**Online Hotel Management System –by K Jyothi Gangarsha**

**Synopsis:**

The Hotel Management System which is going to be implemented for Hotel, will automate the major operations of the hotel. The Reservation System is to keep track in room and Bouquet reservation and check availability. The Room Management System is for managing all room types room services. The Inventory Control System will keep track in all inventories of the hotel and guest details will handled by guest management. Administration department will monitor the all. There are three End Users for HMS. The End Users Are Owner, Manager and Receptionist. Owner can access to all system functionalities without any restrictions. Manager can access to all system functionalities with limited restrictions. Receptionist can only access to the Reservation management section. To keep restrictions for each End User levels HMS can create different Login functions.

The objectives of the automated Hotel Management System are to simplify the day to day processes of the hotel. The system will be able to handle many services to take care of all customers in a quick manner. As a solution to the large amount of file handling happening at the hotel, this software will be used to overcome those drawbacks. Safety, easiness of using and most importantly the efficiency of information retrieval are some benefits the development team going to present with this system. The system should be user appropriate, easy to use, provide easy recovery of errors and have an overall end user high subjective satisfaction.

**Product Functions (Role wise):**

**Owner:**

1. Manage department details

Set dept and dept managers

Set Salary – Managers, staff

1. Retrieve Reports
2. All functionalities without restrictions

**Manager:**

1. Set staff (add, delete, update, view)

2. Set rooms (add, delete, update)

3. Set inventory (add, delete, update)

**Receptionist:**

1. Make Reservations (check-in, check-out, Extend guest)
2. Manage Guest (Add, Update Guest)
3. Search Rooms
4. Issue Bills

**Departments:**

1. Reservation management system

2. Room management system

3. Inventory control system

4. Guest management system

5. Administration

**Database:**

**Mongodb DB: Hotel**

Collection 1: Owner

Owner operations, Access: Owner

Collection 2:Staff

Manager Operations, Access: Owner, Manager

Collection 3: Room

Manager Operations, Access: Owner, Manager

Collection 4: Inventory

Manager Operations, Access: Owner, Manager

Collection 5: Guest

Checked-In Guest details, Access: Owner, Manager, Reception

Collection 6: CheckedOut

Checked-Out Guest details, Access: Owner, Manager, Reception

Collection 7: IdSeq

Sequence Ids of all operations.

**MySql DB: mydb**

**Table:** login

Login Credentials setup, Access: Owner

**MicroServices:**

1. Owner Boot ( Spring Boot )
2. Manager Boot ( Spring Boot )
3. Guest Boot ( Spring Boot )
4. Auth (Node)

**Functional Requirements**

|  |  |
| --- | --- |
| Function 1 | **Make Reservations** |
| Input | Code, Number of children, Number of adults, check-in date, check out date, status, Number of nights |
| Output | Database Record, Database successfully updated message |
| Processing | Validate the given details and record the information in to the database. |

|  |  |
| --- | --- |
| Function 2 | **Add Guest** |
| Input | Member code, Phone number, Company, Name, E-mail, Gender, Address |
| Output | Database Record, Database successfully updated message |
| Processing | Validate the given details and record the information in to the database. |

|  |  |
| --- | --- |
| Function 3 | **Add staff member** |
| Input | Code, Employee Name, Employee Address, NIC, Salary, Name Age, Occupation, E-mail |
| Output | Database Record, Database successfully updated message |
| Processing | Validate the given details and record the information in to the database. |

|  |  |
| --- | --- |
| Function 4 | **Search Rooms** |
| Input | Period, Check-in, Check-out, Guest |
| Output | Display a message with available room details |
| Processing | Validate the given details and check for the available rooms in a given time period and return it’s availability. |

|  |  |
| --- | --- |
| Function 5 | **Add Payments** |
| Input | Total, pay time, Credit card details |
| Output | Database Record, Database successfully updated message |
| Processing | Validate the given details and record the information in to the database. |

|  |  |
| --- | --- |
| Function 6 | **Issue Bill** |
| Input | Billing no, Quantity, Price, Taxes, Date, Services, Unit |
| Output | Printed version of the bill |
| Processing | Validate the given details and total cost is calculated according to the  Services gain by the customer. |

|  |  |
| --- | --- |
| Function 7 | **Set Rates** |
| Input | Check-in, Check-out, Day, No.of guests, First night price, Extension price |
| Output | Database Record, Database successfully updated message |
| Processing | Validate the given details and record the information in to the database. |

**Use-case Diagram**

Manager



View

Insert

Update

Delete

Add

Update

Delete

Add

Update

Reports

Department Details

Department Details

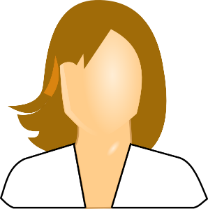
Department Details



Room/Staff/InventoryDetails

Room/Staff/InventoryDetails

Room/Staff/InventoryDetails



GuestDetails

GuestDetails

Delete

GuestDetails

Search

Rooms

Make

Reservations



Owner

Receptionist

Issue

Bill

Rooms/Bouquet

Set Rates