

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).

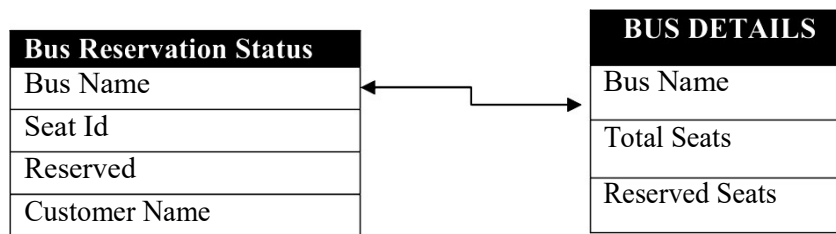
Front end : Java Runtime

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)

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

```
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));
```

```

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 curo/»found then
      for i in 1..tot

```

PL/SQL procedure successfully completed.

```
SQL> select * from bus details;
```

aa	3	0
----	---	---

```
aa      1 n
aa      2 n
aa      3 n
```

>>>>>>>>>>>>>>>>>**BUS RESERVATION**<<<<<<<<<<<<<<<<<<

```

declare
cname char(15);
bname char(15);
sid number(3);
tot number(3);
resv number(3);
begin
cname:='&cname';
bname:='&bname';
select total seats into tot from bus details where bus name=bname;
select reserved seats into resv from bus details where bus name=bname;
if tot>resv then
        select MIN(seat id) into sid from busreservation status where bus name=bname and reserved='n';

update busreservation status set reserved='y' where bus name=bname and seat id=sid;

update busreservation status set customer name=cname where bus name=bname and seat id=sid;

update bus details set reserved seats=reserved seats*1 where bus name=bname'
end if'
dbms output.put line('No seat available');

end;
```

PL/SQL procedure successfully completed.

***** OUTPUT *****

```
select * from bus details;
select * from busreservation status;
```

```
SQL> select ' ' from bus details;
```

BUS NAME	TOTAL SEATS	RESERVED SEATS
----------	-------------	----------------

aa	3	1
----	---	---

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

BUS NAME	SEAT ID	RE	CUSTOMER NAME
----------	---------	----	---------------

aa	1	y	sman
aa	2	n	
aa	3	n	

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://plsqli-tutorial.com/>

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