GLA UNIVERSITY



TOPIC: TripMate

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Submitted to:

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DECLARATION

We hereby declare that the work which is being presented in the online "TripMate", in partial fulfilment of the requirements for TripMate Project viva voce, is an authentic record of our own work carried by the team members under the supervision of our mentor.

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Course: B.Tech (Computer Science and Engineering)

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ACKNOWLEDGEMENT

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INTRODUCTION: -

The "Hotel Booking System" has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and, in some cases, reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner. With the development of information technology, online travel agency has become an important information and communication source in the hospitality industry. The previous studies assessing the online hotel decision making behaviors, however, mainly focused on behavioral intentions as well as identifying factors that directly influence the transactional behaviors, which rely on a static approach rather than employing the holistic viewpoints. Thus,

this research adopted the choice-set model as a theoretical lens to explore online hotel booking

behaviors by using multiple methods (i.e., observation and survey methods). The findings of this research shed light on the dynamic patterns of online hotel decision making process and identify important factors (i.e., internal and external information sources) across sequential stages of the choice-set model. Therefore, this research provides useful implications to online hospitality marketers.

About The Project

The Hotel Hub is a tourist agent which provides the facilities for booking hotels, holiday apartments and other accommodations for customers. Any customers need to book hotel, ins or apartment they need to visit their office. It will help them to manage the customers booking easily and also to keep the customers data safer. It will also help staffs to keep in track their customer's online booking request as well as easily to reply feedback to the customers. A hotel reservation system enables guests to schedule dates and length of stay, room selection, extras, and payment all in one place.

In this documentation it shows how the web-based system will be implemented and looks like (User Interface).

Primary Reason to Choose This Project

The Primary reason to choose this project to make user life easier and more comfortable. This time saving process can help them to reserve/book their rooms from their home in any of their favorite hotel at any place and giving them best suggestion for the places where they can travel. Providing user, a best security i.e., securing all their personal information like all bills and other personal documents within the application

The Main Objective of the Project

The main objective of the Project on Hotel Booking System is to manage the details of Hotel, Rooms, Services, Payments, Bookings. It manages all the information about Hotel, Customers, Bookings, Hotel. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the Hotel, Rooms, Customers, Services. It tracks all the details about the Services, Payments, Booking.

Functionalities provided by Hotel Booking System are as follows:

- Provides the searching facilities based on various factors. Such as Hotel, Services, Payments, Bookings
- Hotel Booking System also manage the Customers details online for Payments details, Bookings details, Hotel.
- It tracks all the information of Rooms, Customers, Payments.
- Manage the information of Rooms
- Shows the information and description of the Hotel, Services
- It deals with monitoring the information and transactions of Payments.
- Manage the information of Hotel
- Editing, adding and updating of Records is improved which results in proper resource management of Hotel data

Reports of Hotel Booking System:

- It generates the report on Hotel, Rooms, Customers
- Provide filter reports on Services, Payments, Bookings
- You can easily export PDF for the Hotel, Customers, Payments
- Application also provides excel export for Rooms. Services, Bookings
- You can also export the report into csv format for Hotel, Rooms, Booking

Scope Of the Project

It may help collecting perfect management in details. In a very short time, the collection will be obvious, simple and sensible. It will help a person to know the management of passed year perfectly and vividly. It also helps in current all works relative to Hotel Booking System. It will be also reduced the cost of collecting the management & collection procedure will go on smoothly.

My project aims at Business process automation, i.e. we have tried to computerize various processes of Hotel Booking System.

Scope Of the Project

- In computer system the person has to fill the various forms & number of copies of the forms can be easily generated at a time.
- In computer system, it is not necessary to create the manifest but we can directly print it, which saves our time.
- To assist the staff in capturing the effort spent on their respective working areas.
- To utilize resources in an efficient manner by increasing their productivity through automation.
- The system generates types of information that can be used for various purposes satisfy the user requirement
- Be easy to understand by the user and operator
- Be easy to operate
- Have a good user interface
- Be expandable

Working Methodology Of the Project:

User needs to create his/her account by registering for being a part of the hotel hub community. Registered user can search the destination where he/she wants to go and book their rooms in any the hotel . User can select the number of rooms he/she wants and even get suggestions for number of rooms according to the people they selected and can book their rooms for the desired number of days. User can also create his/her bucket list and can get suggestion as per his/her search

- ➤ It is user-friendly.
- > The system is easy to maintain.

Registration

- ✓ Enter Username and Password
- √ Sign Up the new user

❖ Select Hotel

- ✓ Filter the hotel
- ✓ See review of hotels

❖ Select Room

- ✓ Select Category
- ✓ View Room details
- ✓ Reserve Room

Manage User Profile

- ✓ Maintain User information.
- ✓ Add User Information
- ✓ Modify User Information

Manage Reservation

- ✓ Make new Reservation
- ✓ Verify reservation Details
- ✓ Pay Bill

❖ Admin

- ✓ User Management
- ✓ Offers Management
- **✓** Configuration

Details About the Hardware and the Software

System Requirements: -

Supported operating System: Windows, Linux or macOS

Windows version: windows 8+

Software requirement:

• Integrated Development Environment (IDE): VS code or any other suitable IDE for react JS development

• Node JS: Latest stable version of Node JS and npm manager

• Mongo DB: Latest stable version of Mongo DB

• Git: The latest stable version of Git version control system

• Web Browser: Google chrome or any other modern version control

Hardware Requirements

• Processor: Intel core i3 or higher

• RAM: 4GB or higher

• Storage: 128 GB or higher

• An active internet Connection

In addition to above requirements user may require additional libraries, frameworks and tools depending on project's requirement and complexity.

Listing Out Technologies:

Frontend and Backend: -

Front end:

- HTML
- CSS
- React JS
- Material UI Icons

Backend:

- NodeJS
- Mongo DB
- Express JS

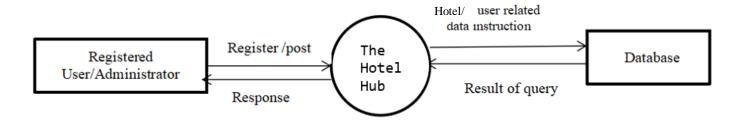
Module Description:

- Hotel Management Module: Used for managing the Hotel details.
- Bookings Module: Used for managing the details of Bookings
- Customers Module: Used for managing the details of Customers
- Rooms Management Module: Used for managing the information and details of the Rooms.
- Services Module: Used for managing the Services details
- Payments Module: Used for managing the Payments informations Login Module: Used for managing the login details
- Users Module: Used for managing the users of the system

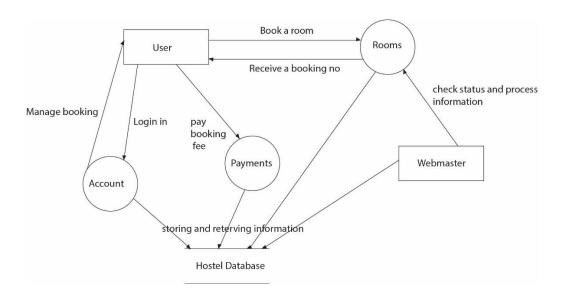
Data Flow Diagrams

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. The web application queries the Mongo DB database for the relevant information, and the database returns the results to the application. The web application then displays the results to the user. The Data Flow Diagram (DFD) for the application provides a high-level overview of how data flows through the system.

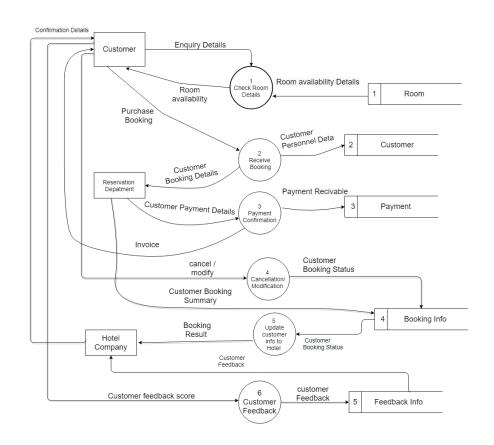
0 level DFD: -



1 level DFD: -



2 level DFD: -



References:

https://www.otrams.com/

https://www.researchgate.net/publication/325980818

Github Repository Link:

https://github.com/codeBurner0/TripMate