

# Hotel Management System

**Abstract-** A web application or web app is a client-server software application in which the client (or user interface) runs in a web browser. Common web applications include webmail, online management systems, online retail sales and many other functions. Our Hotel Management System is a web application to manage the hotel online. It provides effective tools for maintaining the total hotel management system.

## Introduction:

The hotel management system will manage all the tasks those are necessary to maintain a hotel. The system will be developed to reduce the paper works that are performed by many Hotels. This will also save time and energy. By this system the information will be stored more efficiently.

## Project Objectives:

In this hotel management system:

1. The normal users (guest user) only can see the home page of this system.
2. To know the details information the user must have to log in.
3. There will be admin in this system who can control all the tasks, for example room confirmation, adding new room etc.
4. The member can see how many rooms are available and apply for the room in online.

## **Security:**

The password of all the user accounts is protected by using cryptographic hash function. The cryptographic hash function is a hash function that takes any arbitrary size of message as input and gives a message digest having alphanumeric strings as output. The passwords are stored in the database in the format of a hash value.

## **Required Software & Tools:**

1. PHP development tool (atom/phpstorm/sublime text)
2. Code standard PHP.
3. CSS framework: Bootstrap
4. Web server: Apache – XAMPP
5. Database: MySQL

# Functional Dependencies

## 1. Functional Dependencies of room

room(roomId, Room\_type, Rate, phone\_no, isReserved)

- $\{\text{room\_id}\} \rightarrow \{\text{Room\_type}, \text{Rate}, \text{phone\_no}, \text{isReserved}\}$
- $\{\text{phone\_no}\} \rightarrow \{\text{roomId}, \text{Room\_type}, \text{Rate}, \text{isReserved}\}$

## 2. Functional Dependencies of hotel

hotel(hotel\_id, hotel\_name, hotel\_type, Address, Phone )

- $\{\text{hotel\_id}\} \rightarrow \{\text{hotel\_name}, \text{hotel\_type}, \text{Address}, \text{Phone}\}$
- $\{\text{Phone}\} \rightarrow \{\text{hotel\_id}, \text{hotel\_name}, \text{hotel\_type}, \text{Address}\}$

## 3. Functional Dependencies of user

user(user\_id, user\_name, address, gender, password, contact)

- $\{\text{user\_id}\} \rightarrow \{\text{user\_name}, \text{address}, \text{gender}, \text{password}, \text{contact}\}$
- $\{\text{contact}\} \rightarrow \{\text{user\_id}, \text{user\_name}, \text{address}, \text{gender}, \text{password}\}$

## 4. Functional Dependencies of reservation

reservation(id, check\_in, check\_out, isAccepted)

- $\{\text{id}\} \rightarrow \{\text{check\_in}, \text{check\_out}, \text{isAccepted}\}$

## 5. Functional Dependencies of admin

admin (id, name, password)

- $\{\text{id}\} \rightarrow \{\text{name}, \text{password}\}$