

Ahsanullah University of Science and Technology (AUST) Department of Computer Science and Engineering

Project Proposal: Vacation Home Rental System

Course No.: CSE4126

Course Title: Distributed Database Systems Lab

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Submitted To-

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Department: CSE

Vacation Home Rental System

Project Planning:

The vacation home rental system is a desktop based project where customers can book their accommodation for the trip. The whole management can be controlled using our software.

Database Schema:

Global schema:

Customer (<u>user_id</u>, username, email, registration_date, age)
PropertyOwner (<u>owner_id</u>, username, email, registration_date, nid_no,
property_registration_no)
Property (<u>property_id</u>, owner_id, title, description, address, city, zip_code, price_per_night,
max_guests, amenities, availability_start_date, availability_end_date,rating)
Booking (<u>booking_id</u>, user_id, property_id, check_in_date, check_out_date, total_price,
payment_status, booking_status)
Review (<u>review_id</u>, user_id, property_id, rating, comment, review_date)

Fragmentation schema:

```
\begin{aligned} & \text{Property1} = \text{PJ}_{\text{(property\_id, owner\_id, title, description, address, city, zip\_code, price\_per\_night, max\_guests, amenities, rating, availability\_start\_date, availability\_end\_date)} & \text{Property} \\ & \text{Property2} = \text{SL}_{\text{city}="ctg"} & \text{PJ}_{\text{(property\_id, owner\_id, description, address, city, zip\_code, availability\_start\_date, availability\_end\_date)} \\ & \text{Property} \\ & \text{Property3} = \text{SL}_{\text{city}="syl"} & \text{PJ}_{\text{(property\_id, owner\_id, description, address, city, zip\_code, availability\_start\_date, availability\_end\_date)} \\ & \text{Property} \\ & \text{Booking1} = \text{Booking SJ}_{\text{property\_id}=\text{property\_id}} & \text{Property2} \\ & \text{Booking2} = \text{Booking SJ}_{\text{property\_id}=\text{property\_id}} & \text{Property3} \\ & \text{PropertyOwner1} = \text{PropertyOwner SJ}_{\text{owner\_id}=\text{owner\_id}} & \text{Property2} \\ & \text{PropertyOwner2} = \text{PropertyOwner SJ}_{\text{owner\_id}=\text{owner\_id}} & \text{Property3} \\ & \text{Review 1} = \text{Review SJ}_{\text{property\_id}=\text{property\_id}} & \text{Property2} \\ & \text{Review SJ}_{\text{property\_id}=\text{property\_id}} & \text{Property3} \\ & \text{Property\_id} & \text{Property\_id} & \text{Property\_id} \\ &
```

Allocation schema:

```
Property1 <sup>1,2</sup>, Property2 <sup>1</sup>, Property3 <sup>2</sup>, Booking1 <sup>1</sup>, Booking2 <sup>2</sup>, PropertyOwner1 <sup>1</sup>, PropertyOwner2 <sup>2</sup>, Review1 <sup>1</sup>, Review2 <sup>2</sup>
```

Functionalities:

1. Customer's register and login:

Here a customers can register by giving their info which is later used to login credentials.

```
SQL> @"C:\Users\Azmain\OneDrive\Documents\VS Code\DDS Lab\Airbnb\PROJECT_login_package.sql"
email: az@gmail.com
pass: Aa1234Bb

Trigger created.

Package created.

Package body created.

Login done...welcome Rahim
```

```
SQL> @"C:\Users\Azmain\OneDrive\Documents\VS Code\DDS Lab\Airbnb\PROJECT_register_package.sql"
reg_name: Rahim
reg_email: az@gmail.com
reg_pass: Aa1234Bb
reg_age: 23
reg_address: Dhaka

Trigger created.

Package created.

Package body created.

Package body created.

Pl/SQL procedure successfully completed.
```

2. Admin login:

Admins can login giving admin mail and password.

```
SQL> @"E:\4.1\DDS Lab\Pro\final\admin_login.sql"
email: admin@gmail.com
pass: 123

Package created.

No errors.

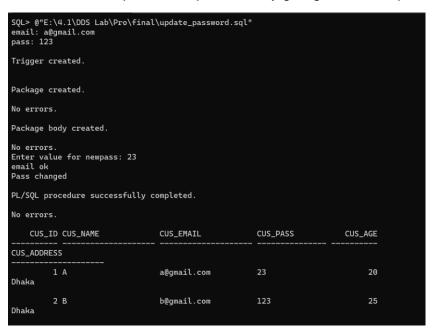
Package body created.

Logged In

PL/SQL procedure successfully completed.
```

3. Customer password update:

Customers can update their password by giving info about previous password.



4. Search for property:

Customers can search for property.

5. **Book:**

Customers can book accommodation from the software.

6. Payment:

Payment for the accommodation is verified here.

```
SQL> @"E:\4.1\DDS Lab\Pro\final\payment.sql"

Package created.

Package body created.

Enter value for book_id: 1

Enter value for pin: 4444

Enter value for property_id: 2

Payment Completed
```

7. Personal booking check:

Customers can see their booking history.

```
SQL> @"E:\4.1\DDS Lab\Pro\final\personal_book_check.sql"

Package created.

Package body created.

No errors.
Enter value for customer_id: 1
book_id po_id property_id check_in check_out pay_status book_status
1 2 2 16-AUG-23 18-JUN-23 done Act
```

8. Book Cancel:

Here customers can cancel their booking.

```
SQL> @"E:\4.1\DDS Lab\Pro\final\book_cancel.sql"

Package created.

Package body created.

Enter value for book_id: 1
Enter value for customer_id: 1
Booking Canceled

PL/SQL procedure successfully completed.

No errors.
SQL> select * from Booking;

BK_ID PO_ID PRP_ID CUS_ID CHECK_IN CHECK_OUT PAY_S BOOK_

BK_ID PO_ID PRP_ID CUS_ID CHECK_IN CHECK_OUT PAY_S BOOK_

1 2 2 1 16-AUG-23 18-JUN-23 done Nact
```

9. Admin Property Add:

Admins can add property.

```
SQL> @"E:\4.1\DDS Lab\Pro\final\admin_propertyAdd.sql"
email: admin@gmail.com
pass: 123

Package created.

No errors.

Package body created.

No errors.

Enter value for po_id: 2
Enter value for prptitle: tile
Enter value for prptitle: tile
Enter value for prpdesc: desc
Enter value for prp_address: Syl
Enter value for city: Syl
Enter value for zip_code: 123
Enter value for price_night: 1200
Enter value for max_guests: 2
ok
Property Added

PL/SQL procedure successfully completed.

No errors.
SQL> Select * from property;
```

```
SQL> Select * from property;
   PRP_ID
               PO_ID PRP_T PRP_D PRP_ADDRESS
                                                     CITY
                                                                ZIP_C
PRICE_PER_NIGHT MAX_G
                   2 abc xyz Sylhet
                                                     Sylhet
                                                                207
          1000 5
                   2 abc xyz
                                Chittagong
                                                     Chittagong 210
          1200 2
                   2 tile desc Syl
                                                     Syl
                                                               123
          1200 2
```

10. All booking show:

All the bookings can be shown.

11. 5 most expensive Properties:

Most expensive properties can be seen.

12. 10 most booked properties:

Most popular properties can be seen.

```
SQL> @"C:\Users\Azmain\OneDrive\Documents\VS Code\DDS Lab\Airbnb\view_3.sql"

View created.

PRP_ID PRP_T PRICE_PER_NIGHT MAX_G PROPE TOTAL_BOOKINGS

1 abc 1000 5 POwnB 4
2 abc 1200 2 POwnB 1
```

Contribution:

1. 190204032:

- 1. Customer's register and login
- 2. Book
- 3. Check personal booking histor
- 4. Search for property

- 5. 5 most expensive Properties
- 6. 10 most booked properties

2. 190204044:

- 1. Admin login
- 2. Customer password update
- 3. Admin Property Add
- 4. Payment
- 5. All booking show
- 6. Booking cancel