

A Mini Project Synopsis on
Hotel Management System

S.E. - I.T Engineering

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CERTIFICATE

This to certify that the Mini Project report on **Hotel Management System** has been submitted by Kashish Kothawala (22204001), Sanskruti Mhatre (22204014) and Rutuja Wagh (22204017) who are a Bonafede students of A. P. Shah Institute of Technology, Thane, Mumbai, as a partial fulfilment of the requirement for the degree in **Information Technology**, during the academic year **2022-2023** in the satisfactory manner as per the curriculum laid down by University of Mumbai.

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- 1.
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Date:

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Chapter 1

Introduction

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.

This project provides room booking, staff information and other necessary hotel management features. The system allows manager to post available rooms in the system. Other hotel services can also be viewed by the customers and can book them too. The system is hence useful for the manager to portable manage the hotel activities.

1.1.Purpose:

The purpose of our project is to facilitate easy management and administration of a hotel with capabilities to do booking or reservation of the rooms, un reservations of the rooms, cash billing, room service, total billing, etc. using the automated hotel management software. One can keep detailed records or info on an unlimited number 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.

1.2.Objectives:

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. We found out what procedures hotels have and based on that information we should create a system which makes it efficient.

1.3.Scope:

The Hotel Management System is a tool for booking rooms of Hotel through online by the customer. It provides easy management tools and easy access to the customer information. The HMS project is intended for the reservations for room that can be made through online. It will be able to automate the various operations of the Hotel. Our Hotel Management System will have three end users: Customers, Receptionist and Hotel Manager. Hotel Management System will consist of Booking Management System, Data Base Management System (DBMS) Server and Report Generator. Customers will be able to check for room's availability, select the rooms and pay for the room. Receptionist will have access to update or modify booking details. Manager will be able to view the financial report and able to update room information such as cost and category.

This project can be used in the hotel after adding some more useful modules in the project for which hotel are providing services. Utmost care and back- up procedures must be established to ensure 100% successful implementation of the computerized hotel system. In case of system failure, the organization should be in a position to process the transaction with another organization or if the worst comes to the worst, it should be in a position to complete it manually. Scope of Improvement Now a day's hotel is providing many other facilities, this project can also be improved with the improvement in the Hotels.

Chapter 2

Problem Definition

Traditional hotel management does not include all functions, such as the location of the consumer, the amount of payment for the reservation, and what they are doing right now. Additionally, most hotels were experiencing a lot of issues affecting their reliability, performance, efficiency, and effectiveness. A hotel system manages information about rooms, reservations, customers, and customer billing manually.

Chapter 3

Proposed System:

The Hotel Management System is designed for any hotel to replace their existing manual paper-based system. The new system is to control the information of rooms. These services are to be provided in an efficient, cost-effective manner, with the goal of reducing the time and resources currently required for such tasks.

3.1. Features & Functionality:

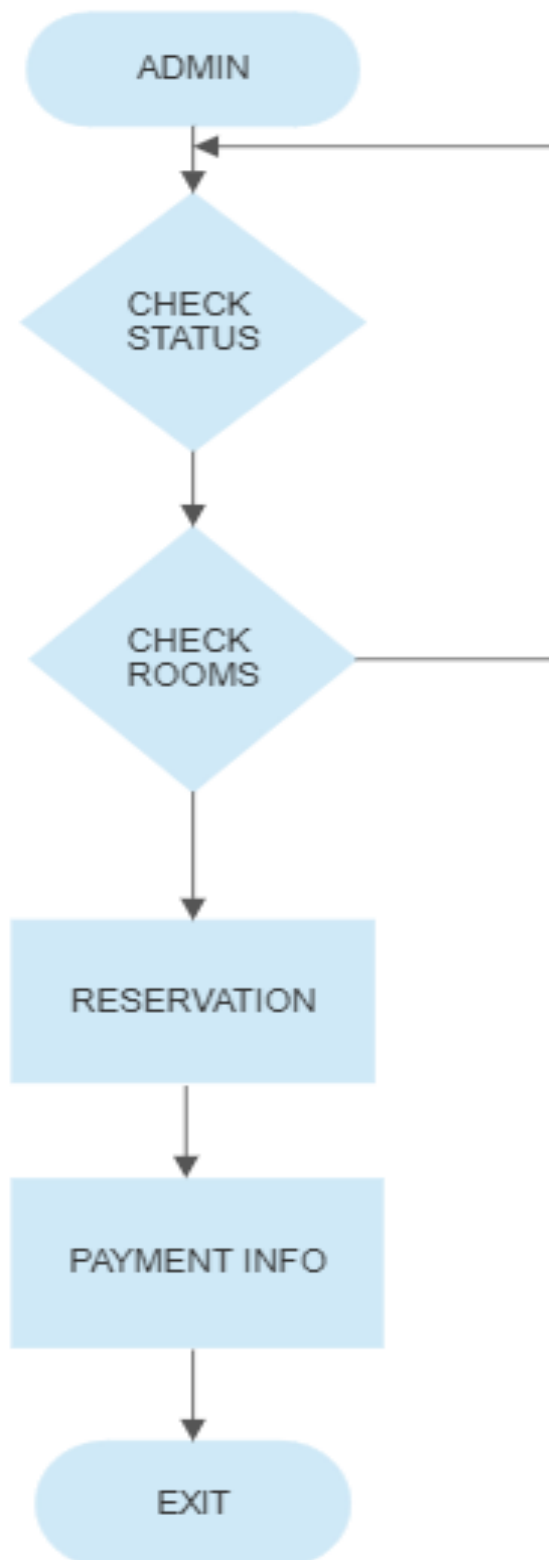
Technology is one of the key tools that hoteliers leverage to make operations appear effortless to guests, and hotel management software is the single most important system in the entire hotel. Whether you work at an independent bed and breakfast or a global hotel chain, your hotel management system is the nucleus of your property.

Nearly every member of a hotel team must access the PMS to perform daily tasks. Guest service staff need to prioritize hotel rooms that must be cleaned for early VIP arrivals. Sales & event management professionals need to block off rooms for groups. Hotel managers need to access the system for data and operating insights.

Modules:

- Home
 - Hotel Status
- Rooms
 - Number of rooms
- Reserve
 - Data Enter and Room Filter
- Payments Information
- Contacts
- Exit

Flowchart:



Chapter 4

Project Outcomes:

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.

It seeks to improve efficiency and operational process performance, strategies are established so that a hotel can be differentiated from what its competitors offer, better ways are sought to improve user experience and customer satisfaction, etc.

Chapter 5

Software Requirements:

Software Requirements deal with defining software resource requirements and prerequisites that need to be installed on a computer to provide optimal functioning of an application. These requirements or pre-requisites are generally not included in the software installation package and need to be installed separately before the software is installed.

SOFTWARE REQUIREMENTS FOR PRESENT PROJECT:

Operating System: Windows 11

Front End: Tkinter

Server-Side Script: Python

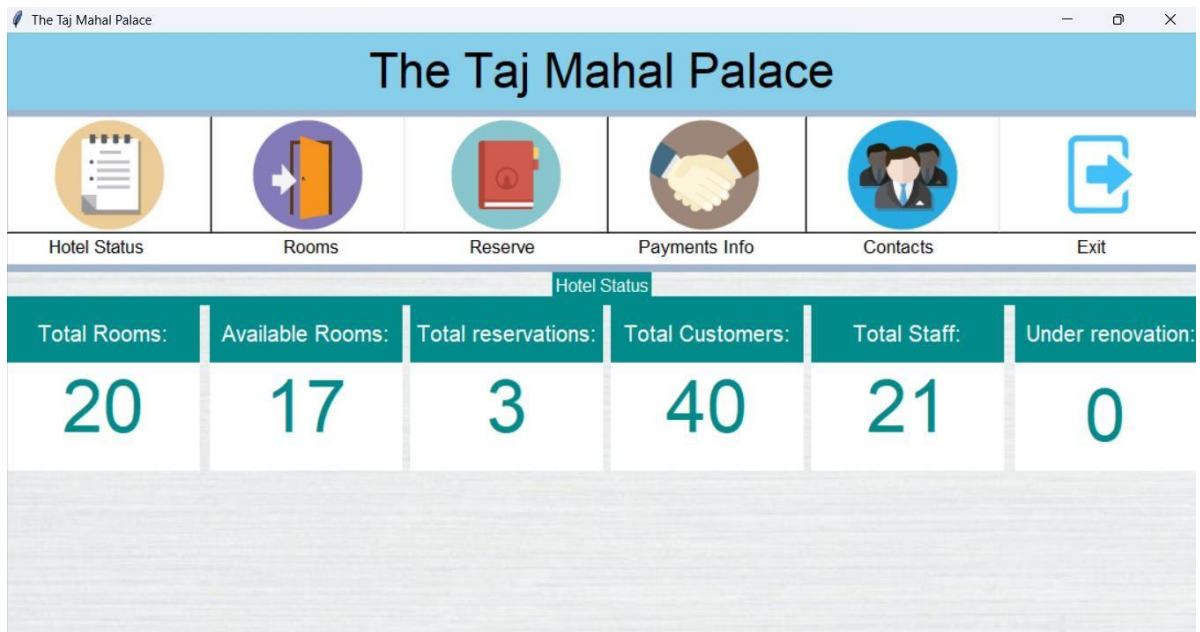
Database: SQLite

Chapter 6

Project Design:

Home Page

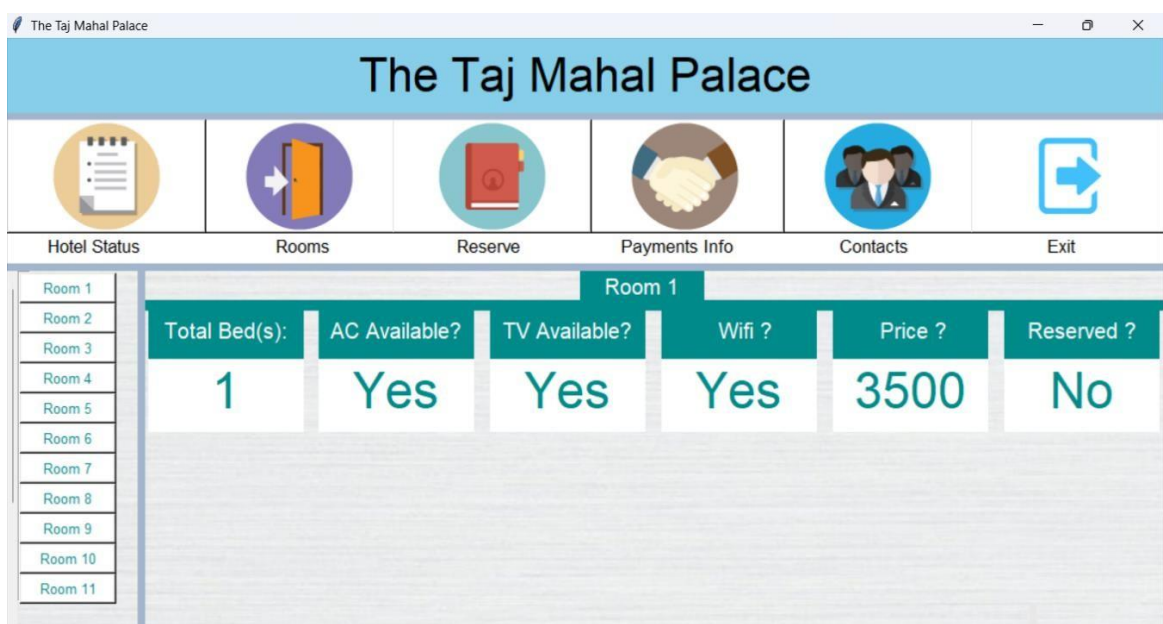
- Hotel Status:



The screenshot shows the 'Hotel Status' section of the application. It features a navigation bar with icons for Hotel Status, Rooms, Reserve, Payments Info, Contacts, and Exit. Below the navigation bar is a table displaying key hotel metrics.

The Taj Mahal Palace					
Hotel Status	Rooms	Reserve	Payments Info	Contacts	Exit
Hotel Status					
Total Rooms:	Available Rooms:	Total reservations:	Total Customers:	Total Staff:	Under renovation:
20	17	3	40	21	0

- Rooms:



The screenshot shows the 'Rooms' section of the application. It features a navigation bar with icons for Hotel Status, Rooms, Reserve, Payments Info, Contacts, and Exit. Below the navigation bar is a table displaying room details for Room 1.

The Taj Mahal Palace					
Hotel Status	Rooms	Reserve	Payments Info	Contacts	Exit
Room 1	Room 1				
Room 2	Total Bed(s):	AC Available?	TV Available?	Wifi ?	Price ?
Room 3	1	Yes	Yes	Yes	3500
Room 4					No
Room 5					
Room 6					
Room 7					
Room 8					
Room 9					
Room 10					
Room 11					

- Reservation:
 - Before Entering Data:

The screenshot shows the 'The Taj Mahal Palace' reservation interface. At the top, there's a navigation bar with icons for Hotel Status, Rooms, Reserve, Payments Info, Contacts, and Exit. Below this, the form is divided into two main sections: Personal Information and Filter.

Personal Information:

- First Name ***: Input field
- Middle Name**: Input field
- Last Name ***: Input field
- Contact Information:**
 - Contact Number ***: Input field
 - Email ***: Input field
 - Guest's Address ***: Input field
- Reservation Information:**
 - Number of Children ***: Input field
 - Number of Adults ***: Input field
 - Number of Days of Stay ***: Input field
 - Enter Room Number ***: Input field
 - Buttons:** Reserve, Unreserve

Filter:

- Bed(s) :** please select... (dropdown)
- AC :** please select... (dropdown)
- TV :** please select... (dropdown)
- Wifi :** please select... (dropdown)
- Find Rooms**: Button
- Rooms of Your Choice will appear Here once you apply filter**: Placeholder text for the results area.

- After Entering Data:

The screenshot shows the same reservation interface as before, but with data entered into the form fields.

Personal Information:

- First Name ***: Kashish
- Middle Name**: Manish
- Last Name ***: Kothawala
- Contact Information:**
 - Contact Number ***: 9977658456
 - Email ***: kashish@gmail.com
 - Guest's Address ***: Thane
- Reservation Information:**
 - Number of Children ***: 0
 - Number of Adults ***: 3
 - Number of Days of Stay ***: 6
 - Enter Room Number ***: 19
 - Buttons:** Reserve, Unreserve

Filter:

- Bed(s) :** 3 (dropdown)
- AC :** Yes (dropdown)
- TV :** Yes (dropdown)
- Wifi :** Yes (dropdown)
- Find Rooms**: Button
- Room Number 19 - Price - 5000**: Text displayed in the results area.

- Payment Information:

The Taj Mahal Palace

Hotel Status
Rooms
Reserve
Payments Info
Contacts
Exit

Please Enter The Unique Payment ID

29 OK

Date of transaction	19-Apr-2023
Time of transaction	13:00
Ammount Paid	17000
Payment Method	--

Print reciept

- Contacts:

The Taj Mahal Palace

Hotel Status
Rooms
Reserve
Payments Info
Contacts
Exit

Manager
Ms. Rutuja Wagh
Extention : 025
Mail : Rutuja@gmail.com

Customer Executive
Ms. Kashish Kothawala
Extention : 032
Mail : Kashish@gmail.com

Restaurant
Mr. Sanskruti Mhatre
Extention : 028
Mail : Sanskruti@gmail.com

Room Service
Ms. Pooja Deore
Extention : 041
Mail : Pooja@gmail.com

- Database:

DB Browser for SQLite - C:\Users\DELL\OneDrive\Desktop\Python mini project\hostel-management-system\hm_proj.db

File Edit View Tools Help

New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database

Database Structure Browse Data Edit Pragmas Execute SQL

Table: paymentsf Filter in any column

	id	f_name	l_name	c_number	email	r_n	day	month	year	time	method	totalamt
	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	26	Ayush	Wagh	9067870542	abc@gmail.com	11	14	Apr	2023	14:41	0	22500
2	27	Rutuja	Wagh	9082520798	rutuja@gmail.com	6	19	Apr	2023	12:41	0	12000
3	28	Sanskriti	mhatre	9082520788	abc@gmail.com	6	19	Apr	2023	12:56	0	12000
4	29	Kashish	Manish	9977298764	Kashish@gmail....	19	20	Apr	2023	13:00	0	17000

Chapter 7

Project Scheduling Template

Sr. No	Group Member	Time duration	Work to be done
<u>1</u>	Kashish Kothawala Sanskriti Mhatre Rutuja Wagh	In the month of January.	Creating GUI using Tkinter, designing of Hotel Status, Room Reservation, Payments Information, Staff Information.
		In the month of February.	Adding more features like room availability, reserved rooms.
<u>2</u>		In the month of March and April.	Adding database and final completion of project.
<u>3</u>		In the month of January.	Creating GUI using Tkinter designing of Hotel Status, Room Reservation, Payments Information, Staff Information.

Chapter 8

Conclusion:

In conclusion we believe this project if properly utilized will save time, reduce the amount of work the administration has to do, and will replace the stationery material with electronic apparatus. The system should also serve as a major tool in improving the efficiency in hotel management. Hence a system with expected results has been developed but there is still room for improvement. In terms of experience gained through the duration of this project study, the students have been able to have broader knowledge about the management of hotel organization using manual and automated procedures. The students have also been able to improve their knowledge in developing enterprise applications.

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