Table Designs

User Table

| Column Name | Data Type | Constraints |
|---------------|---------------|------------------|
| user_id | INT | PRIMARY KEY, |
| user_iu | AUTO_INCREMEN | AUTO_INCREMENT |
| name | VARCHAR(100) | NOT NULL |
| email | VARCHAR(100) | UNIQUE, NOT NULL |
| phone_number | VARCHAR(15) | NOT NULL |
| address | TEXT | |
| date_of_birth | DATE | |
| preferences | TEXT | |
| feedback | TEXT | |

Reservations Table

| Column Name | Data Type | Constraints |
|----------------|-------------|---------------------|
| reservation_id | INT | PRIMARY KEY, |
| | | AUTO_INCREMENT |
| user_id | INT | FOREIGN KEY (user) |
| room_id | INT | FOREIGN KEY (Rooms) |
| check_in_date | DATE | NOT NULL |
| check_out_date | DATE | NOT NULL |
| booking_date | DATE | NOT NULL |
| status | VARCHAR(20) | NOT NULL |
| total_amount | DECIMAL(10, | NOT NULL |
| | 2) | |

Rooms Table

| Column Name | Data Type | Constraints |
|----------------------|-------------|------------------|
| room_id | INT | PRIMARY KEY, |
| | | AUTO_INCREMENT |
| room_number | VARCHAR(10) | UNIQUE, NOT NULL |
| room_type | VARCHAR(50) | NOT NULL |
| status | VARCHAR(20) | NOT NULL |
| rate_per_night | DECIMAL(10, | NOT NULL |
| | 2) | |
| maintenance_schedule | TEXT | |
| description | TEXT | |

Billing Table

| Column Name | Data Type | Constraints |
|----------------|-------------|----------------------------|
| billing_id | INT | PRIMARY KEY, |
| _ | | AUTO_INCREMENT |
| reservation_id | INT | FOREIGN KEY (Reservations) |
| invoice_number | VARCHAR(50) | UNIQUE, NOT NULL |
| billing_date | DATE | NOT NULL |
| amount | DECIMAL(10, | NOT NULL |
| | 2) | |
| payment_method | VARCHAR(20) | NOT NULL |
| payment_status | VARCHAR(20) | NOT NULL |

Inventory Table

| Column Name | Data Type | Constraints |
|-----------------|--------------|----------------|
| inventory_id | INT | PRIMARY KEY, |
| | | AUTO_INCREMENT |
| item_name | VARCHAR(100) | NOT NULL |
| quantity | INT | NOT NULL |
| reorder_level | INT | NOT NULL |
| supplier | VARCHAR(100) | NOT NULL |
| last_order_date | DATE | |
| cost_per_unit | DECIMAL(10, | NOT NULL |
| | 2) | |

Housekeeping Table

| Column Name | Data Type | Constraints |
|-----------------------|-------------|---------------------|
| housekeeping_id | INT | PRIMARY KEY, |
| | | AUTO_INCREMENT |
| room_id | INT | FOREIGN KEY (Rooms) |
| task_description | TEXT | NOT NULL |
| task_date | DATE | NOT NULL |
| status | VARCHAR(20) | NOT NULL |
| housekeeping_staff_id | INT | FOREIGN KEY (Staff) |

Staff Table

| Column Name | Data Type | Constraints |
|------------------------|--------------|------------------|
| staff_id | INT | PRIMARY KEY, |
| | | AUTO_INCREMENT |
| first_name | VARCHAR(50) | NOT NULL |
| last_name | VARCHAR(50) | NOT NULL |
| role | VARCHAR(50) | NOT NULL |
| email | VARCHAR(100) | UNIQUE, NOT NULL |
| password | VARCHAR(50) | NOT NULL |
| Profile picture | VARCHAR(255) | |
| phone_number | VARCHAR(15) | NOT NULL |
| address | TEXT | |
| date_of_birth | DATE | |
| salary | DECIMAL(10, | NOT NULL |
| | 2) | |

Maintenance Table

| Column Name | Data Type | Constraints |
|----------------------|-------------|---------------------|
| maintenance_id | INT | PRIMARY KEY, |
| | | AUTO_INCREMENT |
| room_id | INT | FOREIGN KEY (Rooms) |
| maintenance_issue | TEXT | NOT NULL |
| reported_date | DATE | NOT NULL |
| resolution_date | DATE | |
| status | VARCHAR(20) | NOT NULL |
| maintenance_staff_id | INT | FOREIGN KEY (Staff) |

LeaveApplication Table

| Column Name | Data Type | Constraints |
|--------------------|--------------|-----------------------------|
| leave_id | INT | PRIMARY KEY, AUTO_INCREMENT |
| staff_id | INT | FOREIGN KEY (Staff) |
| leaveType | VARCHAR(20) | NOT NULL |
| startDate | DATE | NOT NULL |
| endDate | DATE | NOT NULL |
| reason | VARCHAR(255) | |
| appliedon | DATE | NOT NULL |
| approvedon | DATE | NOT NULL |
| status | VARCHAR(20) | NOT NULL |