Hotel Management System

**Entity Relationship Diagram (ERD) of the Hotel Management System**. This small database will also provide you with a thorough overview of the tables in the Hotel management system database project.

This ER Diagram of a hotel management system was created using a hotel management database design. The system’s job is to store and encode consumer data and transactions. In addition, for reports and inventory purposes, the hotel administrator must have access to customer information. The data used in these transactions needs to be handled and secured properly, which necessitates the implementation of an ER Diagram for Hotel Management.

## **Features of Hotel Management System ER Diagram**

Here are the hotel management system features which were the basis in creating the database tables and ER Diagram design for project development.

* **Hotel Management**

The core aspect of the system is Hotel Management, which manages the hotel’s basic information, including its basic data, accommodations, personnel, and services offered. This is the information that will be kept in the ER Diagram.

* **User Management**

This feature is in charge of adding, updating, and deleting information for the user. The administrator or the owner, service crews or employees, and the client are examples of users. Each of them will have their basic information entered in the ER Diagram of the Hotel Management System.

* **Managing Reports**

The hotel administrator is the only person who has access to all of the system’s transactions. Customers’ queries, reservations, services given, and many more transactions were part of these transactions. They will be stored in the system’s database for the purpose of generating reports and performing other vital tasks.

* **Customer Reservation**

Customer reservations require the customer’s basic information, such as name, address, and phone number, in order for hotel administrators to track their transactions anytime they use the hotel’s services. These customers’ basic information and reservations should now be entered in the database so that payment and other purposes may be calculated.

* **Transaction and Reports Management**

This feature will save customer transactions, including their details, as well as summaries of all transactions done by hotel staff and customers.

## **Hotel Management System Database Tables**

These tables below provide the complete database tables details such as **Field Name**, **Descriptions**, **data types**, **character lengths**.

#### **Table Name: tbl\_Customer**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Description** | **Type** | **Length** |
| cust\_ID (PK) | Customer ID | Int | 11 |
| custfname | Customer First Name | Varchar | 255 |
| custlname | Customer Last Name | Varchar | 255 |
| reservation | Customer Reservation | Varchar | 255 |
| address | Customer Address | Varchar | 255 |
| status | Customer Status | Varchar | 255 |
| contact\_address | Contact Address | Int | 11 |

Customer Table

#### **Table Name: tbl\_Room**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Description** | **Type** | **Length** |
| room\_ID (PK) | Room ID | Int | 11 |
| room\_type | Room Type | Varchar | 30 |
| room\_sample | Room Sample | Varchar | 30 |
| description | Room Description | Text |  |

Room Table

#### **Table Name: tbl\_Reservation**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Description** | **Type** | **Length** |
| reservation\_ID (PK) | Reservation ID | Int | 11 |
| customer\_ID (FK) | Customer ID | Int | 11 |
| room\_ID (FK) | Room ID | Int | 11 |
| reservation\_date | Date of Reservation | Date |  |
| date\_in | Date of Coming In | Date |  |
| date\_out | Date of Coming Out | Date |  |
| days\_range | Range of Days | Int | 11 |

Reservation Table

#### **Table Name: tbl\_RoomClass**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Description** | **Type** | **Length** |
| class\_ID (PK) | Room Class Id | Int | 11 |
| name | Room Name | Varchar | 30 |
| price | Room Price | Int | 11 |

RoomClass Table

#### **Table Name: tbl\_Payment**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Description** | **Type** | **Length** |
| payment\_ID (PK) | Payment ID | Int | 11 |
| customer\_ID (FK) | Customer Id | Int | 11 |
| type | Payment Type | Varchar | 30 |
| payment\_date | Date of Payment | Date |  |

Payment Table

#### **Table Name: tbl\_Employees**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Description** | **Type** | **Length** |
| employee\_ID (PK) | Employee Id | Int | 11 |
| fname | First Name | Varchar | 30 |
| lname | Last Name | Varchar | 30 |
| job\_department | Job Department | Varchar | 30 |
| address | Address | Text |  |
| contact\_address | Contact Address | Int | 11 |
| username | Username | Varchar | 30 |
| password | Password | Varchar | 30 |

Employees Table

#### **Table Name: tbl\_Transactions**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Description** | **Type** | **Length** |
| transaction\_ID (PK) | Transaction ID | Int | 11 |
| transaction\_name | Transaction Name | Varchar | 30 |
| customer\_ID (FK) | Customer ID | Int | 11 |
| employee\_ID (FK) | Employee ID | Int | 11 |
| reservation\_ID (FK) | Reservation ID | Int | 11 |
| transaction\_date | Transaction Date | Date |  |

Transactions Table

#### **Table Name: tbl\_Reports**

|  |  |  |  |
| --- | --- | --- | --- |
| **Field** | **Description** | **Type** | **Length** |
| report\_ID (PK) | Report ID | Int | 11 |
| transaction\_ID (FK) | Transaction ID | Int | 11 |
| name | Report name | Varchar | 30 |
| type | Report Type | Varchar | 30 |

Reports Table

The tables are made to meet the required specification of the system and provide much more specific details of each entity within the system.

**E-R Diagram:**

