

A Research on Hotel Management System

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Abstract: The system aims the maintenance and management of the different Hotels are available in the different parts of the world. This paper designs the Hotel Management System, the overall task of system development is to make the office staff can quickly and easily complete the hotel guest room management task. Hotel management helps you manage booking guest and agents. The system provides the information regarding the different hotels that are available and their status specifies to availability. The guest is scheduled information of the availability of the units they have requested the time. The guests can visit the site and register themselves with the essential information that is expected by the system. Each registered guest can raise a request for the unit booking. The Guests are scheduled with the info of the availability of the units for they have requested the time. For database connection we are using JDBC (Java Database Connectivity).

Keywords: Hotel management, system modelling, requirements analysis.

1. Introduction

Hotel management project provides room booking, Staff management and other needed hotel management features. The entire project has been established keeping in view of the distributed client server computing technology in mind. We are creating a desktop application using java it is a hotel management system application. Hotel industry is facing the increasingly fierce competitive environment, on the other hand the traditional hotel industry is difficult to get rid of low price, low occupancy rate and low profit. The Hotel Management System project is a desktop application that allows a hotel manager to manage all hotel operations online. This system is incredibly adjustable and convenient because of the interactive GUI and the ability to manage numerous hotel bookings and rooms. A Hotel System Java is created using the Java programming language and the NetBeans IDE, and it uses a SQL database as its back-end to keep records available for future use. This is a straightforward yet complete hotel management system. This system finishes all of the tasks that a hotel software program must complete.

2. The Requirements Analysis of System Functional

Hotel management system mainly used in the hotel daily information set, entry and question at the same time in between customer writers, administrator's owner set up an interactive platform for a visit.

Hotel management major functionalist are Customer

information, rooms, food, other items, check out and payment.

3. Hotel Management System Java

A hotel management system is a collection of hotel software applications that keep things running efficiently. Accounting software, customer relationship management (CRM) software, and a confusing assortment of industry-specific software are all available.

4. Business Requirements Analysis

Room booking ability can handle customer bookings by various means, such as phone book, online bookings, and reservations at the front desk. Rooms of the hotel have different grades, and require the system to be able to classify the room management, and according to book different types of rooms to offer available prices, booking discount timing function settings such as lowest price, easy to fit individual traveller and collection reservations.

Goal: To make a responsive, easy to operate, fast and efficient recovery of information as per the user's convenience. To provide all information about Rare Material to User and Maintain payments of supplier and buyer. To provide comfort in the maintenance of different types of Raw Material Requirement. To make a database that is consistent and secure. To provide correct, whole, ongoing information. To develop a well-organized information storage system. To make good documentation so as to facilitate imaginable future enhancements.

The hotel information management need-The hotel management include the following functional requirements such as personal information related to maintenance counter, management and business information analysis.

The key features are required in this system are,

Room category, Room, Facility, Room Facility, Guest, Booking, Search, Report.

Room Category: Rooms are categorized into their respective infrastructure and number of portion that divide the room.

Room: This shows the number of rooms available in the hotels.

Facility: It is the feature that shows the facilities providing by the hotels.

Room Facility: This shows the providence of room facility such as rooms that are contains additional features.

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Guest: This shows the data of guest customers.

Booking: This shows the both online and offline booking of the customers and guests.

Search: This is provided the search options of the system that can search any connected information of the system.

Report: it shows the reports in different fields of the system.

5. Importance of Hotel Management System in Java

The hotel sector, sometimes known as the people's industry, is currently experiencing a qualified and knowledgeable people shortage. More than lakhs of workers are expected to be wanted in this industry during the next five years, according to projections. Based on this hypothesis it can be decided that the chances of landing a reputable position in this industry are extremely high.

The objectives of hotel management system,

A front-office system for a hotel, motel, or resorts main goal is to increase income, streamline operations, and remove human labour. The scope of hotel management system-The Hotel management is one of the extremely job oriented field. it covers a wide range of services with food service, accommodation and catering. The main job fields in the hospitality sector include Hotels, resorts, fast food chains, restaurants, etc.

6. The System Requirements for Hotel Management System

Hardware Requirements, Multi-core – 1.8 GHz processor or better.,4GB RAM., Windows 7, 8, 8.1, 10, or 11.

80 GB hard drive or more 160 GB highly recommend Mouse. Monitor with 1024 X 768 resolution or advanced. Windows compatible printer (laser printer recommended) Gigabit Ethernet port and router for networking computers.

The future scope of hotel management,

This sector is expected to grow extremely, roughly 7.5% of our GDP by 2025. Today, Hotel Management is not only limited to hotels but has gone a long way to catering, clubs, food and beverage industry, resorts, airlines, cruise and many more.

7. Database Access Technology

This system can combine uses Java JDBC technology achieve connection of Java with MySQL. DBC (Java Data Base Connectivity Java database connectivity is a Java API for executing SQL statements, and can provide unified access to multiple relational databases, which consists of a set of classes and interfaces printed in the Java language. JDBC provides a standard API for database developers, can build more advanced tools and interfaces according to it that enables database developers to use pure Java API to write database applications. JDBC structures include a connection to the database, send a

statement of the operational database and process the results. Java has a sturdy, safe, easy to use, easy to understand and can be automatically downloaded from the network properties, it is an outstanding language in writing database applications. All you need is Java application and the method of dialogue between different databases and JDBC is a mechanism for this purpose. JDBC extends the functionality of Java. This is called a client/server configuration, in which users' computers is clients, provides database's computer is a server. In a three-tier model, the command is sent to the service's middle-tier, and then it sends SQL statements to the database. Database process SQL statements and the results are sent back to the middle tier, middle tier and then sent the results back to the user.

8. Principle of Database Design

Hotel management information's main task is to manage the needs of information obtained through large amounts of data, which must store and manage large amounts of data. Therefore, establish a good data structures and databases can make the whole system be quickly, easily, and accurately to manage the data you need is one of the main indicators to measure a hotel management information system development work well or bad. A good data structure and database should fully reflect the evolving situation, fully meet regulatory requirements at all levels of the Organization, should also make subsequent systems development work convenient, fast, overhead is small and comfort of maintenance.

Operator set up module: This module is used to succeed the hotel operator information, add new operator, edit existing operator information, and delete operative information functions.

9. Conclusion

From a proper analysis of positive points and constraints on the component, it can be safely concluded that the project is a highly efficient GUI based component. This desktop application is working properly and meeting to all user requirements. This component can be easily worked in many other systems. The system should also serve as a important kit to improving the efficiency in hotel management system.

References

- [1] <https://projecttunnel.com/Online-Hotel-Management-Project-in-Java>
- [2] <https://sourcecodehero.com/hotel-management-system-java-with-source-code/>
- [3] <https://tourismconference.co/research-paper-topics-in-hospitality-industry/>
- [4] http://www.cmnt.lv/upload-files/ns_8art50_CMNT1806-124_BHS_Guo.pdf