**Data Dictionary**

**Customer Table**

**Description: Customers Details**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Datatypes** | **Field Length** | **constraints** | **Null** | **Validation**  **Rule** | **Description** |
| Customer\_ID  (primary key) | Int(15) | 15 | Primary Key | No | It Must be Unique | It Uniquely define every costumer details |
| User\_ID  (Foreign key) | Int(15) | 15 | Foreign Key | No |  | Foreign key reference to User |
| First\_Name | varchar(50) | 50 | Not Null | No |  | First name of the customer |
| Last\_Name | varchar(50) | 50 | Not Null | No |  | Last name of the customer |
| Address | varchar(60) | 60 | Not Null | No |  | Address of the customer |
| Contact | Int(20) | 20 | Not Null | No |  | Contact of the customer |
| Email | varchar(100) | 100 | Not Null | No | It Must be in  Email format  Containing an @ and a ‘.’ | Email address of the customer |
| Gender | varchar(20) | 20 | Not Null | No |  | Gender of the customer |
| City | varchar(50) | 50 | Not Null | No |  | City where customer live |
| Nationality | varchar(50) | 50 | Not Null | No |  | Nationality of the customer |
| DOB | date |  | Not Null | No |  | Date of birth of the customer |

**Indexes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **key name** | **Type** | **Unique** | **Column Name** | **Null** |
| PRIMARY | BTREE | Yes | Customer\_ID | no |
| FOREIGN | BITRE | Yes | User\_ID | no |

**User Table**

**Description: User’s Details**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Datatypes** | **Field Length** | **constraints** | **Null** | **Validation**  **Rule** | **Description** |
| User\_ID  (primary key) | Int(15) | 15 | Primary Key / Auto Increments | No | It Must be Unique | It Uniquely define every room details |
| username | Varchar(50) | 50 | Not Null | No |  | Username of the user |
| Password | Varchar(50) | 50 | Not Null | No |  | Password of the user |
| Email | Varchar(50) | 50 | Not Null | No |  | Email address of the user |

**Indexes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **key name** | **Type** | **Unique** | **Column Name** | **Null** |
| PRIMARY | BTREE | Yes | User\_ID | no |

**Room Table**

**Description: Room’s Details**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Datatypes** | **Field Length** | **constraints** | **Null** | **Validation**  **Rule** | **Description** |
| Room\_ID  (primary key) | Int(15) | 15 | Primary Key / Auto Increments | No | It Must be Unique | It Uniquely define every room details |
| Room\_Type | Varchar(50) | 50 | Not Null | No |  | Types of room |
| Room\_Price | Int(20) | 20 | Not Null | No |  | Price of the room |
| Availability\_Status | Boolean | 60 | Not Null true / false | No |  | Availability status of the room |

**Indexes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **key name** | **Type** | **Unique** | **Column Name** | **Null** |
| PRIMARY | BTREE | Yes | Room\_ID | no |

**Booking Table**

**Description: Booking’s Details**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Datatypes** | **Field Length** | **constraints** | **Null** | **Validation**  **Rule** | **Description** |
| Booking\_ID  (primary key) | Int(15) | 15 | Primary Key / Auto Increments | No | It Must be Unique | It Uniquely define every costumer details |
| Room\_ID  (Foreign key) | Int(15) | 15 | Foreign key ,Reference Room | No |  | Foreign key reference to Room |
| Customer\_ID  (Foreign key) | Int(15) | 15 | Foreign key , ,Reference Booking | No |  | Foreign key reference to Customer |
| Manager\_ID  (Foreign key) | Int(15) | 15 | Foreign key , ,Reference Manager | No |  | Foreign key reference to Manager |
| Check\_In | date | - | Not Null | No |  | Date where user checks in |
| Check\_Out | date | - | Not Null | No |  | Date where user checks out |
| Room\_Type | varchar(100) | 100 | Not Null | No |  | Type of room available in the hotel |
| Number\_Of\_Room | int(10) | 10 | Not Null | No |  | Number of room available in the hotel |
|  |  |  |  |  |  |  |

**Indexes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **key name** | **Type** | **Unique** | **Column Name** | **Null** |
| PRIMARY | BTREE | Yes | Booking\_ID | no |
| FOREIGN | BTREE | Yes | Customer\_ID/reference Customer , | no |
| FOREIGN | BTREE | Yes | Manager\_ID/ reference Manager | no |
| FOREIGN | BTREE | Yes | Room\_ID/reference Room , | no |

**Payment Table**

**Description: Payment’s Details**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Datatypes** | **Field Length** | **constraints** | **Null** | **Validation**  **Rule** | **Description** |
| Bill\_Number  (primary key) | Int(15) | 15 | Primary Key / Auto Increments | No | It Must be Unique | It Uniquely define every costumer details |
| Booking\_ID  (Foreign key) | Int(15) | 15 | Foreign key ,Reference Booking | No |  | Foreign key reference to Booking |
| Customer\_ID  (Foreign key) | Int(15) | 15 | Foreign key , ,Reference Customer | No |  | Foreign key reference to Customer |
|  |  | - |  |  |  |  |
| Amount | Int(15) | 15 | Not Null | No |  | Amount paid by Customer |
| Payment\_Method | varchar(100) | 100 | Not Null | No |  | Methods to pay to hotel |
| Payment\_Date | date | - | Not Null | No |  | Date where payments is successful |

**Indexes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **key name** | **Type** | **Unique** | **Column Name** | **Null** |
| PRIMARY | BTREE | Yes | Bill\_Number | no |
| FOREIGN | BTREE | Yes | Customer\_ID/reference Customer , | no |
| FOREIGN | BTREE | Yes | Room\_ID/reference Room , | no |

**Manager Table**

**Description: Manager’s Details**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Datatypes** | **Field Length** | **constraints** | **Null** | **Validation**  **Rule** | **Description** |
| Manager\_ID  (primary key) | Int(15) | 15 | Primary Key / Auto Increments | No | It Must be Unique | It Uniquely define every costumer details |
| User\_ID  (Foreign key) | Int(15) | 15 | Foreign key ,Reference User | No |  | Foreign key reference to User |
| Name | varchar(100) | 100 | Not Null | No |  | Name of the manager |
| Address | varchar(100) | 100 | Not Null | No |  | Address of the manager |
| Email | varchar(100) | 100 | Not Null | No |  | Email of the manager |
| Phone\_Number | Int(10) | 10 | Not Null | No |  | Phone number of the manager |
| City | varchar(100) | 100 | Not Null | No |  | Place where manager live |
| Roles | varchar(100) | 100 | Not Null | No |  | Roles to be played by the manager |

**Indexes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **key name** | **Type** | **Unique** | **Column Name** | **Null** |
| PRIMARY | BTREE | Yes | Manager\_ID | no |
| FOREIGN | BTREE | Yes | User\_ID/reference User , | no |

**Employee Table**

**Description: Employee’s Details**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Datatypes** | **Field Length** | **constraints** | **Null** | **Validation**  **Rule** | **Description** |
| Employee\_ID  (primary key) | Int(15) | 15 | Primary Key / Auto Increments | No | It Must be Unique | It Uniquely define every costumer details |
| Manager\_ID  (Foreign key) | Int(15) | 15 | Foreign key ,Reference Manager | No |  | Foreign key reference to Manager |
| Employee \_Name | varchar(100) | 100 | Not Null | No |  | Name of the employee |
| Employee \_Position | varchar(100) | 100 | Not Null | No |  | Position of the employee |
| Address | varchar(100) | 100 | Not Null | No |  | Address of the employee |
| Email | varchar(100) | 100 | Not Null | No |  | Email address of the employee |
| Phone\_Number | Int(10) | 10 | Not Null | No |  | Phone number of the employee |

**Indexes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **key name** | **Type** | **Unique** | **Column Name** | **Null** |
| PRIMARY | BTREE | Yes | Employee\_ID | no |
| FOREIGN | BTREE | Yes | Manager\_ID/reference Manager , | no |

**CardDetails Table**

**Description: Card Details**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Name** | **Datatypes** | **Field Length** | **constraints** | **Null** | **Validation**  **Rule** | **Description** |
| Card\_ID  (primary key) | Int(15) | 15 | Primary Key / Auto Increments | No | It Must be Unique | It Uniquely define every room details |
| Customer\_ID  (Foreign Key) | Int(15) | 15 | Foreign Key | No |  | Foreign key reference to the Customer |
| CardHolderName | Varchar(50) | 50 | Not Null | No |  | Name of the card holder |
| Amount\_Status | Varchar(50) | 50 | Not Null | No |  | To check the available amount of the card |

**Indexes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **key name** | **Type** | **Unique** | **Column Name** | **Null** |
| PRIMARY | BTREE | Yes | Room\_ID | no |
| FOREIGN | BTREE | Yes | Customer\_ID | no |