

## **School of Computer Science and Engineering**

# **Hotel Management System**

A project submitted in partial fulfillment of the requirements for the degree of Bachelor of Technology in Computer Science and Engineering

By

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This is to declare that the project entitled "Project Title" is an original work done

by undersigned, in partial fulfillment of the requirements for the degree "Bachelor of

Technology in Computer Science and Engineering" at School of Computer Science and

Engineering, Vellore Institute of Technology (VIT), Vellore.

All the analysis, design and system development have been accomplished by the

undersigned. Moreover, this project has not been submitted to any other college or

University.

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ii

## **ABSTRACT**

The theme of our Project is Hotel Management System. This project is a fine thought to make the complex procedure of the Hotel management system to an easy manner which is systematic, modular designed, selective menu based user display. The modular design and constructed system is very much user oriented in which user can easily understand the tools. The system is not any tough more and does not possesses many applications but it is made by focusing on the maintaining records employee's actions in a computerized system rather than time taking manual system.

The project is a software application that can be easily handled by minimum educated and simple computer knowledge person without any option of error. Two kinds of users can handle the system.

- 1. Online Users,
- 2. Administrator or Hotel Management.

The Online users are the customers or the staff who can see the news and updates of the Hotel and the Administrator are responsible for updating the Hotel details on computer. The Administrator is the authorized user who has power to change or edit the updates as well as the Password. In case of the forgetting of password there is provision to password recovery and Logout and Login in the system.

The Purpose of the whole process is to ease the daily or regular activities of the Hotel Management into an automatic computerized retrievable process. The daily activities includes the Room activities, Entering details of the new customer check in, To allocate a room as per the customer need and interest, Recording the checkout time and details, Releasing or Empty of room and to record the process in a computer system for future.

# **Table of Contents**

1. Introduction (Heading 1)	5
2. Abbreviations and Acronyms (Heading 2)	5
3. Contents	Error! Bookmark not defined.
3.1 Module Decomposition	
3.2 Figures and Table	Error! Bookmark not defined.
4.1Search Room (Administrator)	11
4.2 Search	
Customer	11
5 Online Reservation Module	12
5.1 Reserve Room	12
5.2.Modify Reservation	13
6. Manage Room Module	14
6.1 Add Room	15
6.2 Delete Room	16
Conclusion	16
8.Team Members Contribution	17
.References	17

#### 1. Introduction

The theme of our Project is Hotel Management System. The Purpose of the whole process is to ease the daily or regular activities of the Hotel Management into an automatic computerized retrievable process. The daily activities includes the Room activities, Entering details of the new customer check in , To allocate a room as per the customer need and interest , Recording the checkout time and details, Releasing or Empty of room and to record the process in a computer system for future.

The main objective of the entire activity is to automate the process of day to day activities of Hotel like:

- ->Room activities,
- -> Admission of a New Customer.
- ->Assign a room according to customer's demand,
- -> Checkout of a computer and releasing the room
- ->Finally compute the bill etc.
- ->Packages available.
- -> Advance online bookings.
- ->Online Cancellation.
- ->Email facility.
- ->Feedbacks.

#### 2. Abbreviations and Acronyms

- 1)"XAMPP Apache + MariaDB + PHP + Perl" open-source cross-platform web server solution stack package (XAMPP)
- 2) Hyper text markup language (HTML)
- 3) Cascarding style sheet (CSS)
- 4) Computer in which the software is running (LOCAL HOST)

3. Contents

3.1 Module Decomposition

The way followed while making module decomposition is to divide the system into modules so that

the operations are done under each module will be higly related with each other, but they are not so

much related with other operations in other modules. Taking this into consideration, hotel management

system project's main services are as follows;

3.1.1 User Authentication Module

**Identification:** User Authentication Module

**Type:** Application

**Purpose:** This Module provide user to register and authenticate user.

Function: User enables to register to system and log in. Also this module provide changing password

and help user if they forgot their password.

**Subordinates:** 

Sing in

Log in

Changed Password

Forgotten Password

6

3.1.1.1. Sign in

**Identification:** Sign in

**Type:** Process

Purpose: Provides user to get their authorization level which is recorded in corresponding

cell of the user table.

Function: A user enters their required information (e-mail, password) to the web form. If those

information match with a row of the user table, user gets their authorization level.

**Subordinates:** 

- None

3.1.1.2. Sign Up

**Identification:** Sign up

**Type:** Process

**Purpose:** Provides a registration process to user, if user information is

not recorded to the user table.

**Function:** A visitor fills the registration form and click on the Complete Registration button. If every

information given is correct, user's information is recorded to user table and user get the

"customer" status by default. For other employee is defined by the administrator in their panel

manually.

7

## 3.1.1.3. Change Password

**Identification:** Change Password

**Type:** Process

Purpose: To make user able to change their passwords.

**Function:** User enters their old password and new password. New password replaces with the old password if it is correct.

## 3.1.2. Forgotten Password

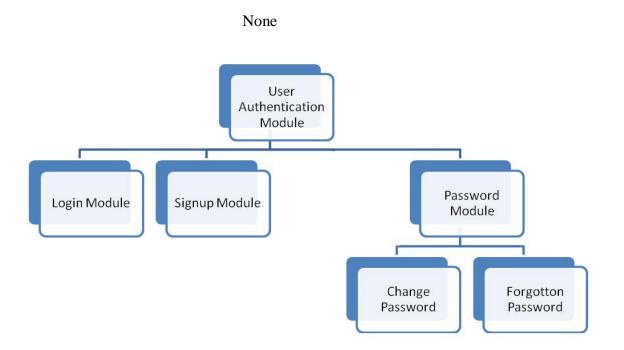
**Identification:** Forgotten Password

**Type:** Process

Purpose: By this module, user can get their fogotten password.

**Funtion:** User sends a request to the system that denotes they have forgotten their password. System sends them an e-mail including their password.

### **Subordinates:**



### 3.1.3. Messaging Module

**Identification:** Messaging Module

**Type:** Application

**Purpose**: This module is used for messaging between users except customer.

Function: Employees can send or receive message each other.

Subordinates:
Send Message
Messaging Module (Other Users)
>Send Message
>Delete Message

## 3.1.3.1Send Message

**Identification:** Send Message

**Type:** Process

**Purpose:** For faster communication, provides hotel employee to send

and receive text messages.

Function: User fills the required areas in the form and clicks on the "Send" button. According to the

information in the messages table, every user has their sent and received messages.

**Subordinates: none** 

### 3.1.3.2.Delete Message

**Identification:** Delete Message

**Type:** Process

**Purpose:** Provides hotel employee to delete their messages visually.

**Function:** User clicks on the "Delete" button. Message status changes to "deleted" and user can not see that message any more. At the end, the message does not deleted from table. Because of foreign key constraints, the corresponding message's status changes.

## 4. Searching Module

**Identification:** Searching Module

Type: Application

Purpose: It allows user to searching information, data in the system.

**Function:** 

**Subordinates:** 

Searching Module(Administrator)

- -Search Room
- Search Employee
- Search Customer

## **4.1Search Room (Administrator)**

**Identification:** Search Room

**Type: Process** 

**Purpose:** Provides a sophisticated room searching to administrators.

**Function:** Administrator enters the capacity and price intervals to the module.

All suitable rooms are listed.

**Subordinates:** None

#### 4.2 Search Customer

**Identification:** Search Customer

**Type:** Process

Purpose: Provides administrator to search customer by name and SSN.

Function: Administrator specifies how the search data, all suitable customer information are listed.



### **5 Online Reservation Module**

**Identification:** Online Reservation Module

**Type:** Application

**Purpose:** This module allows to customer

**Function:** 

#### **Subordinates:**

- Reserve Room

- Modify Reservation

-Cancel Reservation

### **5.1 Reserve Room**

**Identification:** Reserve Room

**Type:** Process

**Purpose:** Provides customer to reserve a room.

Function: Customer picks a room. Specifies entering and leaving dates and how the room price will

be paid. Clicks on reserve button.

## **5.2.**Modify Reservation

**Identification:** Modify Reservation

**Type:** Process

**Purpose:** Provides customer to change their reservation information.

Function: Customer clicks on modify reservation button. They can change any information about the

room and cancel the reservation.

**Subordinates:** Cancel Reservation

## **5.2.1Cancel Reservation**

**Identification:** Cancel Reservation

**Type:** Process

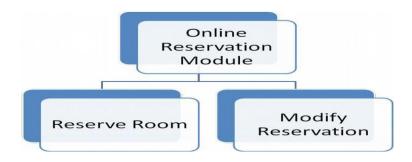
Purpose: Provides customer to cancel the reservation. Any related data in the reservation table will

be erased.

Function: Customer clicks on cancel reservation button. Reservation is canceled.

#### **Subordinates:**

#### None



## 6 Manage Room Module

**Identification:** Manage Room Module

Type: Application

**Purpose:** Administrator enable to manage room.

**Function:** This module provides add, delete or change room information like room is vacated or occupied.

- Add Room
- Delete Room

Modify Room Information(Vacated/Occupied)

### 6.1 Add Room

**Identification:** Add Room

**Type:** Process

Purpose: Provides administrator to add a new room.

**Function:** Administrator clicks on "Add new Room" button, fills the form according to room specifications, clicks on save button.

### **6.2 Delete Room**

**Identification:** Delete Room

**Type:** Process

Purpose: Provides administrator to delete a room.

**Function:** Administrator clicks on "Delete Room" button, clicks on save button. Because room information does not erased from the database, this process is reversible.

Subordinates: None

## **6.2.1 Modify Room Information**

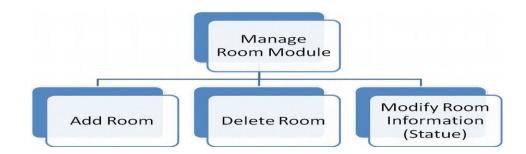
**Identification:** Modify Room Information

**Type:** Process

**Purpose:** Provides administrator to modify a room's information.

Function: Administrator clicks on "Modify Room Information" button, all the

information can be changed.

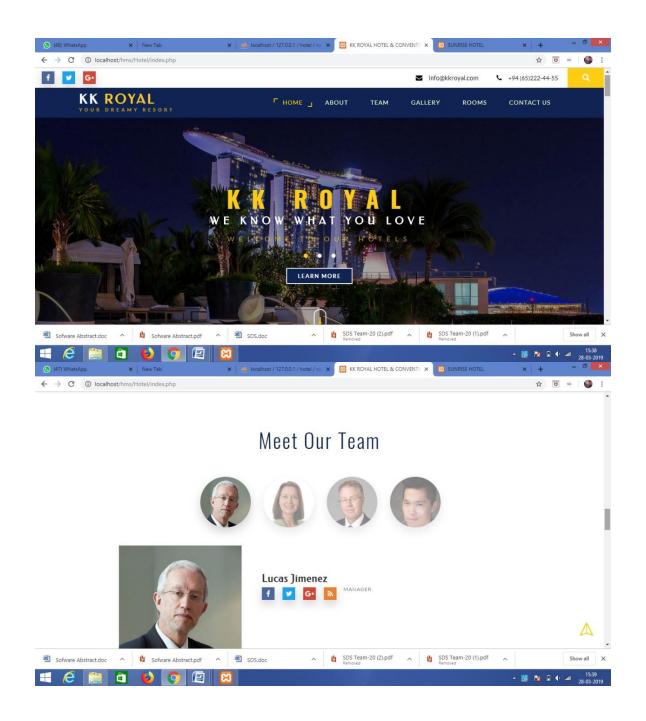


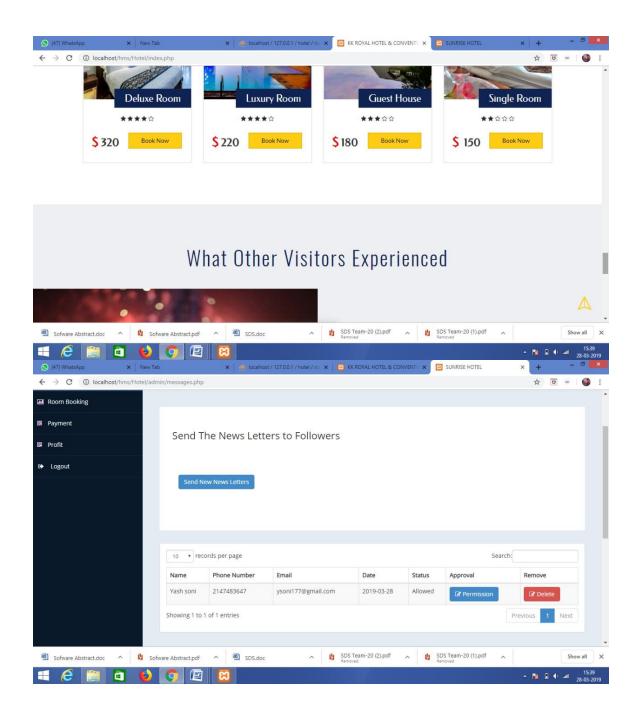
# **7.Team Members Contribution**

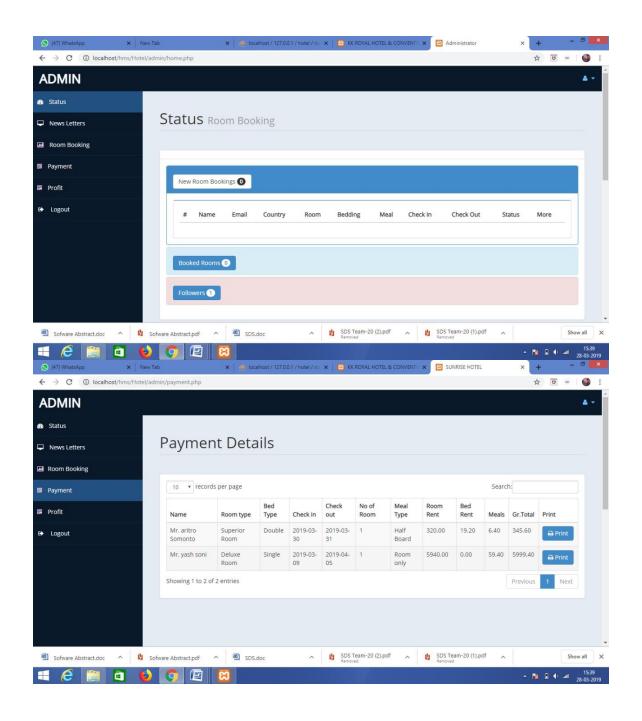
(Only Applicable for Group Project)

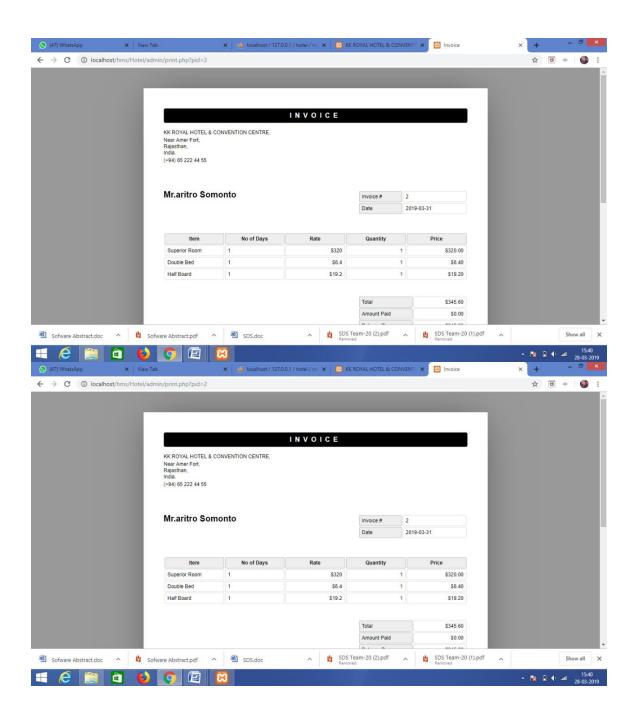
Name	Role and Main Task
Sourabh Jain	Web designer, update website, user interface for
	complete system
Yash Soni	test & debug for complete system, evaluation,
	Demo, report writer
Sahith D.	Graph maker, Database administrator, System design
	and modelling

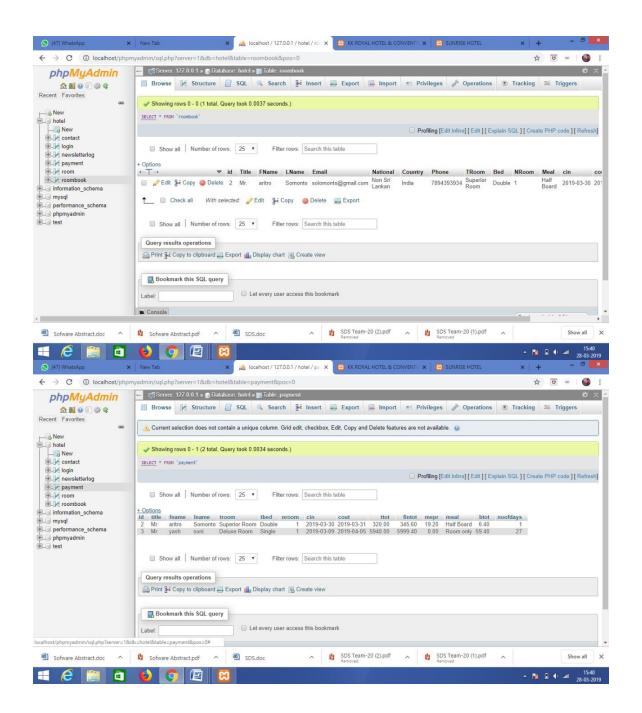
## **SCREEN SHOTS:**

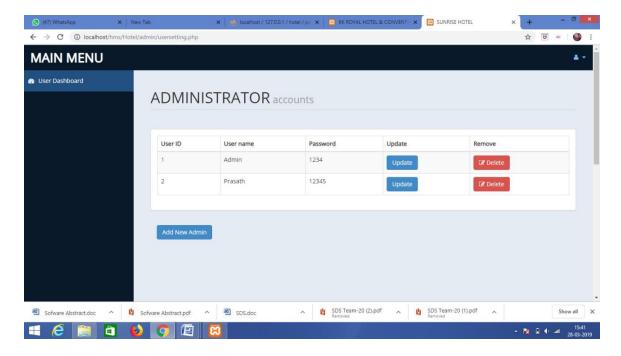












#### **CONCLUSION:**

This project is designed to meet the requirements of Online Hotel Management. It hasbeen developed in JSP, Servlets keeping in mind the specifications of the system. For designing the system we have used simple data flow diagrams. Overall the project teaches us the essential skills like:

Using system analysis and design techniques like data flow diagram in designing the system.

Understanding the database handling and query processing.

#### 8.References

- [1] Sachio Hirokawa; Makoto Okada; Kiyota Hashimoto "Extraction of Hints and Advice from Hotel Reviews for Improving Small Hotel Management"
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- [4] www.w3schools.com
- [5] www.phptpoint.com