

# **B.P. Poddar Institute of Management and Technology**

## **Department of Computer Application**



**Session (2018-2019)**

**A Project Report**

**BUS RESERVATION SYSTEM**

**SUBMITTED IN PARTIAL FULFILLMENT FOR AWARD OF DEGREE  
OF M.C.A**

**Maulana Abul Kalam Azad University of Technology, West Bengal**

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## **Acknowledgment**

I would like to express my special thanks of gratitude to my teacher Mr. Subhasis Mallick as well as our lab assistant Mr. Avik Dey who gave me the golden opportunity to do this wonderful project on the topic Bus Reservation System, which also helped me in doing a lot of Research and i came to know about so many new things I am really thankful to them.

Secondly i would also like to thank my parents and friends who helped me a lot in finalizing this project within the limited time frame.

## **Introduction:**

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. This reservation system has three modules. First module helps the customer to enquire the availability of seats in a particular bus at particular date. Second module helps him to reserve a ticket. Using third module he can cancel a reserved ticket.

First module retrieves data from tables required for enquire.

Second module inserts values into the tables on reservation.

Third module deletes values into from the table on cancellation of tickets.

As the database is hosted using Oracle Server onto internet, the application can access data from any part of the world, by many number of people concurrently.

## **PROBLEM SPECIFICATION:**

Bus Reservation Systems that were suggested till now, are not up to the desired level. There is no single system which automates all the process.

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.

Analyzing the problem thoroughly forms the vital part of the system study. In system analysis, prevailing situation of problem is carefully examined by breaking them into sub problems.

Problematic areas are identified and information is collected. Data gathering is essential to any analysis of requests. It is necessary that this analysis familiarizes the designer with objectives, activities and the function of the organization in which the system is to be implemented.

## **OBJECTIVE:**

- To change the manual transaction and provide an electronic system that will help both the management and passenger to process the Reservation effectively and efficiently.
- To record the passengers information that will serves as bases to avoid overcrowding of files.
- To find and get the information needed easily in case of confirmation and for records.

## **SCOPE AND LIMITATION:**

- We decide to make a project entitled “Bus Reservation System”
- Where in it limits to one specific bus station only in Libmanan Super Line Bus Reservation. This will be an automated transaction for
- passenger’s
- Reservation as well as printing of passenger receipt. This system allows the user to look for vacant seat quickly.
- Availability of seats can be enquired very easily.
- Passengers can also cancel their tickets easily.

## **SOFTWARE REQUIREMENT SPECIFICATION**

### **Hardware Requirements:**

PC with Pentium IV processor.

512 MB RAM or above.

40 GB Hard Disk or above.

### **Software Requirements:**

Operating system : Windows XP (or latest).

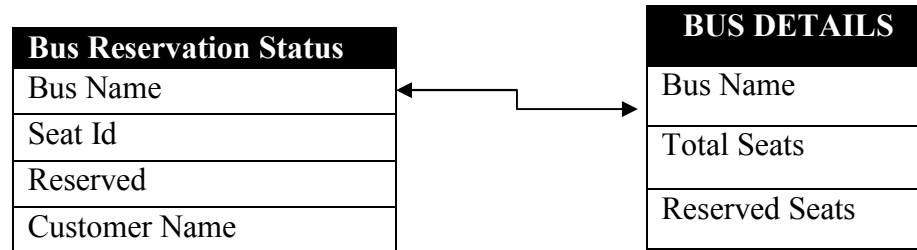
Front end : Java Runtime

Platform : Java Swings

Integrated development environment(IDE) : Eclipse

Back end : Oracle 10g

## **Database design:**



## **Database Structure:**

### **Reservation Status:**

Field Name	Data Type
Bus_name	Char(15)
Seat_id	Number(3)
Reserved	Char(2)
Customer_name	Char(15)

### **Bus Details:**

Field Name	Data Type
Bus_name	Char(15)
Total_seats	Number(3)
Reserved_seats	Number(3)

**Schema:**

>>>>>>>>>>>>>>>>>>CREATE TABLE<<<<<<<<<<<<<<<<<<

```
create table bus_details(bus_name char(15) primary key,total_seats number(3),reserved_seats
number(3));
```

```
create table busreservation_status(bus_name char(15) references bus_details(bus_name),seat_id
number(3),reserved char(2) check (reserved in('y','n')),customer_name char(15));
```

>>>>>>>>>>>>>>>>>ENTER BUS DETAILS<<<<<<<<<<<<<<<<<<

```

declare
bname char(15);
tot number(3);
resv number(3);
cursor cur is select * from bus_details;
begin
insert into bus_details values('&bus_name',&total_seats,0);
open cur;
loop
fetch cur into bname,tot,resv;
if cur%found then
for i in 1..tot
loop
insert into busreservation_status values(bname,i,'n',null);
end loop;
else
exit;
end if;
end loop;
close cur;
end;
/

```

PL/SQL procedure successfully completed.

\*\*\*\*\* OUTPUT \*\*\*\*\*

```
SQL> select * from bus_details;
```

BUS_NAME	TOTAL_SEATS	RESERVED_SEATS
aa	3	0

```
SQL> select * from busreservation_status;
```

BUS_NAME	SEAT_ID	RE	CUSTOMER_NAME
aa	1	n	
aa	2	n	
aa	3	n	

[illegible]

\*\*\*\*\* OUTPUT \*\*\*\*\*

```
SQL> select * from bus_details;
```

```
SQL> select * from busreservation status;
```

[illegible]

## **CONCLUSION**

This project is designed to meet the requirements of a Bus reservation system. It has been developed in the database has been built in PL/SQL only, keeping in mind the specifications of the system. Apart from MS-Access we could have also implemented other database software like Oracle or SQL. For designing the system we have used simple data flow diagrams and E/R diagrams. Overall the project teaches us the essential skills like, Understanding programming logic and language along with utilities like reports, forms, queries etc. in Visual Basic and PL/SQL.

## **References:**

### **Books:**

Fundamentals of Database Systems

- Ramez Elmasri, Shamkant B. Navathe

Beginning SQL Programming

- Kauffman, SPD/WROX

SQL PL/SQL for Oracle 8 & 8i

- P.S Deshpande, Wiley Dreamtech

Oracle PL/SQL Programming

- Feuerstein, SPD/O'REILLY

### **Website:**

<https://www.wikipedia.org/>

<http://plsql-tutorial.com/>

<https://www.tutorialspoint.com/>