

Second year Mini Project Report

Hotel Management System

Submitted in partial fulfillment of the requirements of the degree
**BACHELOR OF ENGINEERING IN COMPUTER
ENGINEERING**

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CERTIFICATE

This is to certify that the Mini Project entitled “ **Hotel Management System**” is a bonafide work of **Sahil Ahuja , Mohit Jeswani , Yash Sainani** submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of “**Bachelor of Engineering**” in “**Computer Engineering**” .

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(Prof._____)

Principal

Mini Project Approval

This Mini Project entitled “**Hotel Management System**” by **Sahil Ahuja , Yash Sainani , Mohit Jeswani** is approved for the degree of **Bachelor of Engineering** in **Computer Engineering**.

Examiners

1.....

(Internal Examiner Name & Sign)

2.....

(External Examiner name & Sign)

Date:

Place:

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ABSTRACT:

The Hotel Management System is a well designed software solution developed to optimize and centralize the management of hotel operations. With a user-friendly interface and advanced features, the system enables hotel manager to efficiently handle multiple tasks , Including guest bookings ,room management ,billing,inventory control, and customer relationship management.

This system incorporates a robust reservation module that allows guests to make bookings through multiple channels ,such as online portals and mobile applications, ensuring a seamless and convenient booking experience. The guest management component facilitates the efficient handling of guest information, preferences, and special requests, thereby enabling personalized and exceptional service delivery.

Moreover, the room allocation feature optimizes the assignment of rooms based on guest preferences, availability, and special requirements, ensuring an efficient and smooth check-in process. The billing module provides a comprehensive platform for managing financial transactions, invoicing, and payment processing, thereby enhancing financial transparency and accuracy.

By centralizing these critical functions, the Hotel Management System enhances operational efficiency, reduces manual errors, and improves overall productivity, enabling hotel staff to focus on delivering exceptionag Additionally, the system generates comprehensive reports and analytics, providing valuable insights for informed decision-making and strategic planning, ultimately contributing to the overall success and profitability of the hotel

Acknowledgment:

We extend our heartfelt gratitude to the numerous individuals and teams who have played a pivotal role in the conception, development, and successful implementation of our hotel management system. This project has been a monumental endeavor, and your unwavering commitment has been indispensable to its realization.

Hotel Management System typically serves as a formal recognition or confirmation of a specific action or request. In the context of a hotel management system, an acknowledgment could include details such as the date and time of the request, the specific request or action being acknowledged, the individuals involved, and any relevant reference numbers or codes. It may also include information about the next steps, if applicable, or any additional information that may be relevant to the request or action.

Introduction:-

hotel management system project is written in Java programming system. This is a simple console based system which can be understood easily . Admin and staff can access will have the access of this project. Talking about the system , it contains all the basic functions which include the List of rooms , staff member's details, booking the rooms and food . Talking about the features of this simple hotel management system, at first , the admin has to login and has to show the list of rooms in hotel It includes the list of rooms , rooms booked previously , advanced room booking , and the check-in and check-out dates. Inside this there are different types of rooms with different varieties (ex:- two sharing double bed, two sharing single bed) . Talking about the food ,their will be a chef provided with a screen in the kitchen and will prepare the food according to the order displayed on the screen. We can also see previous data like the rooms which are booked previously , staff member details. The staff members will be assigned the work on notifications.

Our Hotel Management System is a software that enhances guest satisfaction, optimize revenue, and boost overall operational efficiency. Whether you run a small boutique hotel or a large chain of properties, our system can be tailored to meet your specific needs and help you stay ahead in the competitive hospitality industry. Join us in embracing the future of hotel management. Elevate your guest experiences, increase your hotel's revenue, and simplify your daily tasks with our Hotel Management System . Welcome to a world of efficiency, convenience, and satisfied guests.

Problem Statement :-

Inefficient management and operations within hotels often result in issues such as over bookings, long guest check-in times, poor staff coordination, and subpar guest experiences. There is a need for a comprehensive Hotel Management System to stream line operations, enhance guest services, optimize room allocation, and ensure compliance with regulations. This system should also address security concerns, resource efficiency, and marketing challenges, ultimately improving the overall efficiency, profitability, and reputation of the hotel.

1. Inefficient Reservations and Booking: Booking rooms is often a cumbersome process, with reservations spread across different platforms, including phone calls, emails. This results in a lack of centralized information, overbooking, or double- booking errors, leading to guest dissatisfaction and revenue loss.
2. Delayed Check-Ins and Check-Outs: Manual check-ins and check-outs are time-consuming for both guests and staff. It leads to long queues, delays, and creates opportunities for errors in guest information and billing.
3. Poor Customer Experience: With limited access to real-time guest information, providing personalized services and addressing guest requests promptly is challenging. This impacts the overall guest experience and can lead to negative reviews and decreased customer loyalty
4. Inadequate Resource Allocation: Staff scheduling, room assignments, and inventory management are often done manually, which can lead to underutilization of resources, overstaffing during low occupancy, or understaffing during peak times.
5. Inefficient Reporting and Analytics: Gathering data for financial and operational analysis is time-consuming and often prone to errors. This makes it challenging for hotel management to make data-driven decisions and optimize their services.

Objectives:

1. create an console application : develop a user-friendly application for management of hotel.
2. Database Management : Establish a database to store crucial information, including staff member's details , customer's details , room details
3. Billing system: ensure the entire process is chargeable
4. Enhanced guest services and experiences .
5. Optimized resource allocation and inventory management
6. Streamlined billing and invoicing processes.
7. Comprehensive reporting and analytics for informed decision-making .
8. Integrated housekeeping management for a clean environment .
9. Data security and compliance with industry standards .
10. Efficient interdepartmental communication.
11. Scalability and customization for diverse hotel types.

Literature Survey:

Paper 1: Web Based Hotel Management System

By : Dukare Siddhesh Sudam , Bhalerao Akanksha Santosh

The literature review we consider and examine the work done by researchers who have broached on this particular topic (Hotel Management System). As mentioned above, the main purpose of hotel industry is to offer consumers' hospitality services. Technology has a considerable impact on Hospitality industry in previous years and will continue to do so with the increasing use of computer Technology, controlled equipment" (Jones and Lockwood, 1989,) Really in the last two to four year, technology has become far more advanced, easy to use and far more widely used throughout all types of industry . They mostly use a range of computer programs system from everything to bookings, communications, security and payments. the reason why hotels utilize technological systems in their operations is because it keeps them up to date in terms of where they are placed in the technology market .

maintaining their position of the brand and status as a luxury brand, rather than cutting high or low costs, which would be more of a priority for budget hotels which cater to a lower-high end market. It is clear that technology used in hospitality establishments and it is also used to make customers' lives more convenient and easy to understanding. The hospitality comprises a wide range of fields within the hotel industry that includes accommodations, restaurants, event planning and other sectors with tourism. (Law, 2009) It seems that if a hospitality company can provide valuable web sites that attract their visitors, they will also get benefits ultimately.

Paper 2 : A Study On Hotel Management

By : Dr. Praveen Kumar

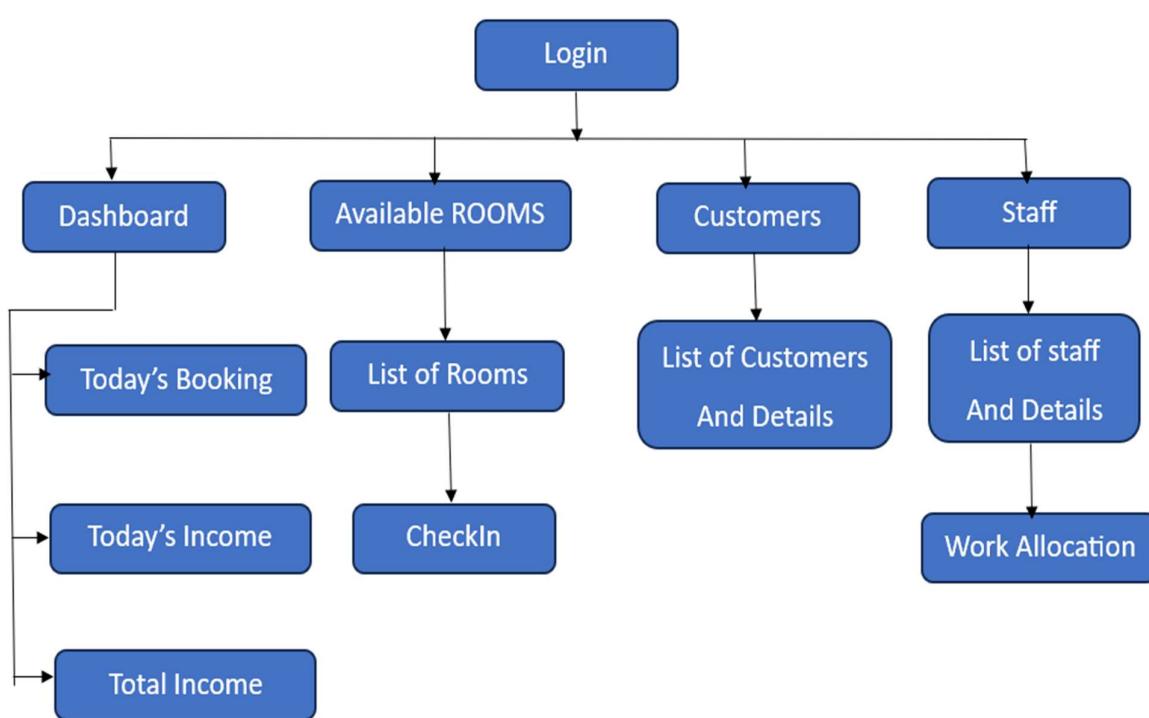
Online Hotel Reservations are becoming popular method for booking hotel rooms. Travelers can book rooms from home via their home computer by using online security to protect their privacy and financial information and by using several online travel agents to compare prices and facilities at different hotels. Prior to the internet, travelers could write, telephone the hotel directly or use a travel agent to make a reservation. Large hotel chains typically have direct connections to the airline national distribution systems (GDS) (Sabre, Galileo, Amadeus, and World span). These in turn provide hotel information directly to the hundreds of thousands of travel agents that align themselves with one of these systems. Individual hotels and small hotel chains often cannot afford the expense of these direct connections and turn to other companies to provide the connections. Nowadays, online travel agents have pictures of hotels and rooms, information on prices and deals, and even information on local resorts. Many also allow reviews of the traveler to be recorded with the online travel agent. Online reservations are also helpful for making last minute travel arrangements. Hotels may drop the price of a room if some rooms are still available. There are several websites that specialize in searches for deals on rooms. In terms of specific features, the literature has identified several essential modules in hotel management.

Proposed System:

Designing a comprehensive hotel management system involves various components like reservation handling, guest management, billing, and more. Here's a proposed system outline:

- 1) **User Authentication:** Implement a secure login system for different user roles like admin, staff, and , Work is Assigned by the Admin to the Chef According to the order given by Customer.
- 2) **Reservation Management:** Develop a module for managing room reservations, including check-in check-out, room availability, and booking modifications. proper display of the work in progress and completed work
- 3) **Guest Profile Management:** Create a database to store guest information, preferences, and history for personalized service.
- 4) **Housekeeping Management:** Include a feature to manage room cleaning schedules, maintenance requests, and inventory control for housekeeping supplies.
- 5) **Rooms and Staff Management :** There is proper Managed list of the room and data of the previous booking and feature for Advanced booking. updated details of the staff and the room details. and managing them properly

Algorithm and Process Design:



Details Of Hardware And Software :

Hardware requirement is a computer system with the following specifications:

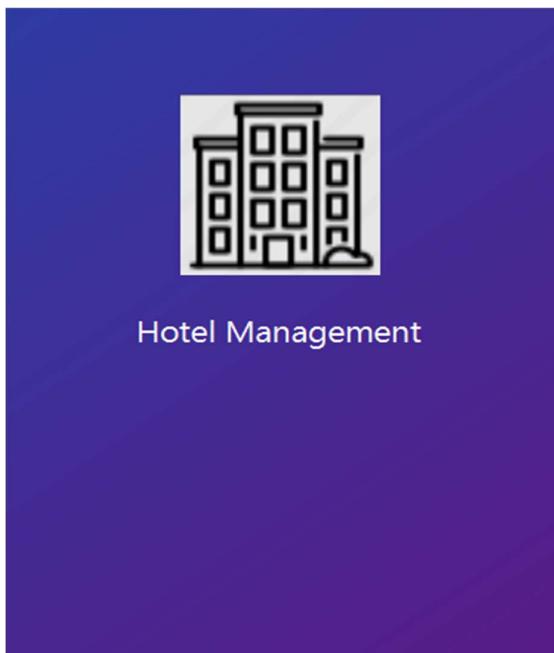
Hardware requirements :

- The HDD required for the application is minimum 2gb.
- The application works on minimum intel core i3.
- It requires 4gb ram.

Software Requirements :

- The application is designed using IntelliJ idea.
- The technology used is java.
- The database has been designed on MY SQL.
- XAMPP to run PHPMYADMIN database.

Experiment and Results:



X

 Sign In

password

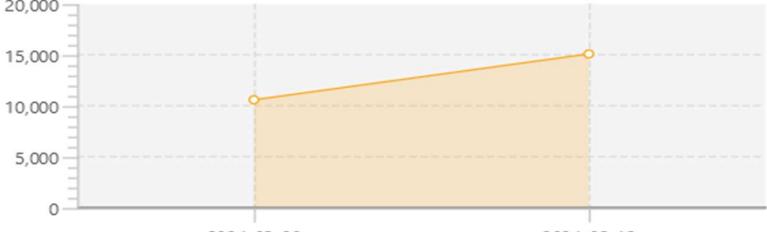
 Hotel Mnagement System

Welcome
admin

[Dashboard](#)
[Available Rooms](#)
[Customers](#)
[Staff](#)
[!\[\]\(76c5e071c162cee1c219102247c8f8da_img.jpg\) Sign Out](#)

Today's book   **\$0.0**
Today's income  **\$165486.0**
Total Income

Data income



| Date | Value |
|------------|--------|
| 2024-03-08 | 11,000 |
| 2024-03-12 | 15,000 |

 Hotel Mnagement System

Welcome
admin

[Dashboard](#)
[**Available Rooms**](#)
[Customers](#)
[Staff](#)
[!\[\]\(72f3bfe51b477f2c2b004c0a9c331962_img.jpg\) Sign Out](#)

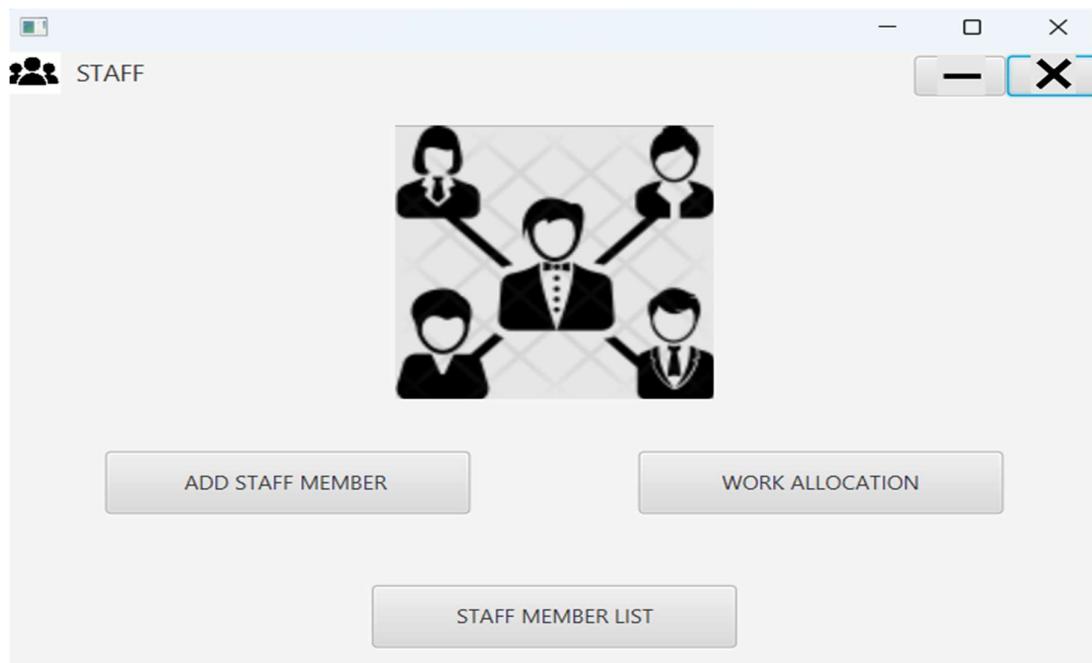
Room#:
Room type:
status:
price(\$):

[Add](#) [Update](#)
[Clear](#) [Delete](#)

[Check In](#)

search

| Room# | room type | status | price(\$) |
|-------|-----------|----------|-----------|
| 4 | | Occupied | 5999.0 |
| 5 | | Occupied | 9999.0 |
| 1 | | Occupied | 1500.0 |

A screenshot of a software application window titled "Check-In". The title bar includes standard window controls. The form is titled "Check-In" with a key icon and shows "Customer# : 7". It contains fields for Name (text input), Phone Number (text input), Email Address (text input), Room Type (dropdown menu), Room# (dropdown menu), Check-In Date (date input with calendar icon), Check-Out-Date (date input with calendar icon), and a calculated field "Total Days: ---". At the bottom are "Reset" and "Check-In" buttons.

Conclusion And Future Scope :

Conclusion :

The conclusion of this project is A Hotel management system is a computerized management system. The application reduces work of the staff and human efforts while booking and there is no more difficulty to keep the records of the rooms , staff and other management hotels. and there is proper customer record and their details for further contacting them offers and the new services we have, and this application data of each and every customer and staff which is kept safe and private and also it reduces the mismanagement while booking and providing the proper slots for booking. On the other hand the work can be easily assigned by the admin to the staff so that there is no Hustle for the work from the both ends and the work is properly distributed to each and every staff accordingly.It can provide valuable insights through data analytics and reporting, helping hoteliers make informed decisions. Additionally, in the digital age, a robust hotel management system should also integrate with online booking platforms and mobile apps to meet the evolving needs of modern travelers. Ultimately, the successful implementation of a hotel management system can lead to improved guest experiences and increased operational efficiency, contributing to the long-term success of the business.

Future Scope :

The application in future is used by a single hotel as it provide more smart work than physical work and also gives the time efficiency and can store as much data as we want as using the application is very efficient way to manage a hotel and it also reduces the human efforts. The expenses used to hire more staff and It provides more security of the data and we can restore it whenever we want.Data Analytics: Deeper data analysis to understand customer preferences, optimize pricing, and improve marketing strategies.Staff Training and Management: Improved training modules and staff management tools to enhance the quality of service.Contactless Technology: Continued adoption of contactless check-in, payments, and room access for health and safety reasons.The future of hotel management systems is focused on integrating advanced technology. This includes AI for personalized experiences, contactless solutions, IoT for automation, blockchain for secure transactions, and data analytics for customer insights. Additionally, sustainability initiatives, enhanced security measures, and the implementation of voice assistants and mobile applications for convenience are key areas of development.

REFERENCE:

1. [https://youtube.com/playlist?list=PL_6kLfS1WcEs4e9GJReOgCU7EM4UnDr8
&feature=shared](https://youtube.com/playlist?list=PL_6kLfS1WcEs4e9GJReOgCU7EM4UnDr8&feature=shared)
2. https://youtu.be/Ng7-StJVCos?si=AeZMd0Ov_4wZ-wIY
3. <https://youtu.be/ZmYQPCdCbf4?si=QKD3dA3gFeaGg4vb>
4. https://youtu.be/j1wauUbMJ3w?si=aU_hOT3phmSjuZBK