Hotel Management System

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Abstract:

Hotel Management System" is a standard model of hotel management. It will help the management team of a hotel to handle their job properly. It provides essential tools to manage and review their work properly.

Introduction:

The "Hotel Management System" will look after all the tasks that are necessary to be performed within a particular hotel. The system will be developed to reduce the paper work which are being performed by the various offices of the hotel and by the guests staying that hotel. However, no system can be successful without human beings and the major task of this system will be to eliminate the processing time and produce result on time.

Project Objectives:

In this "Hotel Management System":

1. Hotel authorities are able to see how many room are already been acquired and how many are vacant.
2. Hotel authorities are able to assign room for their guest checking the availability of that room.
3. Hotel authorities can able to see the room that need to be repaired or under construction.
4. Only Admin can create accounts of Hall Authority.
5. Admin can manage and update the total website.

Required Software & Tools:

1. Sublime Text 3

2. Web application framework: ASP.NET

3. Code standard: PHP

4. CSS framework: HTML, CSS

5. Web server: Apache – XAMPP

6. Database: MySQL

Project Description:

In this management system, we built a web application from where the whole Hall Management System is controlled. There are two types of account. They are:

1. Admin
2. Employee

Each type of account has its own privileges. In this system, all the information about the university hall are stored. Information about all guests are kept. This also helps management to get room status. So assigning guest's room will become a faster and easier for management. In this project, admin has access to update and remove employee. Admin can also update room category and status (under construction to available).

Interesting Queries:

1. Total number of rooms in the hotel
2. Number of equipped and unequipped rooms.
3. Number of guests.
4. Number of guests stayed a specific date.
5. Details of a guest stayed in the hotel.
6. Total under construct rooms.
7. Total employee.
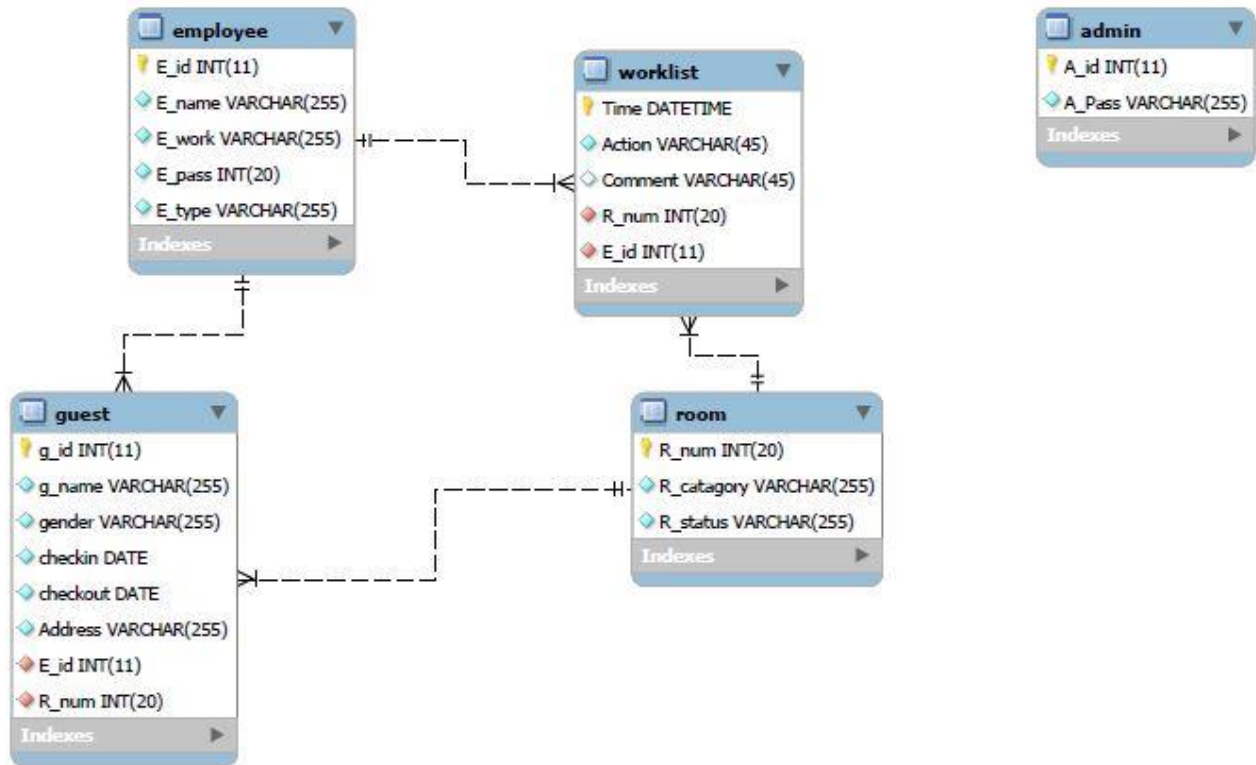8. Details of an employee.

Schema Diagram:

❖ employee {E_id, E_name, E_work, E_pass, E_type}

- ❖ guest {g_id, g_name, Address, E_id, R_num, checkin, checkout}

- ❖ room{R_num, R_catagory, R_status}

- ❖ Worklist {Time, E_id, R_num, Action, Comment }
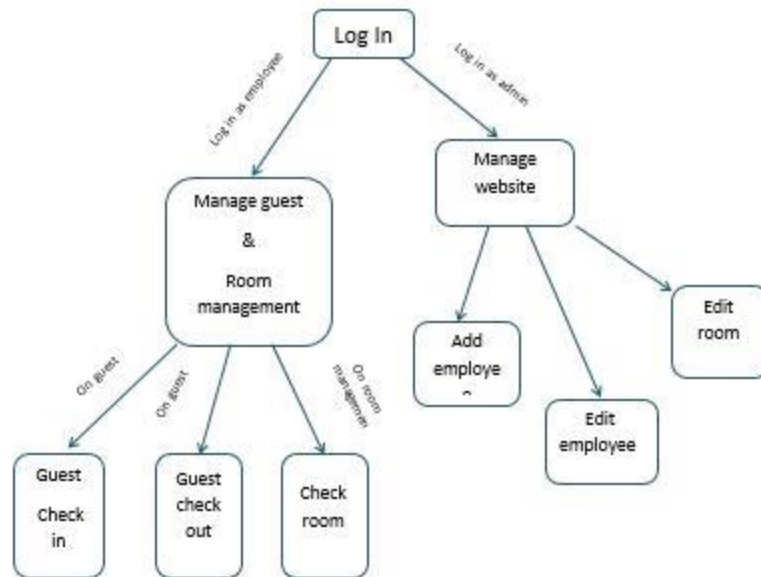
- ❖ Admin {A_id, A_Pass}

Functional Dependency:
- ❖ employee :
    - ○ {E_id} -> {E_name, E_work, E_pass, E_type}
    - ○ {E_id, E_pass } -> {E_name, E_work, E_type}
    - ○ {E_id, E_pass, E_name, } -> { E_work, E_type}
    - ○ {E_id, E_pass, E_name, E_work} -> { E_type}
    - ○ {E_id, E_pass, E_type} -> {E_name, E_work}
    - ○ {E_id, E_pass, E_type, E_name} -> {E_work}
    - ○ {E_id, E_pass, E_work} -> {E_name, E_type }

- ❖ guest :
    - ○ {G_id} -> {g_name, Address, E_id, R_num, checkin, checkout}
    - ○ {G_id, E_id } -> {g_name, Address, R_num, checkin, checkout}
    - ○ {G_id, R_num} -> {g_name, Address, E_id, checkin, checkout}
    - ○ {G_id, E_id, R_num} -> {g_name, Address, checkin, checkout}
    - ○ {G_id , E_id, R_num, checkin, checkout} -> {g_name, Address}

- ❖ room :
    - ○ {R_num}-> {R_catagory, R_status}
    - ○ {R_num, R_catagory}-> {R_status}
    - ○ {R_num, R_status}-> {R_catagory}

- ❖ Worklist :
    - ○ {Time, E_id, R_num} -> {Action, Comment}
- ❖ Admin :
    - ○ {A_id, A_Pass} -> {A_id}

Entity-Relationship Diagram:

employee
- E_id INT(11)
- E_name VARCHAR(255)
- E_work VARCHAR(255)
- E_pass INT(20)
- E_type VARCHAR(255)
- Indexes

worklist
- Time DATETIME
- Action VARCHAR(45)
- Comment VARCHAR(45)
- R_num INT(20)
- E_id INT(11)
- Indexes

admin
- A_id INT(11)
- A_Pass VARCHAR(255)
- Indexes

guest
- g_id INT(11)
- g_name VARCHAR(255)
- gender VARCHAR(255)
- checkin DATE
- checkout DATE
- Address VARCHAR(255)
- E_id INT(11)
- R_num INT(20)
- Indexes

room
- R_num INT(20)
- R_catagory VARCHAR(255)
- R_status VARCHAR(255)
- Indexes

Graphical Representation of User Interface:

Log In

Log in as employee

Log in as admin

Manage guest
&
Room management

Manage website

On guest

On guest

On room management

Add employee

Edit employee

Edit room

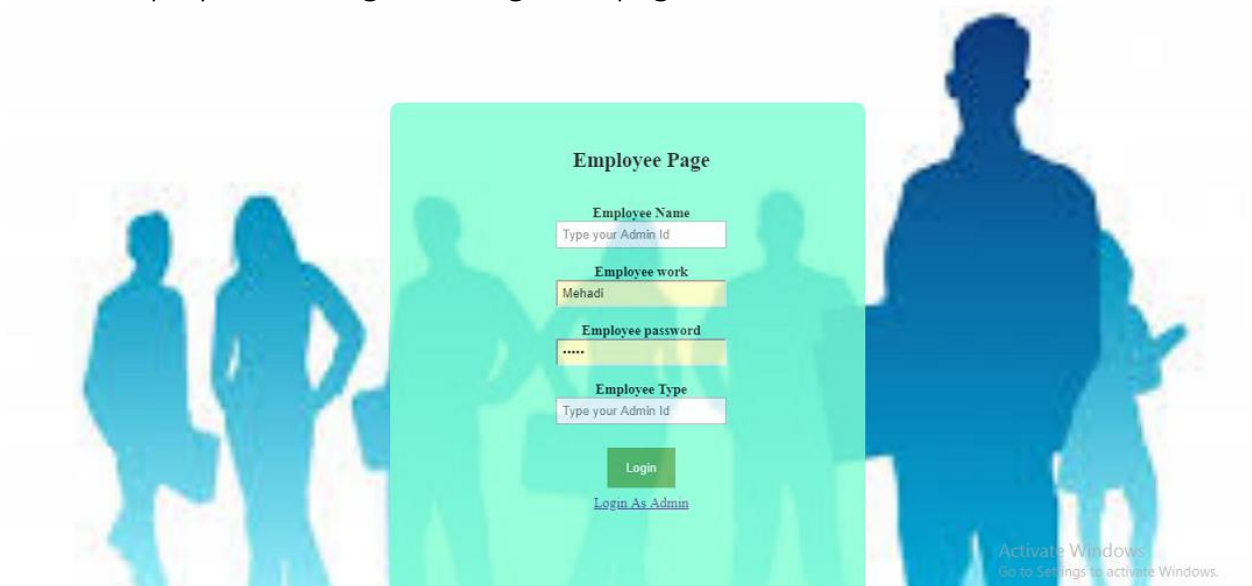Guest Check in
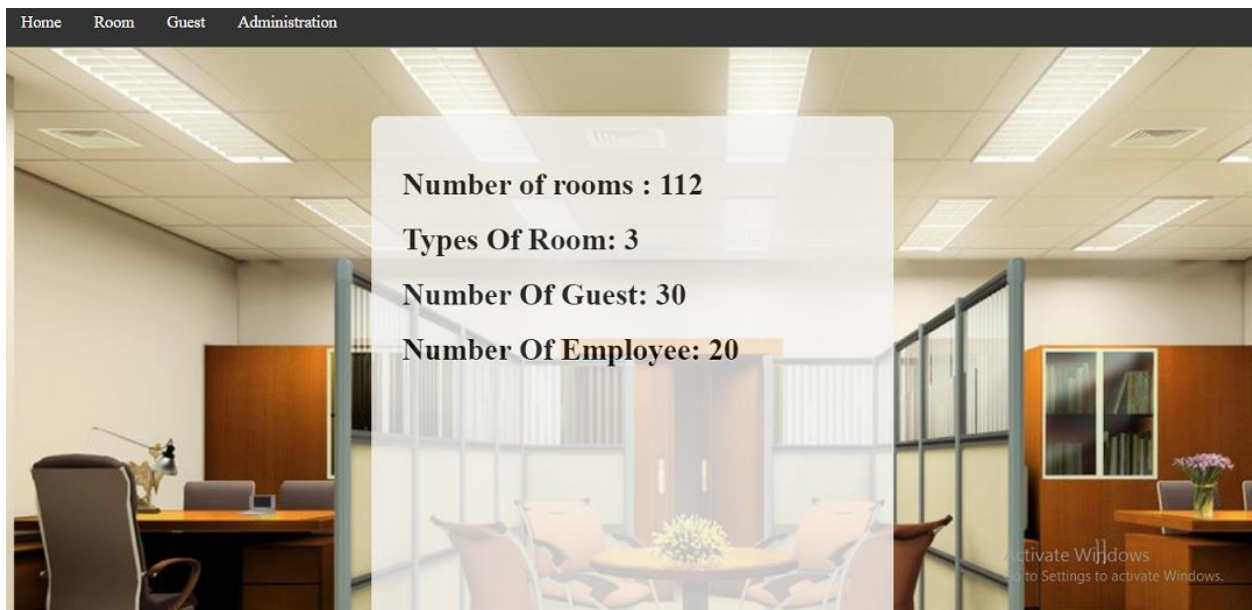
Guest check out

Check room

Website Layout:

This is the log in page of the project. Admin can login from this page. Employees can use the link below to log in.
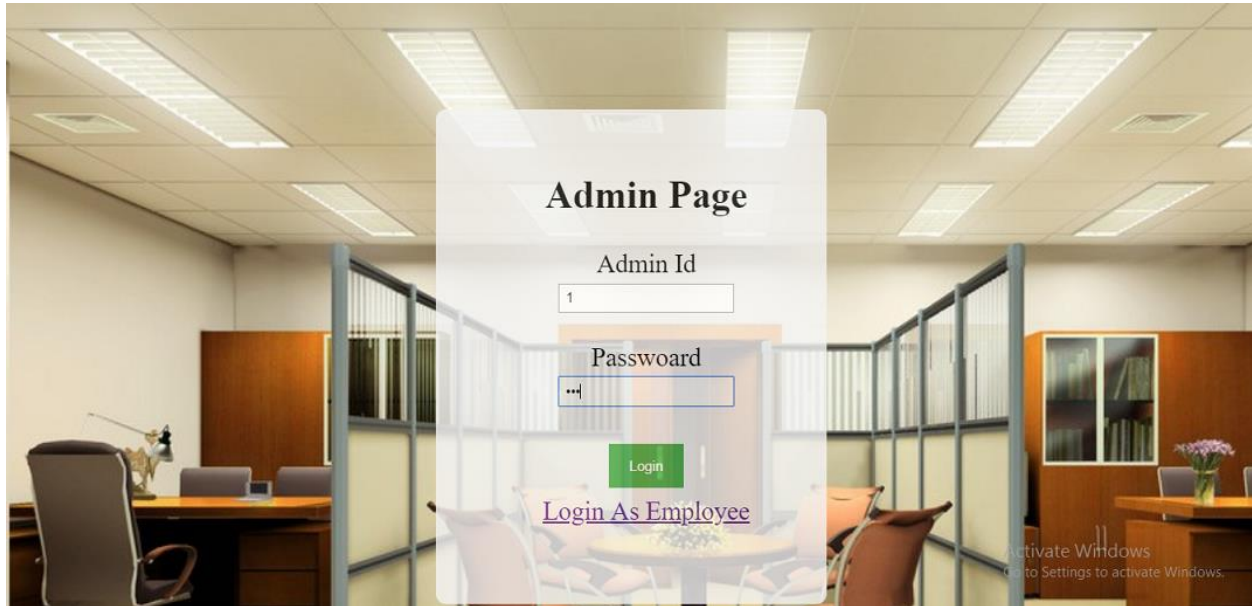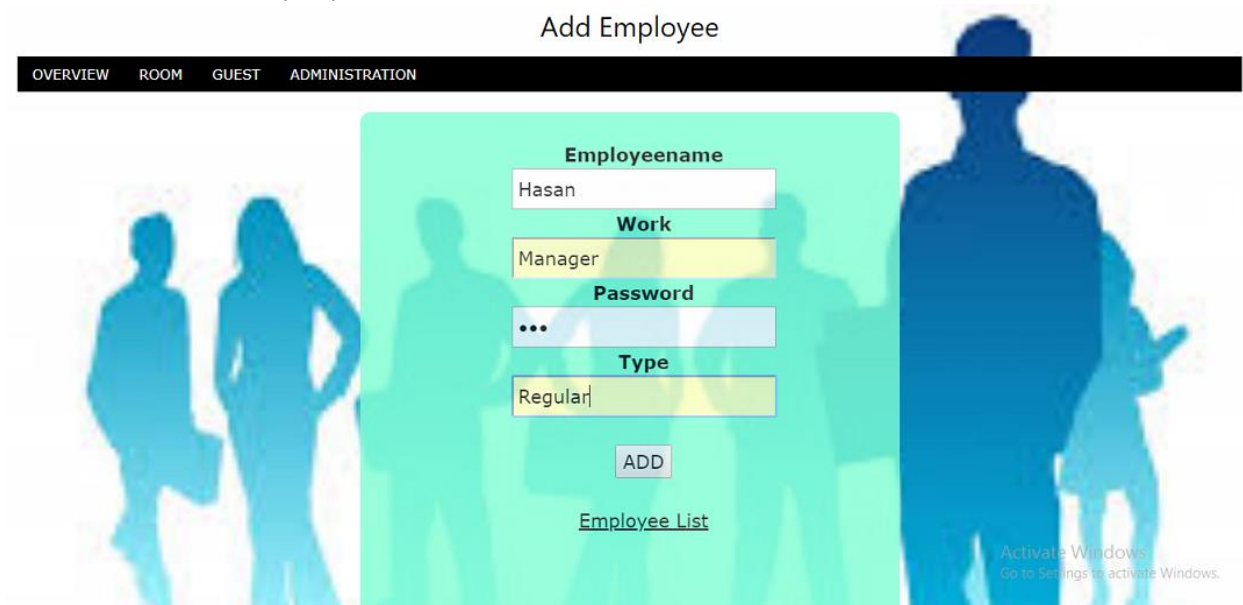

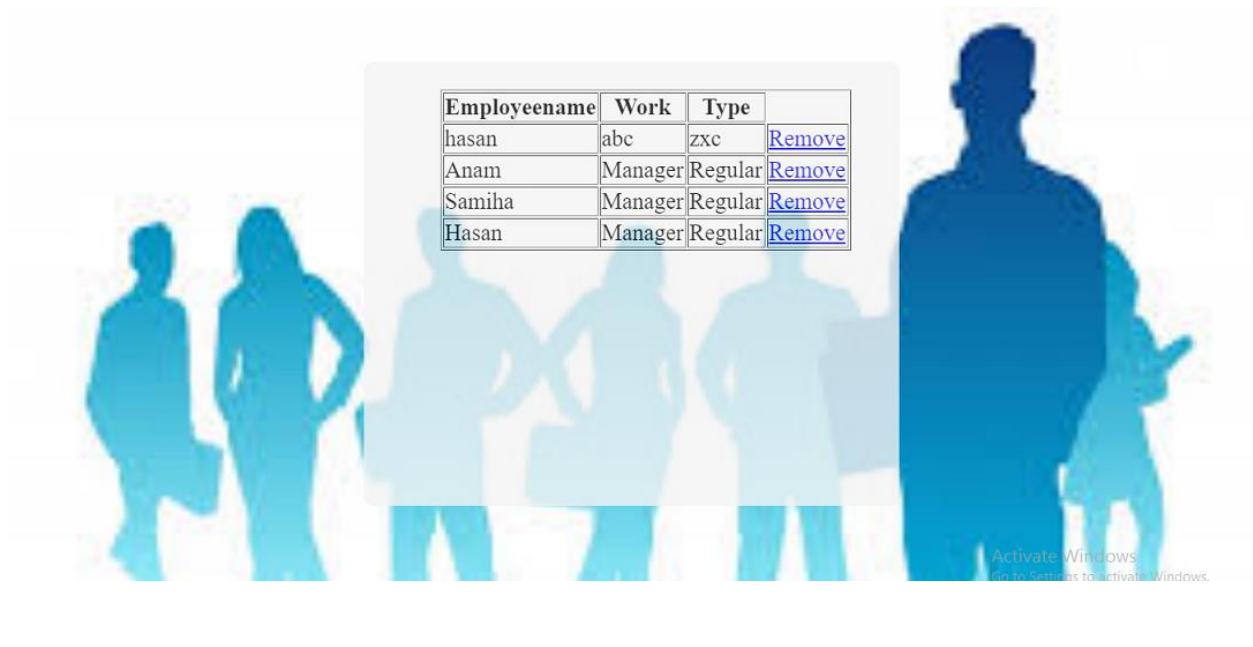Other employees can log in through this page.

After login as admin, admin can get administration bar in his page. But, a employee does not.
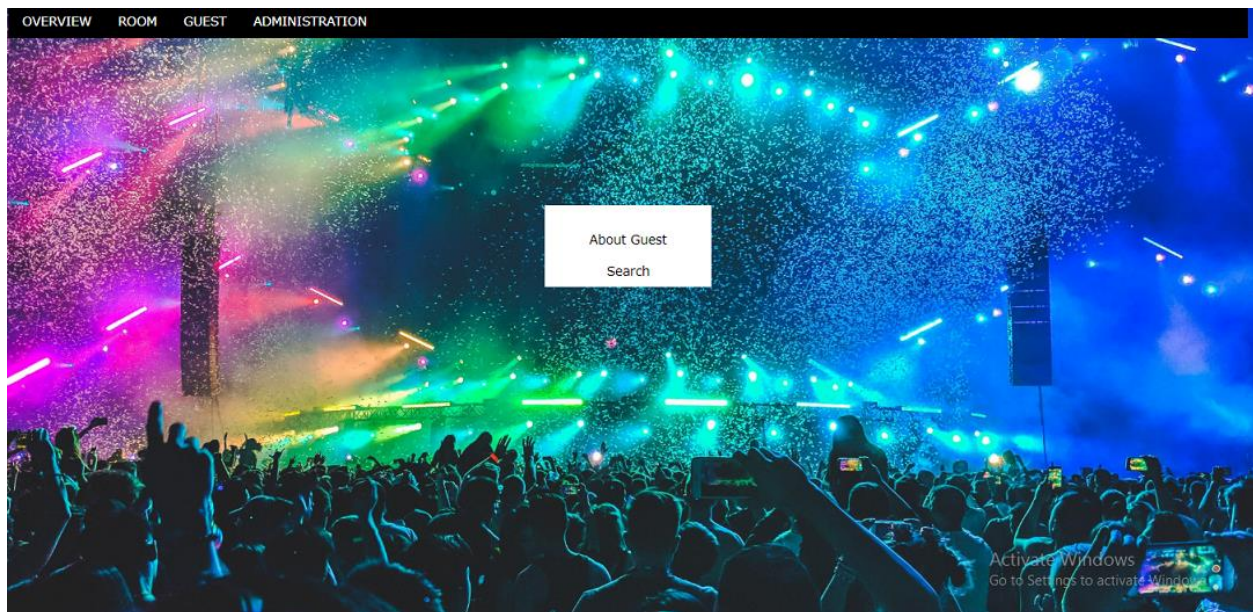

Admin can add employee.

Admin can also view his total employee list.

Employeename	Work	Type	
hasan	abc	zxc	Remove
Anam	Manager	Regular	Remove
Samiha	Manager	Regular	Remove
Hasan	Manager	Regular	Remove

But, admin cannot add a guest. He can only view the guests.

On the other hand, an employee can add guest.

He can also view guest list

He also has the access for total guest info.

Name : Essan
Gender :Male
Checkin : 2018-01-01
Checkout : 2018-02-05
Room Number : 201
Address Number : G M road

An employee can also see the total room data.

Room List

OVERVIEW   ROOM   GUEST

Occupied

Unoccupied

Under Construction

Room Number	Room Price	Room Catagory	Room Status
101	2500	Single	Occupied
102	2300	Double	Unoccupied
201	2700	Single	Underconstruction
203	2000	Single	Occupied
205	3000	Multiple	Unoccupied
206	5000	Vip	Occupied
220	2500	Single	Unoccupied
301	6000	Vip	Occupied
302	3000	Single	Unoccupied

He can also get occupied, unoccupied and under construction room list separately.

Occupied rooms:

Occupied Room List

Room Number	Room Price	Room Catagory	Room Status	
101	2500	Single	Occupied	Update
203	2000	Single	Occupied	Update
206	5000	Vip	Occupied	Update
301	6000	Vip	Occupied	Update

Unoccupied rooms:

Unoccupied Room List

Room Number	Room Price	Room Catagory	Room Status	
205	3000	Multiple	Unoccupied	Update
220	2500	Single	Unoccupied	Update
302	3000	Single	Unoccupied	Update

Under construction rooms :

Under Construction Room List

Room Number	Room Price	Room Catagory	Room Status	
201	2700	Single	Underconstruction	Update
304	3400	Double	Underconstruction	Update

Conclusion:

Hotel Management System has a huge impact in managing hotel. It makes hotel managing easy and comfortable, by digitalizing the whole system.