AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

DISTRIBUTED DATABASE MANAGEMENT SYSTEM LAB

FINAL PROJECT REPORT

ONLINE HOTEL RESERVATION SYSTEM

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EXECUTIVE SUMMARY :

Tourism has become a great trend for all aged people . We developed a distributed database for hotel booking system . There are so many hotels and resorts at almost every city . And many of them have more than one branch . More branches means more data . Our focus is to manage these growing data effectively with the help of a distributed database management system .

ENTITY SET :

- guest - Keeps information of the guest who confirmed their reservation.
- -reserve - Keeps information of the check-in and check-out time of customers. -
- room_type - Keeps detailed information about each type of room.
- room - Keeps information of the type , no of rooms and the specific room number that one customer reserves for him/her.

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GLOBAL SCHEMA :

- RESERVE (reserve_id , check_in , check_out)
- GUEST (guest_id , reserve_id , name , address , email , phone , city , payment)
- ROOM-TYPE (type_id , type_name , total, available , price)
- ROOM (id , reserve_id , room_no , room_type_id)

FRAGMENTATION SCHEMA :

- guest1 = guest   SLguest.city='Dhaka'   guest
- -guest2 = guest   SLguest.city='Chittagong'   guest
- reserve1 = reserve   JNreserve.reserve_id=guest.reserve_id   SLguest.city='Dhaka'   guest
- reserve2 = reserve   JNreserve.reserve_id=guest.reserve_id   SLguest.city='Chittagong'   guest
- room1 = room   JNroom.reserve_id= reserve.reserve_id   reserve   JNreserve.reserve_id=reserve._id   SLguest.city='Dhaka'   guest
- room2 = room   JNroom.reserve_id= reserve.reserve_id   reserve   JNreserve.reserve_id=guest.reserve_id   SLguest.city='Chittagong'   guest

ALLOCATION SCHEMA :

There are two sites in our project. (Named as site_link and site_link2)

- -reserve1 @ site_link -
- reserve2 @ site_link2
- guest1 @ site_link -
- guest2 @ site_link2 -
- room1 @ site_link
- room2 @ site_link2

FUNCTION / PROCEDURE / TRIGGER :

INPUTGUEST :

Puts the guests that are available in the global schema into fragments based on city . Inputreserve , inputroom works as same .

AVAILABILY1 :

Checks the availability of all types of rooms within a given time period . If rooms are available within the dates , returns the no of room available of all type .

- ▫ INPUT : checkin date , checkout date .
- ▫ OUTPUT : no of available rooms of each type within given dates .

(sql file : proc_available.sql)

BOOKING :

If rooms are available within the dates customer wants , then this procedure books the rooms according to customer's preference .

- ▫ INPUT : no of rooms of type1 (single bed),no of rooms of type2(double bed),no of rooms of type3 (cottage),checkin , checkout ,city
- ▫ OUTPUT : confirmation of booking

(sql file : proc_book.sql)

CHECKOUT :

If someone checkouts then the no of rooms he was occupying is added to the the no of available rooms of room_type table (based on the current date) .

(sql file : proc_checkout.sql)

CANCELLATION :

If someone cancels booking then the no of rooms he was occupying is added to the the no of available rooms of room_type table (based on the current date) .

(sql file : proc_cancel.sql)

BILL CALCULATION :

Calculates the bill of a guest from the no of days he stayed , no of rooms he books and the rate of the rooms .

MY CONTRIBUTION :

Created the tables

input data to the global schema ,

fragmentated the data and put them into fragments

procedure of availability

Procedure of booking

Procedure of checkout

Procedure of cancellation