

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELAGAVI**



A Mini Project Report on

“HOTEL MANAGEMENT SYSTEM”

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In

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CERTIFICATE

This is to certify that the Mini Project work entitled “**HOTEL MANAGEMENT SYSTEM**” is a bonafide work carried out by **Ms. SRIPRIYA R (1BY19CS158)** and **Mr. GAJEELEE ROHAN PRANAV (1BY19CS194)** in partial fulfillment for the award of **Bachelor of Engineering Degree in Computer-Science and Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in this report. The Mini project report has been approved as it satisfies the academic requirements in respect of project work for the B.E Degree.

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ABSTRACT

This project aims at creating on Hotel Management System which can be used by Admin and Customers. The admin to advise/publish the availability of rooms in different hotels and customers are checking the availability of room in required hotel. Customers should be able to know the availability of the rooms on a particular date to reserve in hotel. They should be able to reserve the available rooms according to their need in advance to make their stay comfortable. The Admin hands the booking information of customers. The users can register and log into the system. The administrator will know the details of reservation and daily income. The hotel department maintain the seat availability and booking details in certain database. This project provides high security to Admin and user information.

The main objective of this project is to design a hotel management system for running a hotel business. The system should be as flexible as possible so that it can be used for different hotels. You have to find out which procedures hotels have used for different hotels. You have to find out which procedures hotels have and based on that information, you should create a system which makes it efficient. You need to find out how a hotel system works on the internet, use your own experience or directly talk to people in the hotel business. The more diverse the sources of your information are, the better will be the resulting system and, possibly, your grade.

This project aims at creating a Hotel Management System which can be used by Admin and Customers. The admin to advise/publish the availability of rooms in different hotels and customers are checking the availability of room in required hotel. Customers should be able to know the availability of the rooms on a particular date to reserve in hotel. They should be able to reserve the available rooms according to their need in advance to make their stay comfortable. The Admin handles the booking information of customers.

ACKNOWLEDGEMENT

I am happy to present this Mini project after completing it successfully. This project would not have been possible without the guidance, assistance and suggestions of many individuals. I would like to express my deep sense of gratitude and indebtedness to each and every one who has helped me to make this project a success.

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CHAPTER 1

INTRODUCTION

1.1 Background:

The project, Hotel Management System is a web-based application that allows the hotel manager to handle all hotel activities online. Interactive GUI and the ability to manage various hotel bookings and rooms make this system very flexible and convenient. The hotel manager is a very busy person and does not have the time to sit and manage the entire activities manually on paper. This application gives him the power and flexibility to manage the entire system from a single online system. Hotel management project provides room booking, staff management and other necessary hotel management features. The system allows the manager to post available rooms in the system. Customers can view and book room online. Admin has the power of either approving or disapproving the customer's booking request. Other hotel services can also be viewed by the customers and can book them too. The system is hence useful for both customers and managers to portable manage the hotel activities.

Overview

A Database Management System (DBMS) is system software for creating and managing databases. A database is a collection of information that is organized so that it can be easily be accessed, managed and updated. The DBMS provides users and programmers with a systematic way to create, retrieve, update and manage data.

Database Management System (DBMS) is a software for storing and retrieving users' data while considering appropriate security measures. It consists of a group of programs which manipulate the database. The DBMS accepts the request for data from an application and instructs the operating system to provide the specific data. In large systems, a DBMS helps users and other third-party software to store and retrieve data.

Characteristics of Database Management System

- Provides security and removes redundancy
- Self-describing nature of a database system
- Insulation between programs and data abstraction
- Support of multiple views of the data
- Sharing of data and multiuser transaction processing
- DBMS allows entities and relations among them to form tables.
- DBMS supports multi-user environment that allows users to access and manipulate data in parallel

Xampp server: XAMPP is a free and open-source cross platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, Maria DB database, and interpreters for scripts written in the PHP and Perl programming languages. XAMPP stands for Cross-Platform, Apache, Maria DB, PHP and Perl. It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing and deployment purposes. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server extremely easy as well.

CHAPTER 2

LITERATURE SURVEY

2.1 Existing System:

In the existing system, only provides the information about particular hotel and only some of the hotels has possibility to reserve the rooms. The previous system was failure to publish the room's availability of multiple hotels. And, it is failure to provide defence to admin and user information.

2.2 Proposed System:

The hotel management system provides the quality service to the end user. This project aims at creating on Hotel Management System which can be used by Admin and Customers. The admin to advise/publish the availability of rooms in different hotels and customers are checking the availability of room in required hotel. Customers should be able to know the availability of the rooms on a particular date to reserve in hotel. They should be able to reserve the available rooms according to their need in advance. To make their stay comfortable. The Admin hands the booking information of customers. The users can register and log into the system. The administrator will know the details of reservation and daily income.

2.3 Objectives/Aims:

- The mission is to facilitate easy management and administration of a hotel with capabilities to do Booking or reservations of the rooms, Cancellation of the rooms, Cash billing, Room service, Restaurant service, Restaurant Billing, Total Billing, Travels arrangement etc. using the automated hotel management software.
- One can Keep detailed records or info on an unlimited amount of customers. The system lets the user Know which all rooms are available for occupancy at any point of time. This makes the Booking considerably faster. And thus helps the hotel in better management and reduce a lot of paper work as well as manpower.

CHAPTER 3

SOFTWARE REQUIREMENTS SPECIFICATION

3.1 Hardware Requirements

The section of hardware configuration is an important task related to the software development insufficient random-access memory may affect adversely on the speed and efficiency of the entire system. The process should be powerful to handle the entire operations. The hard disk should have sufficient capacity to store the file and application.

The hardware required in this project are:

- Processor : Minimum Intel(R) Core(TM) i3-9100f CPU @ 2.40GHz 2.40GHz
- RAM : Minimum 4 GB RAM capacity
- Hard disk : Minimum 40 GB ROM capacity
- Cache Memory : L2-1 MB
- GPU : Intel HD Graphics

3.2 Software Requirements

This document gives a detailed description of the software requirement specification. The study of requirement specification is focused specially on the functioning of the system. It allows the developer or analyst to understand the system, function to be carried out the performance level to be obtained and corresponding interfaces to be established.

The softwares we are using in this project are:

- XAMPP : Main Software package
- HTML, CSS, JS : Fontend(Page layout and Design)
- PHP, MYSQL : Backend
- GOOGLE CHROME : Web Browser
- APACHE : Server

About Technologies used :

- **HTML** is integrated in PHP. It provides a means to structure text-based information in a document. It allows users to produce web pages that include text, graphics and hyperlinks.
- **CSS (Cascading Style Sheets)** is a style sheet language used for describing the presentation of a document written in a mark-up language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document.
- **MYSQL** is the language used to manipulate relational databases. It is tied closely with the relational model. It is issued for the purpose of data definition and data manipulation. Program runs as a server providing multi-user access to a number of databases. MySQL is a multithreaded, multi-user SQL database management system (DBMS). It includes facilities to add, modify or delete data from the database, ask questions (or queries) about the data stored in the database and produce reports summarizing selected contents.
- **PHP** is a scripting language originally designed for producing dynamic web pages. It has evolved to include a command line interface capability and can be used in standalone graphical applications. PHP is a general-purpose scripting language that is especially suited for web development. PHP generally runs on a web server, taking PHP code as its input and creating web pages as output. It can also be used for command-line scripting and client-side GUI applications. PHP can be deployed on most web servers, many operating systems and platforms, and can be used with many relational database management systems. It is available free of charge, and the PHP Group provides the complete source code for users to build, customize and extend for their own use. PHP stores whole numbers in a platform-dependent range. This range is typically that of 32-bit signed integers. PHP has hundreds of base functions and thousands more from extensions. These functions are well documented on the PHP site. It requires MySQL connection between the front end and back end components to write to the database and fetch required data.

CHAPTER 4

DESIGN

Database design:

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system. A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MS Access database has been chosen for developing the relevant databases.

4.1 Entity - Relationship Diagram:

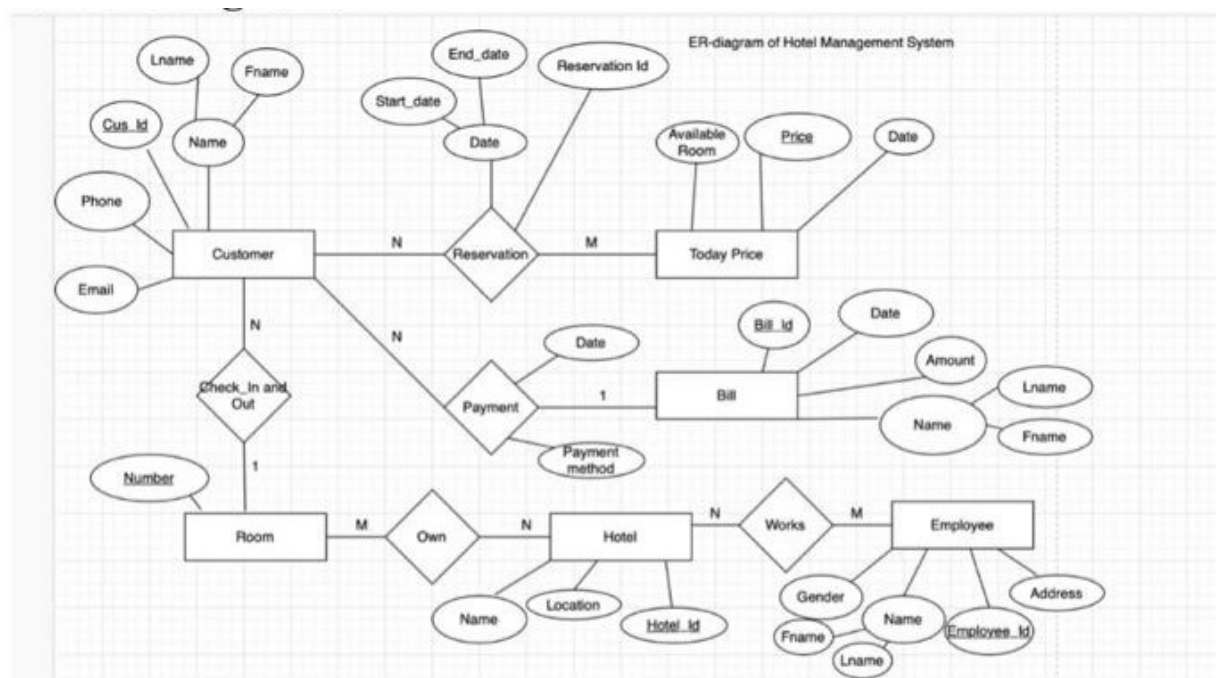


Figure 1: Entity-Relationship Diagram

4.2 Schema Diagram :

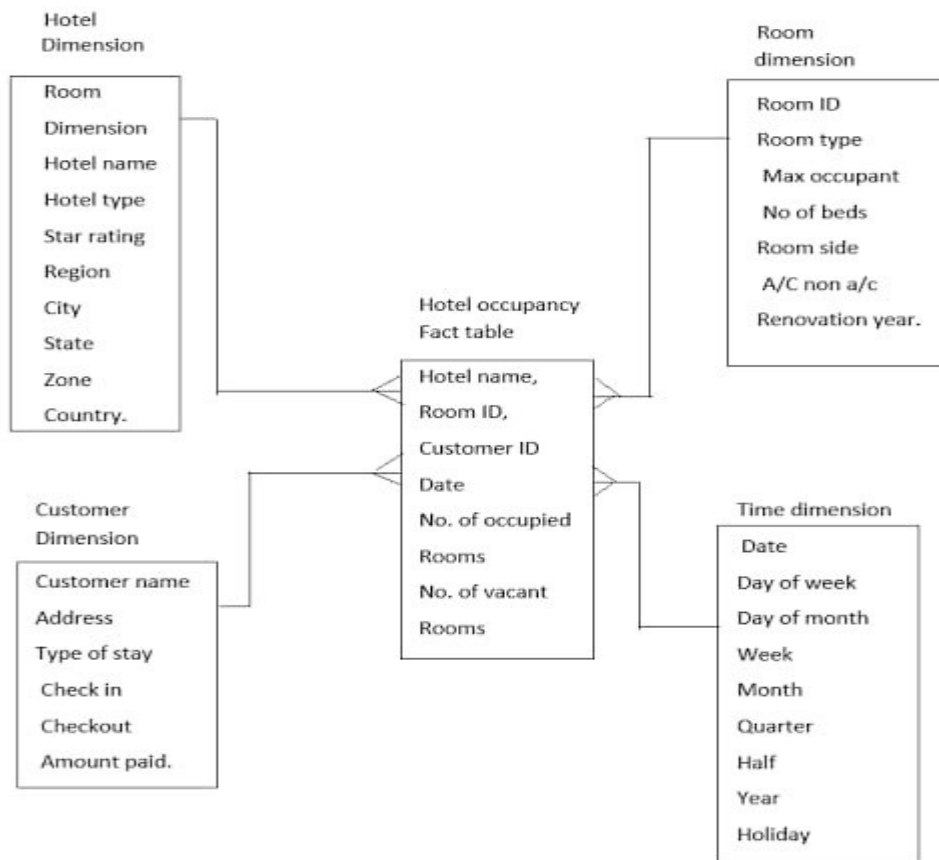
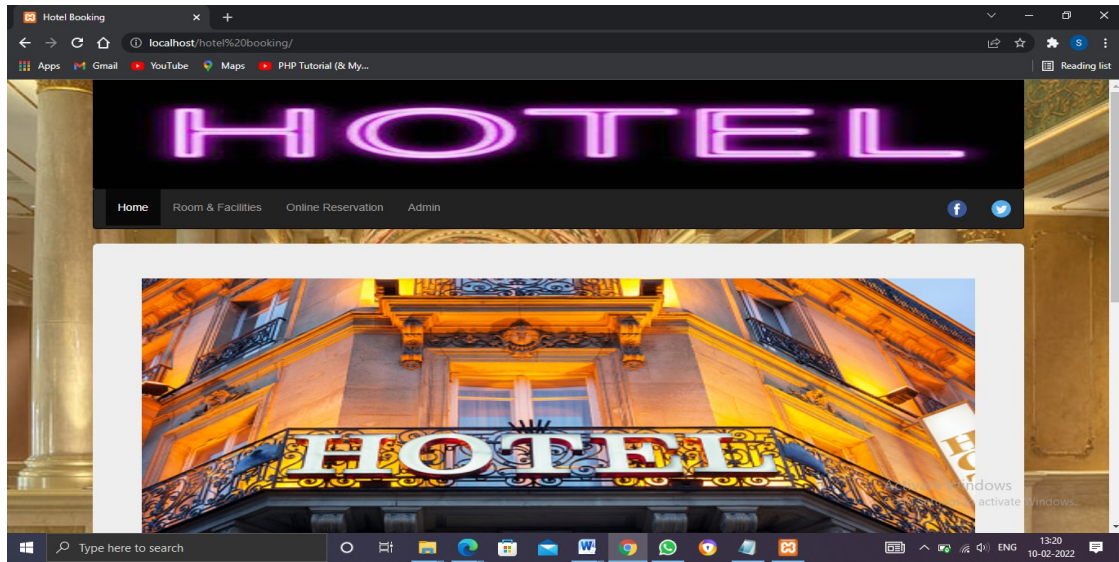


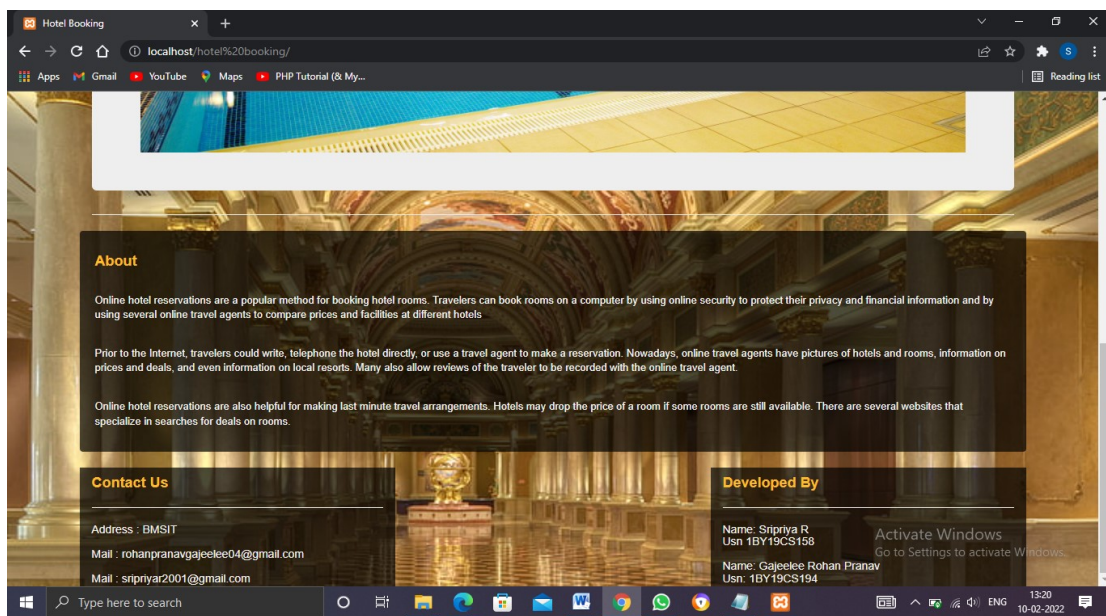
Figure 2: Schema Diagram

CHAPTER 5

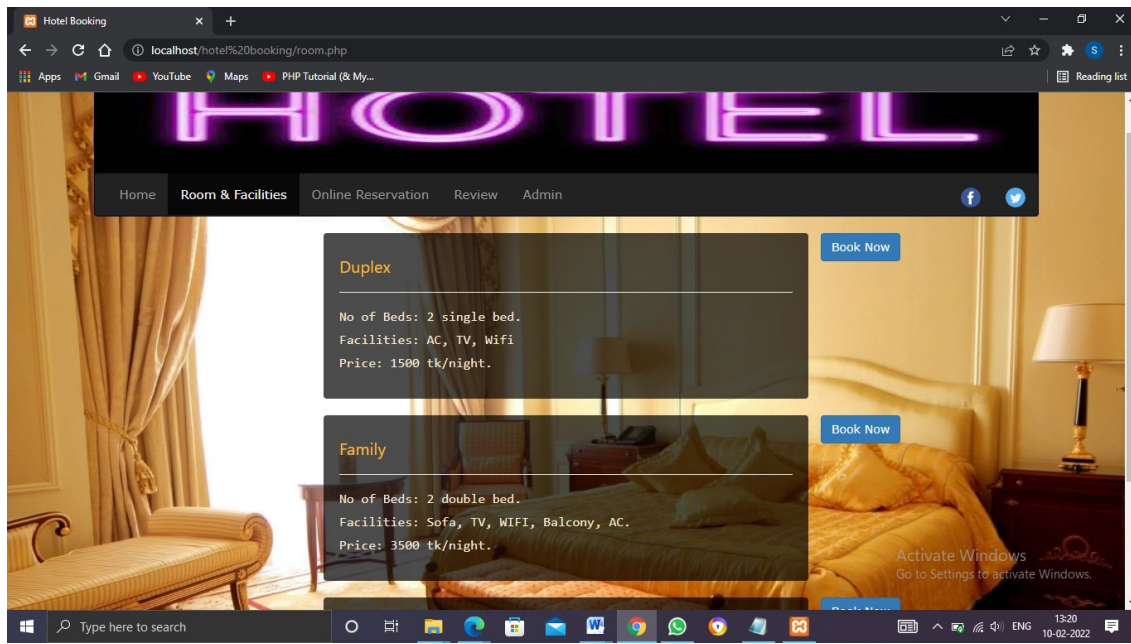
5.1 IMPLEMENTATION with SCREENSHOTS



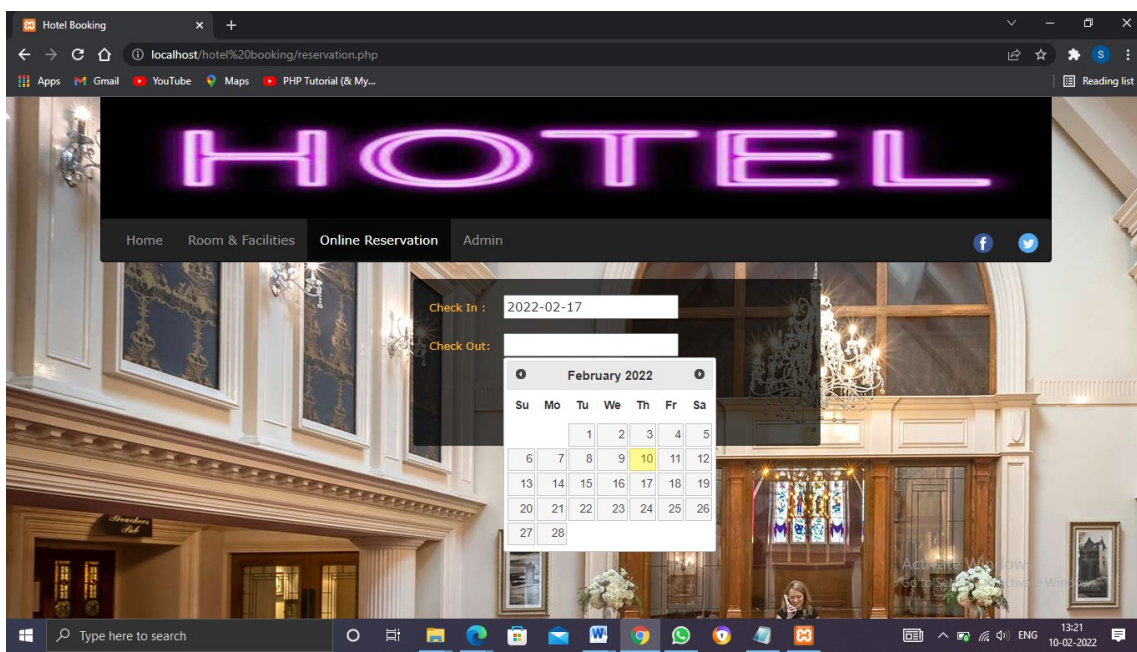
HOME PAGE



HOTEL MANAGEMENT SYSTEM

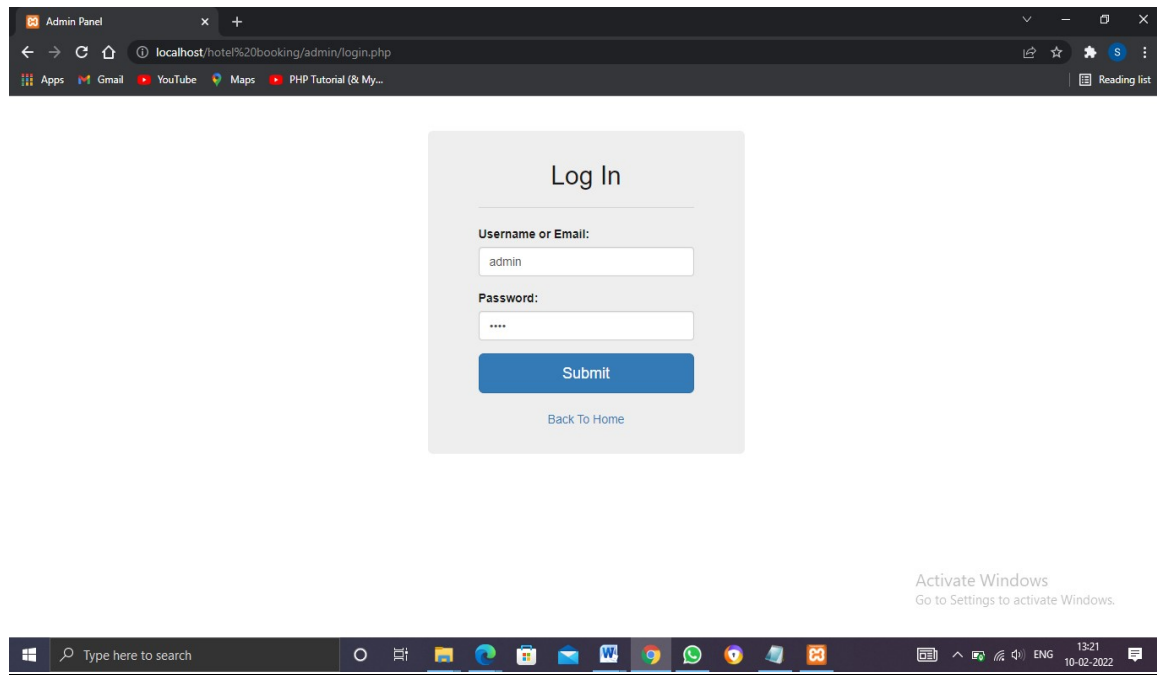


ROOM CATEGORIES

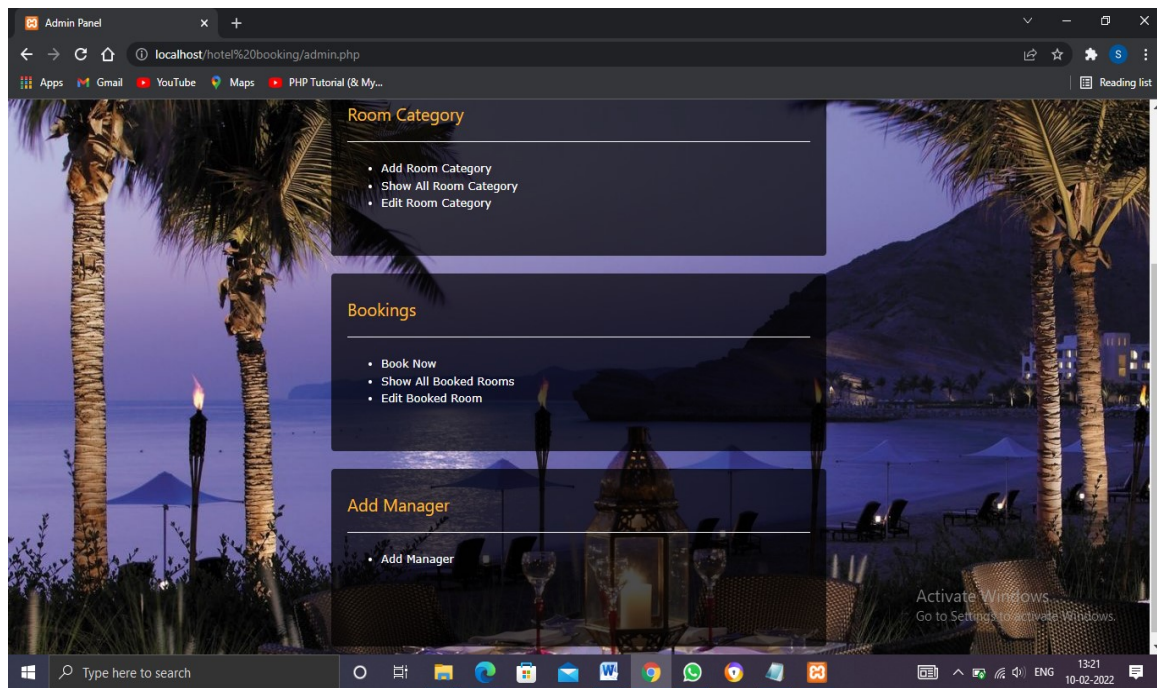


CHECK IN AND CHECK OUT

HOTEL MANAGEMENT SYSTEM

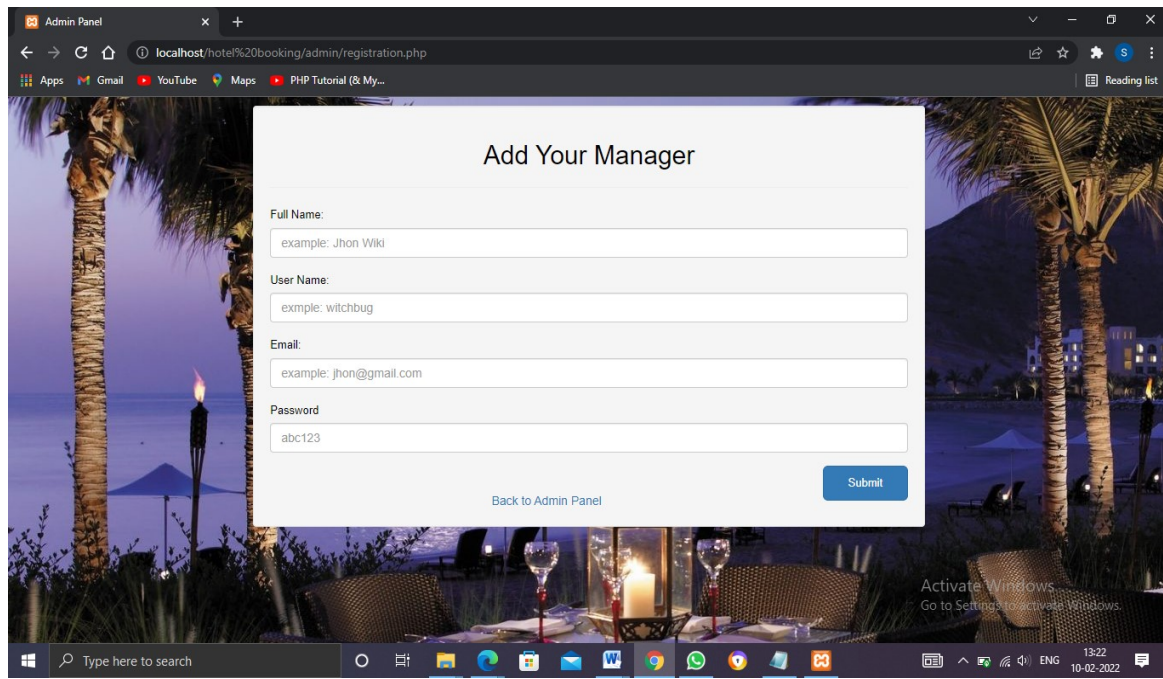


ADMIN LOGIN



ADMIN ACCESSIBLE FEATURES

HOTEL MANAGEMENT SYSTEM



The screenshot shows a web browser window with the title 'Admin Panel' and the URL 'localhost/hotel%20booking/admin/registration.php'. The main content is a form titled 'Add Your Manager'. The form has four input fields: 'Full Name' (with placeholder 'example: Jhon Wiki'), 'User Name' (with placeholder 'example: witchbug'), 'Email' (with placeholder 'example: jhon@gmail.com'), and 'Password' (with placeholder 'abc123'). Below the fields are two buttons: 'Back to Admin Panel' and 'Submit'. The background of the page is a tropical night scene with palm trees and a beach.

Admin Panel

localhost/hotel%20booking/admin/registration.php

Add Your Manager

Full Name:
example: Jhon Wiki

User Name:
example: witchbug

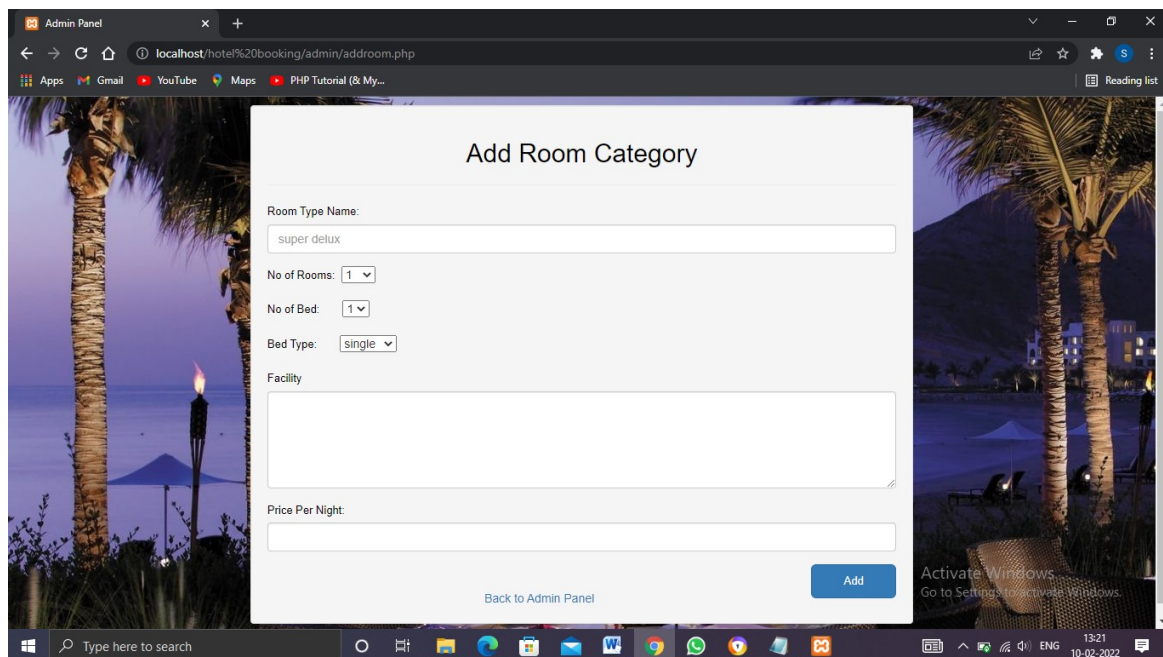
Email:
example: jhon@gmail.com

Password:
abc123

Back to Admin Panel

Submit

ADMIN CAN ADD A NEW MANAGER



The screenshot shows a web browser window with the title 'Admin Panel' and the URL 'localhost/hotel%20booking/admin/addroom.php'. The main content is a form titled 'Add Room Category'. The form has five input fields: 'Room Type Name' (with placeholder 'super deluxe'), 'No of Rooms' (a dropdown menu with '1' selected), 'No of Bed' (a dropdown menu with '1' selected), 'Bed Type' (a dropdown menu with 'single' selected), and 'Facility' (a large text area). Below the fields are two buttons: 'Back to Admin Panel' and 'Add'. The background of the page is a tropical night scene with palm trees and a beach.

Admin Panel

localhost/hotel%20booking/admin/addroom.php

Add Room Category

Room Type Name:
super deluxe

No of Rooms: 1

No of Bed: 1

Bed Type: single

Facility

Price Per Night:

Back to Admin Panel

Add

ADMIN CAN ADD NEW ROOM CATEGORIES

CHAPTER 6

CONCLUSION AND FUTURE ENHANCEMENT

Conclusion:

The project, developed using PHP and MySQL is based on the requirement specification of the user and the analysis of the existing system, with flexibility for future enhancement. The expanded functionality of today's software requires an appropriate approach towards software development. In the Online hotel management system, we have developed a secure, user-friendly Hotel Management System. This System can take care of each member whether its Owner or Customer.

This System will Help them to properly Manage their hotel and help in growth without creating any hassle. This system is completely secure since every Manager is provided with a user ID and Password so there is no chance of any unauthorized access. This System provides an easy access to people who want to access the data easily without having to compile everything themselves. Identification of the drawbacks of the existing system leads to the designing of computerized system that will be compatible to the existing system with the system which is more user friendly and more GUI oriented.

Future Enhancement:

There are some enhancements which can be implemented further. They are as follows:

- Allow admin to search for a particular user using a search bar .
- Add some more module such as customer service tab where user can get in contact with hotel supervisors.
- Other module to be added are the option for user to see with images or videos the status of the room category they have chosen.
- Allow the user to give review of the hotel in a new module called review tab where feedback can be provided.

REFERENCES

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