# GLA UNIVERTSITY, MATHURA



TOPIC: MINI PROJECT SYNOPSIS ON HOTEL MANAGEMENT WEBSITE

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## **DECLARATION**

I hereby declare that this project work entitled "Hotel Management Website" has been prepared by our team during 2021-2022 under the guidance of Mr. Akash Kumar Choudhary, Technical Trainer, Department of Computer Science, GLA UNIVERSITY, MATHURA In the partial fulfillment of B.Tech degree prescribed by the college.

I also declare that this project is the outcome of effort of our team this includes Satyam Tiwari (191500733), Shaurya Gupta (191500751) Utkarsh Kulshrestha (191500879), Rishika Sharma (191500656) and Pranav Pandey (191500566) that it has not been submitted to any other university or college or any other institute for the award of any degree.

## The problem statement

The phase of system analysis process deals with problems that are affecting the current manual system. The problems are those, which are affecting the hotel in its daily routine work. As the growing trend in most business in InfoTech World of Computers, need of accuracy, perfectness, speed and high memory data storage is a must. Each and every problem must be solved with least amount of time and energy.

The problems faced by the existing system and hope to be solved by the Hotel Management System are described below:

- ❖ Difficulty in maintenance of records
- **\*** Time consuming
- **&** Editing of data becomes a tedious job
- ❖ No security of data
- \* Mistakes occurring in Calculation of funds
- **\*** Lack of efficiency
- **❖** Data redundancy
- **❖** Data inconsistency
- **❖** *Incidence of Fraud*
- > Difficulty in maintenance of records: It is very difficult to maintain data record in the system as all the records are entered in the register or the perspective record books. There are chances of the record books or files in which all the Data are stored may be torn or wearied out or some other damages result or files may even be misplaced.
- > Time Consuming: It is very time consuming and difficult to write each and every entry and exit of customers into the hotel in the register. Also it takes a lot of time if all the entries are to be repeated say to keep in another record for safe keeping. It is also time consuming to check for data quickly. In the current system processes such as making different types of reports, preparing merit lists, and tedious calculations are examples of time consuming processes.
- > Editing of data: Manually written data cannot be changed or edited once written. If there is a mistake and the administrator tried to cancel it out and write it again this would make

the entire register very dirty and disorganized. If data is entered incorrectly the entire system gets incorrect while editing wrongly entered data cannot easily solve errors.

- > Incidence of Fraud: Fraudulent acts can be perpetuated by the staff arising from record insecurity. The continuous incidence of fraud in the hotel organization may lead to non-profitability of the business and the hotel involved may eventually fold up.
- > Data Insecurity: As the data is stored in files or registers, it is not a secure place, As the storage media here are files and books or registers, there are chances of getting this storage media lost, torn, or it may go in the hand of the wrong person which can destroy the database or it can also be destroyed accidentally. Also in the system, data should be shown to the person according to his position on the establishment; everybody should not be allowed to use all the data. If the Data goes into the hand of the wrong person he or she may take advantage of the data. So security is the major aspect of the Hotel Management System.
- > High Data Redundancy: As mentioned in the current system. Due to maintenance of so many registers there is a high redundancy of data i.e. same data is recorded repeatedly.
- > Data Inconsistency: Here as mentioned in the above step the same information is written in more than one place that creates the problem, where there is a change or deletion in the recorded data.

#### INTRODUCTION

This project examines the aspect of the hospitality industry which is Hotel management. In the 21<sup>st</sup> century the use of the internet, computers and other electronic devices have made handling different jobs and aspects of management very easy. This project is the design and implementation of an electronic hotel management system that provides proper management of data and transactions in a centralized and organized manner and also provides a user friendly interface with which the user can interact easily with the just little or elementary knowledge of operating computers.

#### ABOUT THE PROJECT:-

This project is designed to create a platform that allows both the user and administrator to keep track of transactions like room reservations, room booking, online reservation and other day to day activities involved in the running and management of a hotel. The implementation is based on the requirements for a hotel management system. The project work is divided into major categories which are; Front Desk, Accommodation, Catering.

This project accomplished the task of building a system that ensures accurate record maintenance which was done through proper identification of customers and the proper designation of user functions with most of the processes being done automatically. An electronic hotel management information system is required to assist management of data in the hospitality industry and also to make the entire hotel management process easier.

The project was designed with the use of Microsoft visual Studio which is an integrated development environment made by Microsoft. It can be used to develop console and graphical user interface applications along with windows form application websites. The database system was created using Microsoft SQL server (MSSQL).

## **Primary Reason to Choose This Project**

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.

## The Main Objective of the Project

The Main Objective of hotel organizations could be improved by integrating service-oriented operations service-oriented operations with project management principles. Such integration would instill innovation, proactive attitudes and regulated risk-taking needed to pursue ongoing improvement and proactive response to change. By managing each change as a project, embedded in smoothly running operations, hotels would extend their life span by continuously reinventing themselves. Due to which the customers can easily book the hotels rooms.

#### **FEASIBILITY STUDY**

A feasibility study is a high-level capsule version of the entire System analysis and Design Process. The study begins by classifying the problem definition. Feasibility is to determine if it's worth doing. Once an acceptance problem definition has been generated, the analyst develops a logical model of the system. A search for alternatives is analyzed carefully.

Perform and evaluate feasibility studies like cost-benefit analysis, technical feasibility, time feasibility and operational feasibility for the project. Project Scheduling should be made using chats. Feasibility study is carried out t decide whether the proposed system is feasible for the company. It begins with a request from the user for a new system. It involves the following:

- Identify the responsible user for a new system
- Clarify the user request
- Identify deficiencies in the current system
- Establish goals and objectives for the new system
- Determine the feasibility for the new system
- Prepare a project charter that will be used to guide the remainder of the Project

## **Scope of the Project**

At present this website does not contain Credit card facility. We can make this application as online so that we can reserve the tables and do the online payment. So as the demand increases we can add these modules as a future scope.

## Working Methodology of the Project

Requirement Gathering and analysis – All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.

- $System\ Design\ -$  the requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.
- *Implementation* with inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.
- Integration and Testing All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- Deployment of system Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.
- Maintenance There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment

#### **Details about the Hardware and the Software**

System Requirements: - Windows 7/8/10

Software Required:

• Technology Implemented: Front-End and Back-End Technologies

• Language: HTML, CSS, Java Script, PHP

• Database: MySQL

• IDE: Visual Studio Code

• Browser: Google Chrome

#### Hardware Requirements: -

• Processor: Intel i3

• Operating System: Windows 7/8/10

• RAM: 4+GB

• Hard disk: 64 GB

• Hardware Devices: Computer System

## Listing out testing technology

#### Frontend and Backend: -

#### Frontend:-

- HTML
- CSS
- JavaScript

#### Backend:-

- PHP
- MySQL

## What contribution would the project make and where?

This project will play major role in hotel management it will have several contribution or role some of these are listed below:

#### 1. Save time on admin tasks

The right hotel management software will vastly cut down the time you spend on manual administrative tasks. The software does the majority of the work and lets you divert your time to more important tasks, such as serving your guests.

More than any other software you use, a hotel management system will touch every department at your property. Front of house, revenue management, housekeeping... If you pick the right solution, you can make significant time savings across almost every area of your business, also boosting your staff's productivity and satisfaction.

#### 2. Increase your online visibility

The right software is an important factor in developing your online presence. You can integrate guest-facing software like <u>hotel booking engines</u>, chat bots and a guest portal with your website design, enabling you to instantly accept online reservations and make guests feel confident in their choice to book directly with you.

Google values and assesses the user experience on websites and those that offer a better user journey and interface will rank higher on Google searches – and other search engines.

#### 3. Implement an effective revenue management system

Most hotel management systems include pricing tools and other features to optimize revenue.

Gone are the days of having just a peak season price and a low season price – if you're not setting prices in a more sophisticated manner, you're losing out on bookings and not making the most of the guests that do book. You should be able to create and customize product rates, rate dependencies, and special offers and rules such as package rates

#### 4. Manage distribution functions

A modern hospitality cloud should be able to easily connect to a <u>channel manager</u> so you can advertise across many channels and easily promote your business across the industry's OTAs and third party booking services.

It provides real-time information that will help you grow your number of reservations and spread awareness of your property.

## Scope for extension into a major project

- ➤ Biometric measures such as fingerprint, retinal scan etc. should be included in the system to ensure good security of the system thereby avoiding impersonation and unauthorized access to stored data thereby preventing loss of vital information.
- > Implementation of a multi modal hotel management control system in delivery of service to customers.
- > Implementation of more modern online facilities that might help prospective customers interact (limitedly) more with the system and the Hotel in general such as PayPal for making online transactions.
- > Adequate provision should be made for customers to interact with authorized users of the hotel for reservation using their mobile phones.

# **Module Description**

## Administrator Login module

- Status
- View Booking
- View Rooms
- View payments
- Logout

#### Users visit module

- View rooms
- View Gallery
- View services
- Book

# **Data Flow Diagrams**

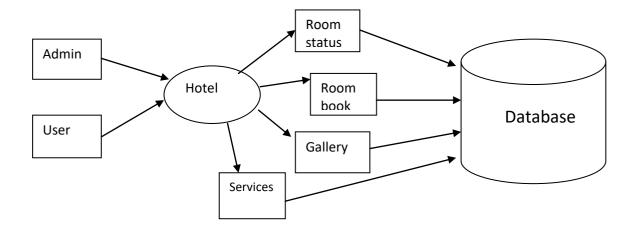
#### DFD: -

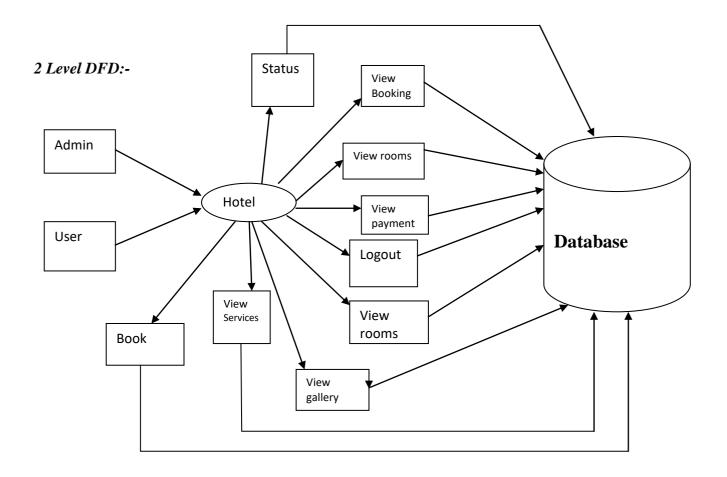
A data flow diagram (DFD) illustrates how data is processed by a system in terms of inputs and outputs. As its name indicates its focus is on the flow of information, where data comes from, where it goes and how it gets stored.

## 0 Level DFD: -



#### 1 Level DFD:-





#### 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 to 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. We believe this project will serve the university efficiently in their efforts to automate the Hotel management process.

#### References

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- https://stackoverflow.com
- Wikipedia