Daylight Daycation Resort Management System (DRMS)

Project Documentation

1. Introduction

The Daylight Daycation Resort Management System (DRMS) is designed to streamline the operations of daycation resorts, offering a one-day recreational experience to families, industrial workers, club teams, and students. The system encompasses several key modules—User, Administrative, and Staff—each responsible for specific functions ranging from user registration and booking to staff management and financial oversight.

This documentation provides a detailed description of the system's database schema, represented through a series of tables. Each table corresponds to the classes and relationships defined in the system's class diagram, ensuring a structured and efficient approach to managing the resort's operations.

2. Database Tables

2.1 Users Table

Purpose: Stores information about all users, including both guest and registered users.

| Column Name | Data Type | Description |
|-------------|-----------|-------------|
| User id | INT | Primary key |

| usernam e | VARCHAR | Unique username for the user |
|------------------|---------|------------------------------|
| email | VARCHAR | User's email address |
| password | VARCHAR | Hashed password |
| first_na me | VARCHAR | User's first name |
| last_nam e | VARCHAR | User's last name |
| phone_numb er | VARCHAR | User's contact number |

| | ENUM | |
|----------|------|--|
| user_typ | | |
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2.2 Bookings Table

• Purpose: Manages booking details made by registered users

| Column Name | Data Type | Description |
|----------------|-----------|-------------------------------------|
| booking_ id | INT | Primary key |
| user_id | INT | Foreign key referencing Users table |
| date | DATE | Booking date |
| time_slot | TIME | |

| | | Time slot for the booking |
|----------------------|------|------------------------------------|
| package_id | INT | reign key referencing |
| number_of_adults | INT | Number of adults for the booking |
| number_of_children | INT | Number of children for the booking |
| special_reques ts | Text | Any special Requests |

2.3 Memberships Table

Purpose: Stores and manages user membership plans.

| Column Name Data Type Description | |
|-----------------------------------|--|
|-----------------------------------|--|

| membership_ id | INT | Primary key |
|-------------------|------|-------------------------------------|
| user_id | INT | Foreign key referencing Users table |
| plan_name | TEXT | Name of the membership plan |
| start_date | DATE | Membership start date |
| end_dat e | DATE | Membership end date |
| status | ENUM | Membership Status |

2.4 Profiles Table

Purpose: Contains user profile details and preferences.

| Column Name | Data Type | Description |
|---------------------|-----------|-------------------------------------|
| profile_ id | INT | Primary key |
| user_i d | INT | Foreign key referencing Users table |
| addres s | TEXT | User's address |
| preferences | TEXT | User notification preferences |
| reservation_history | TEXT | History of users Reservation's |

2.5 Feedback Table

Purpose: Collects feedback and support requests from users.

| Column Name | Data Type | Description |
|-----------------|-----------|-------------------------------------|
| feedback_ id | INT | Primary key |
| user_id | INT | Foreign key referencing users table |
| messag e | TEXT | Feedback message from the user |
| rating | INT | Rating provided by the user (1-5) |
| submitted_at | DATETIME | Date time feedback submitted |

2.6 Admin Table

Purpose: Manages information related to admin users.

| | DataType | Description |
|-------------|----------|-------------|
| Column Name | | |
| | | |
| | | |

| admin_i d | INT | Primary key |
|--------------|---------|--------------------------------------|
| user_id | INT | Foreign key referencing Users table |
| role | VARCHAR | ole of the admin (e.g., manager, HR) |
| department | VARCHAR | Departments |

2.7 Staff Table

Purpose: Stores information about resort staff.

| Column Name | Data Type | Description |
|-------------|-----------|-------------|
| staff_id | INT | Primary key |

| first_na me | VARCHAR | Staff member's first name |
|----------------|---------|--|
| last_name | VARCHAR | Staff member's last name |
| role | VARCHAR | staff member (e.g., FrontDesk, Houseke |
| department | VARCHAR | Department the staff belongs to |
| salary | DECIMAL | Staff Members Salary |

2.8 Departments Table

• Purpose: Defines various departments within the resort.

| Column Name | Data Typ | Description |
|-------------|----------|-------------|
| package_id | INT | |

| | | Primary key |
|-----------------|---------|------------------------|
| | | |
| department_name | VARCHAR | Name of the department |

2.9 Packages Table

• Purpose: Details the various resort packages available for booking.

| Column Name | Data Type | Description |
|--------------|-----------|-------------------------------------|
| package_id | INT | Primary key |
| package_name | VARCHAR | Name of the package |
| description | TEXT | Detailed description of the package |
| price | DECIMAL | Price of the package |

| availability | BOOLEAN | Availability status of the package |
|--------------|---------|------------------------------------|
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2.10 Salaries Table

• Purpose: Manages salary details for staff members.

• Purpose: Details the various resort packages available for booking.

| Column Name | Data Type | Description |
|-------------|-----------|-------------------------|
| salary_id | INT | Primary key |
| staff_id | INT | |
| Sum_iu | | ղ key referencing Staff |
| | | |
| base_salary | DECIMAL | |

| | | Base salary of the staff member |
|------------|---------|---|
| bonuses | DECIMAL | s earned by the staff men |
| deductions | DECIMAL | Deductions from the salary |
| net_salary | DECIMAL | Final salary after deductions and bonuses |

2.11 Notifications Table

• Purpose: Stores notifications sent to users and staff.

| Column Name | Data Type | Description |
|-------------|-----------|-------------|
| | | |

| notification_ id | INT | Primary key |
|---------------------|---------|--------------------------------------|
| user_id | INT | |
| | | referencing (nullable) |
| | | |
| staff_id | DECIMAL | n key referencing staff nullable) |
| | | |

| message | DECIMAL | ontent of the otification |
|------------|---------|--|
| sent_at | DECIMAL | Timestamp of when the notification was sent |
| net_salary | DECIMAL | Status of the notification (e.g., sent, pending) |

2.12 Records Table

• Purpose: Maintains records of users and staff.

| Column Name | Data Type | Description |
|-------------|-----------|-------------|
| | | |

| record_id | INT | Primary key |
|-----------|-----|-----------------------------------|
| user_id | INT | ıser table (nullable) |
| | | |
| staff_id | INT | 1 key referencing able (nullable) |

| INT | |
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| | |
| TEXT | |
| | Detailed information about |
| | the record |
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Conclusion

The Daylight Daycation Resort Management System (DRMS) is an integrated solution that efficiently handles various aspects of resort operations. The database schema outlined in this document provides a solid foundation for managing users, bookings, memberships, staff, and financial records, ensuring that the resort's operations run smoothly. By maintaining a clear and well-structured database, the system can effectively support the needs of guests, staff, and administrators, contributing to an exceptional daycation experience.