Bus no:
Driver:
:00
                        1
Hari
                                                  Arrival time:
                                                                           10:003:00
                                                                                                    Departure time:3
From:
                         Kathmandu
                                                              To:
                                                                                        Butwa1
 ***************************
             Empty
Pramesh
Empty
Empty
Empty
                                                                                            Empty
Empty
Empty
Empty
Empty
                                                      3.
7.
11.
15.
19.
23.
27.
                             2.
6.
10.
14.
18.
22.
26.
30.
                                                                   Empty
                                                                                4.
8.
12.
16.
20.
24.
28.
32.
                                          Empty
                                          Empty
Empty
Empty
Empty
Empty
Empty
Empty
Empty
Empty
                                                                   Empty
Empty
Empty
Empty
    13.
17.
21.
25.
29.
                                                                                            Empty
Empty
Empty
                 Empty
Empty
Empty
                                                                   Empty
Empty
Empty
There are 31 seats empty in Bus No: 1
The seat no 5 is reserved for Pramesh.
```

CONCLUSION

The project of Bus Reservation System using C++ has been successfully performed. We observed the working of the Bus reservation system and after going through it, we get to know that there are many operations, which they have to do manually. It takes a lot of time and causing many errors while data entry. 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 passenger details, bus details, seat availability, arrival depature time and other things, a computerized reservation system has been developed which helps to do bookings in a simple and a better way.

References

- 1) https://t4tutorials.com/bus-ticket-reservation-system-project-in-c-oop/?amp
 - 2) https://www.lovelycoding.org/bus-reservation-system/
- 3) https://www.codewithc.com/bus-reservation-system-project-in-c/