

# Indian Institute of Technology, Bhubaneswar



## PROJECT ABSTRACT

### LEISURE VOYAGE RESERVATION SYSTEM

#### CONTRIBUTORS

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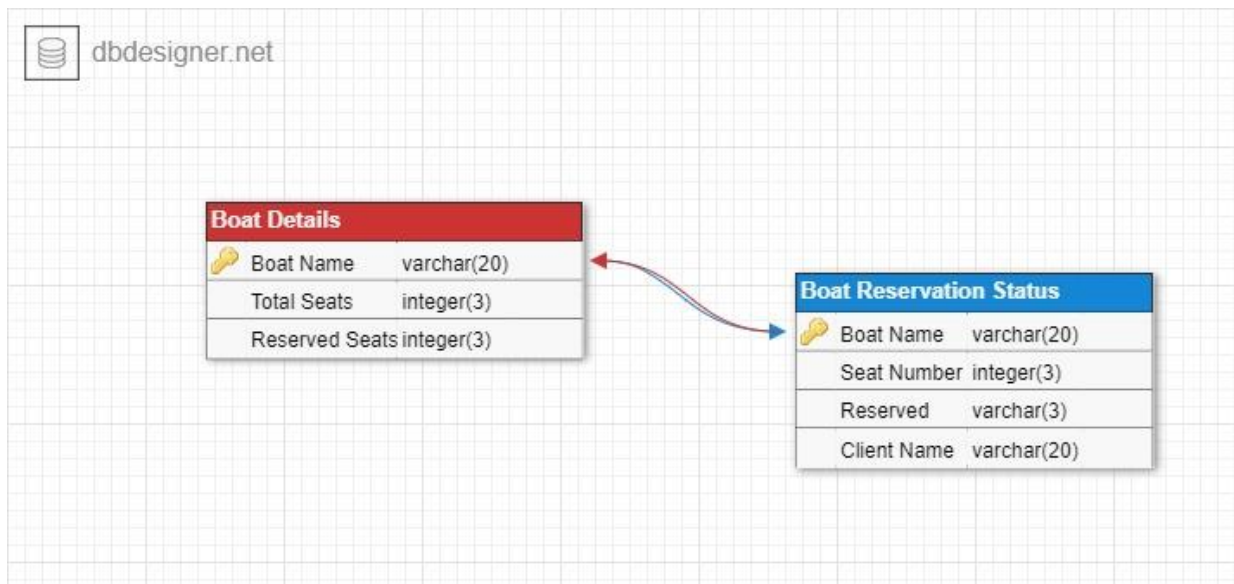
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## Introduction

The project's main goal is to computerize a company's data management. It takes the place of all paper work. It maintains and ensures that the computerized boat reservation system is implemented successfully 100 percent of the time. There are three modules in this reservation system. The first module assists the customer in determining the availability of seats on a specific boat. The second module assists him in confirming a ticket reservation. He can cancel a reserved ticket using the third module.

The first module gathers information from tables that are needed for the inquiry. On reservation, the second module enters values into the tables. On ticket cancellation, the third module deletes values from the table. Because the database is hosted on the internet using Oracle Server, the application can access data from anywhere in the world and by a large number of people at the same time.



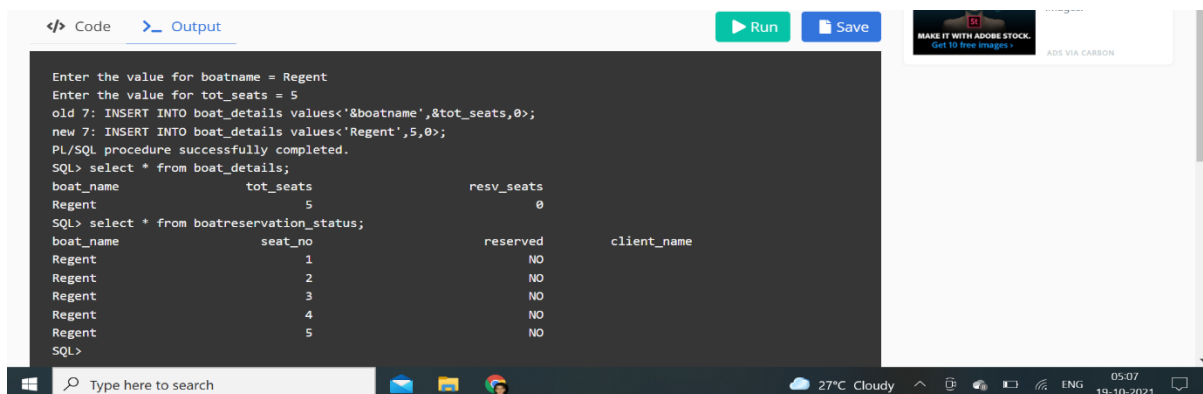
# CREATING TABLES

```
CREATE TABLE boat_details(boat_name CHAR(20)PRIMARY KEY, tot_seats  
NUMBER(3), reserved_seats NUMBER(3)) ;
```

```
CREATE TABLE boatreservation_status(boat_name CHAR(20) REFERENCES  
boat_details(boat_name),seat_no NUMBER(3),reserved CHAR(3) CHECK(reserved  
in('YES','NO')),client_name CHAR(20));
```

## BOAT DETAILS

```
DECLARE  
boatname CHAR(20);  
tot_seats NUMBER(3);  
resv_seats NUMBER(3);  
CURSOR cur IS SELECT * FROM boat_details;  
BEGIN  
INSERT INTO boat_details VALUES('&boat_name',&tot_seats,0);  
OPEN cur;  
loop  
FETCH cur INTO boatname,tot_seats,resv_seats;  
if cur % found then  
for i in 1..tot_seats  
loop  
INSERT INTO boatreservation_status VALUES(boatname,i,'NO',NULL);  
end loop;  
else  
exit;  
end if;  
end loop;  
lose cur;  
end;
```

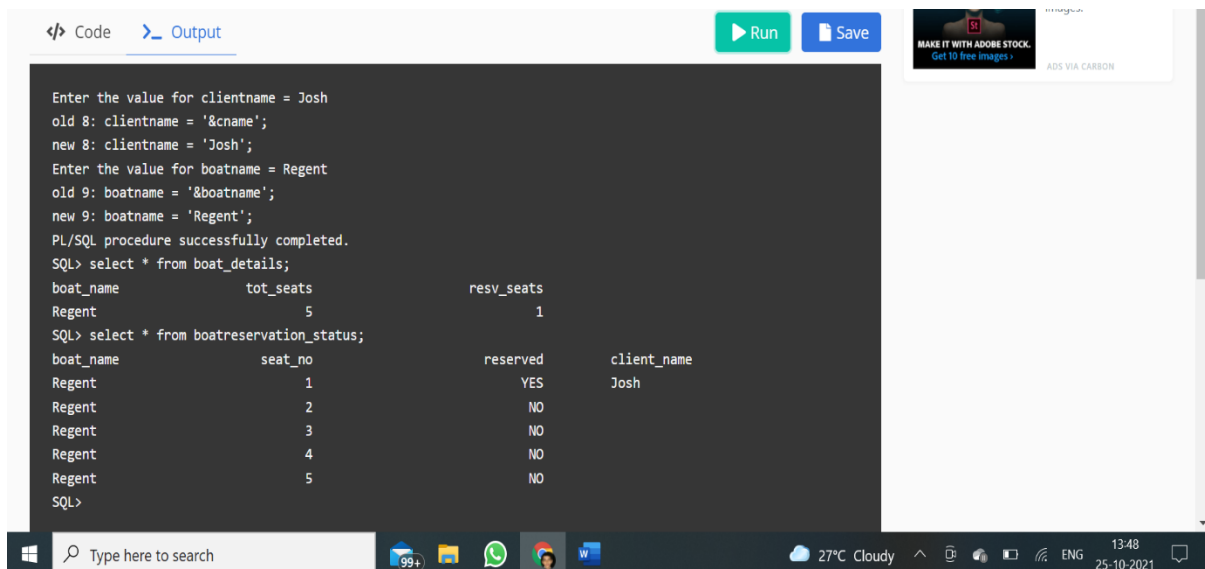


The screenshot shows a SQL IDE with a 'Code' tab and an 'Output' tab. The 'Code' tab contains the PL/SQL procedure and SQL queries. The 'Output' tab shows the results of the execution. The procedure inserts a new boat 'Regent' with 5 seats and 0 reserved seats. The SQL query then displays the contents of the 'boat\_details' and 'boatreservation\_status' tables.

```
Enter the value for boatname = Regent  
Enter the value for tot_seats = 5  
old 7: INSERT INTO boat_details values('&boatname',&tot_seats,0);  
new 7: INSERT INTO boat_details values('Regent',5,0);  
PL/SQL procedure successfully completed.  
SQL> select * from boat_details;  
boat_name      tot_seats      resv_seats  
-----  
Regent         5              0  
SQL> select * from boatreservation_status;  
boat_name      seat_no      reserved      client_name  
-----  
Regent         1           NO  
Regent         2           NO  
Regent         3           NO  
Regent         4           NO  
Regent         5           NO  
SQL>
```

# BOAT RESERVATION

```
DECLARE
clientname CHAR(15);
boatname CHAR(15);
seatno NUMBER(3);
tot_seats NUMBER(3);
resv_seats NUMBER(3);
BEGIN
clientname:='&clientname';
boatname:='&boatname';
SELECT tot_seats INTO tot_seats FROM bus_details WHERE boat_name=boatname;
SELECT reserved_seats INTO resv_seats FROM boat_details WHERE
boat_name=boatname;
if tot_seats>resv_seats then
SELECT MIN(seat_id) INTO seatno FROM boatreservation_status WHERE
boat_name=boatname and reserved='NO';
UPDATE boatreservation_status SET reserved='YES' WHERE boat_name=boatname and
seat_no=seatno;
UPDATE busreservation_status SET client_name=clientname WHERE
boat_name=boatname and seat_no=seatno;
UPDATE boat_details SET reserved_seats=reserved_seats+1 WHERE
boat_name=boatname;
end if;
dbms_output.put_line('No seat available');
end;
```



Code Output Run Save

Enter the value for clientname = Josh  
old 8: clientname = '&cname';  
new 8: clientname = 'Josh';  
Enter the value for boatname = Regent  
old 9: boatname = '&boatname';  
new 9: boatname = 'Regent';  
PL/SQL procedure successfully completed.

SQL> select \* from boat\_details;

boat_name	tot_seats	resv_seats
Regent	5	1

SQL> select \* from boatreservation\_status;

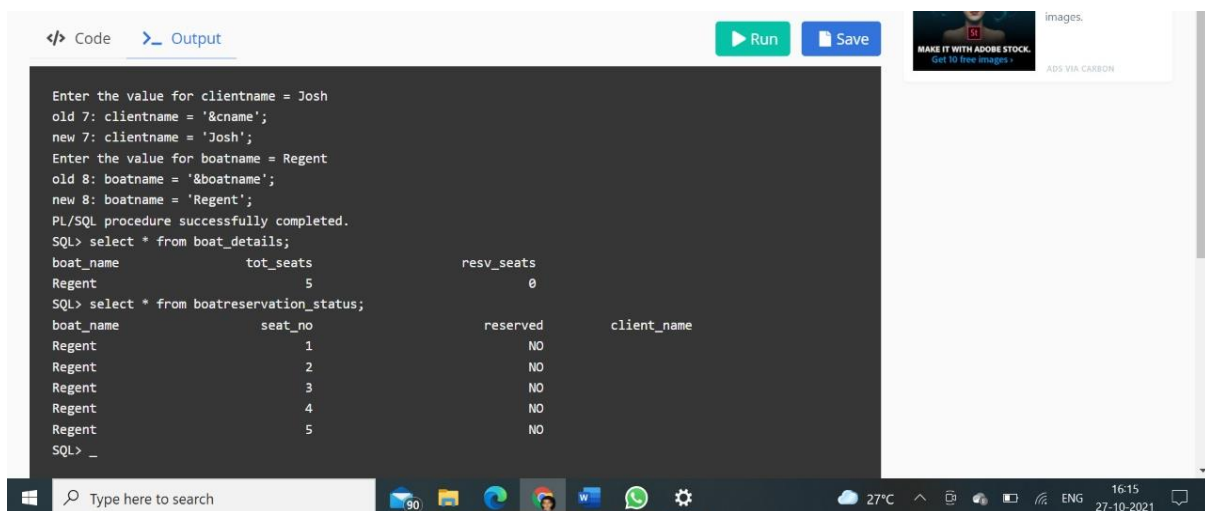
boat_name	seat_no	reserved	client_name
Regent	1	YES	Josh
Regent	2	NO	
Regent	3	NO	
Regent	4	NO	
Regent	5	NO	

SQL>

Windows taskbar: Type here to search, 99%, 27°C Cloudy, 13:48, 25-10-2021

# TICKET CANCELLATION

```
Declare
clientname char(15);
boatname char(15);
seatno number(3);
resv_seats number(3);
BEGIN
clientname:='&clientname';
boatname:='&boatname';
SELECT seat_id INTO seatno FROM busreservation_status WHERE boat_name=boatname
and client_name=clientname;
SELECT reserved_seats INTO resv_seats FROM bus_details WHERE
boat_name=boatname;
if resv_seats<0 then
dbms_output.put_line('Cancelation not allow');
else
UPDATE boatreservation_status set reserved='n' where bus_name=boatname and
seat_id=seatno;
UPDATE boatreservation_status set customer_name=null WHERE bus_name=boatname and
seat_id=seatno;
UPDATE bus_details set reserved_seats=reserved_seats-1 WHERE bus_name=boatname;
end if;
end;
```



The screenshot shows a SQL Developer IDE with a PL/SQL procedure being executed. The output window displays the following text:

```
Enter the value for clientname = Josh
old 7: clientname = '&cname';
new 7: clientname = 'Josh';
Enter the value for boatname = Regent
old 8: boatname = '&boatname';
new 8: boatname = 'Regent';
PL/SQL procedure successfully completed.
SQL> select * from boat_details;
boat_name      tot_seats      resv_seats
-----
Regent         5              0
SQL> select * from boatreservation_status;
boat_name      seat_no      reserved      client_name
-----
Regent         1            NO
Regent         2            NO
Regent         3            NO
Regent         4            NO
Regent         5            NO
SQL> _
```

The IDE interface includes a 'Code' tab, an 'Output' tab, and buttons for 'Run' and 'Save'. The Windows taskbar at the bottom shows the system clock as 16:15 on 27-10-2021.

## **References:**

### Books:

Fundamentals of Database Systems - Ramez Elmasri, Shamkant B. Navathe

Oracle PL/SQL Programming - Feuerstein, SPD/O'REILLY

### Website:

<https://www.wikipedia.org>

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

<https://www.tutorialspoint.com>