Computerized Reservation System for Taunggyi Hotel

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Abstract

Nowadays, the computerized systems are popular in many business application areas and the online-based business systems are widely implemented for successful business. Taunggyi has many popular and interested places those are attracting to foreigners and local visitors. Thus this system implements the reservation system for Taunggyi Hotel based on the web. This system intends to be convenient for visitors who want to be sure their accommodation and any visitor can access this reservation system from any computer which is connected to the internet. This system provides booking service and reservation service for customers. This system also provides some facilities such as discount and promotion on amount offered. All reservation transactions are recorded in the database and annual income situation is analyzed because budget is the most important thing for every business.

Keywords: *client-server architecture,On-line reservation system, database system.*

1. Introduction

It is express to sincere hope that this thesis may be of concise presentation of the essential fact of computerized reservation system.

A hotel has a peaceful surrounding and a good service for the guests. And also there are many ancient and renowned pagodas near the hotel. Not only natives but also foreigners stay at that hotel. As well as technology improves, the hotel systems also change. For example, the customer can book from online now replaced by phoning.

Today, almost everyone knows that computer can do fantastic things, and that the world has become heavily dependent on computers for its survival.

Computers are widely used in several factors, such as military, hospitals, offices, business, hotel, universities and others. By using computerized system in everywhere, now the world become global village. Communication, transportation, trading are very effected by using computer software.

Computerized reservation systems are built in every country, people can easily know all information of the world just living in their rooms.

Large amounts of data in computerized reservation system are often required to receive rapidly in a variety of sequences and combinations.

Providing faster response, data can be an asset only if they are accurate and available when needed.

Computerized reservation system of hotel is to make transaction to be accurate and fast, to keep the client's record (list) systematically and effectively. Computerized reservations system can be handled and it finds that making a booking just takes a few minutes.

So, it is also necessary to support the computerized reservation system of hotel. This system supports any user concerned with hotel for efficient information and accurate services data to understand easily.

1.1 Studying Hotel Reservation Systems

This section introduces the information about other hotels how to define the room types and what services are provided.

The system[] is the four stars hotel and the room types are such as Standard, Deluxe, Executive, Jacuzzi, Studio Premier and Penthouse and provide a plan to visit the popular places around London. The system[] is the four stars hotels and defines garden rooms (double en-suite), Califer (double en-suite), Lady Kathleen (double en-suite), King Cees(double en-suite), Henderson (single en suite), Robbie Burns (single en- suite). The system[] is three stars hotels and simply define single, double, twin , triple and family room types. Some have restaurant, conference rooms, wedding rooms, spindles health and leisure clubs and also give a service for trip by connecting with tour companies.

2. Importance of Database System

A database system is basically a computerized record keeping system whose overall purpose is to maintain information and to make that information available on demand. Information systems are

interrelated components working together collect, process and store and disseminate information to support decision making, control, analysis and visualization in on organization.

Computer Based Information Systems are used in most popular today and computers are found in many home. In fact, many firms even many small ones, could not operate without these systems. Many offices are applying computer based information systems to gain advantages over their competitors.

2.1 Database management systems

Perhaps the most important challenge facing information system developers is to provide users with timely and versatile access to data stored in computer files. In a dynamic business environment, there are many unanticipated needs for information. Often the data to satisfy these information needs are contained in computer files but cannot accessed and output in a suitable format on a timely basis. Database management systems have the potential to meet this challenge.

2.2 Advantages of DBMS

- Data Independence
  Application programs should be possible from details of data representation and storage efficient data access.
- Efficient Data Access
  A DBMS utilizes a variety of sophisticated techniques to store and retrieve to efficiently.
- Data Integrity and Security
  If data is always accessed through the DBMS, the DBMS can enforce integrity constraints on the data.
- Data Administration
  When several users share the data centralizing the administration of data can significant improvements.
- Concurrent Access and Crash Recovery
  A DBMS schedules concurrent accesses to the data in such a manner that users can think of the data as being accessed by only one user at a time.
- Reduced Application Development Time
  The DBMS supports many important functions that are common to many applications accessing data stored in the DBMS.

2.3 Client-Server Architecture

The client-server architecture is the most widely use in many business application areas and can be shown in Figure 1.

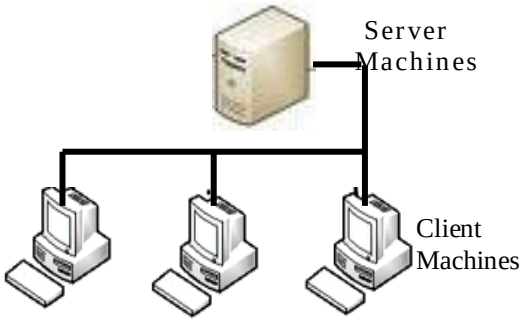

Figure 2.3 Client-Server Architecture

Server is a collection data items and supporting objects organized and presented to facilitate services, such as searching, storing, and recombining, updating, and analyzing data.

Client is a software program that might be used interactively by a person or that interactively by a person or that could be an automated process. This is includes all software that interacts with the server, either requesting data from the database of sending data to the database.

3. Overview of System Architecture

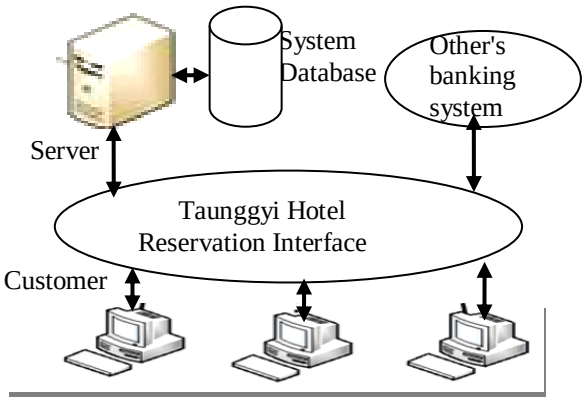

Figure 3.Overview of system architecture

Architectural view of web-based Taunggyi Hotel reservation system on network environment can be shown in Figure 2. The customers for this system may be domestic or international visitors. The system has customer module, interface module, data server module and related banking system.

The customers, who are interesting to book or reserve the Taunggyi Hotel, visit to the website and make room booking or reservation that they preferred.

The reservation interface is the main component in the whole system. That can retrieve room information for visitors, can perform booking and reservation the rooms for the users. This module

connect to the data server to perform the tasks for the users.

The data server keeps the updated room information for every booking or reservation transaction and related information about financial.

When the user payment type is credit card, this system cooperates with other banking system for checking account validation and payment transaction.

The admin also cooperate in the system to inform the booking customers to ensure the booking confirmation.

3.1 System Flow Diagram

This section describes the process flow of users who want to visit or booking the rooms or room reservation as shown in Figure 3.

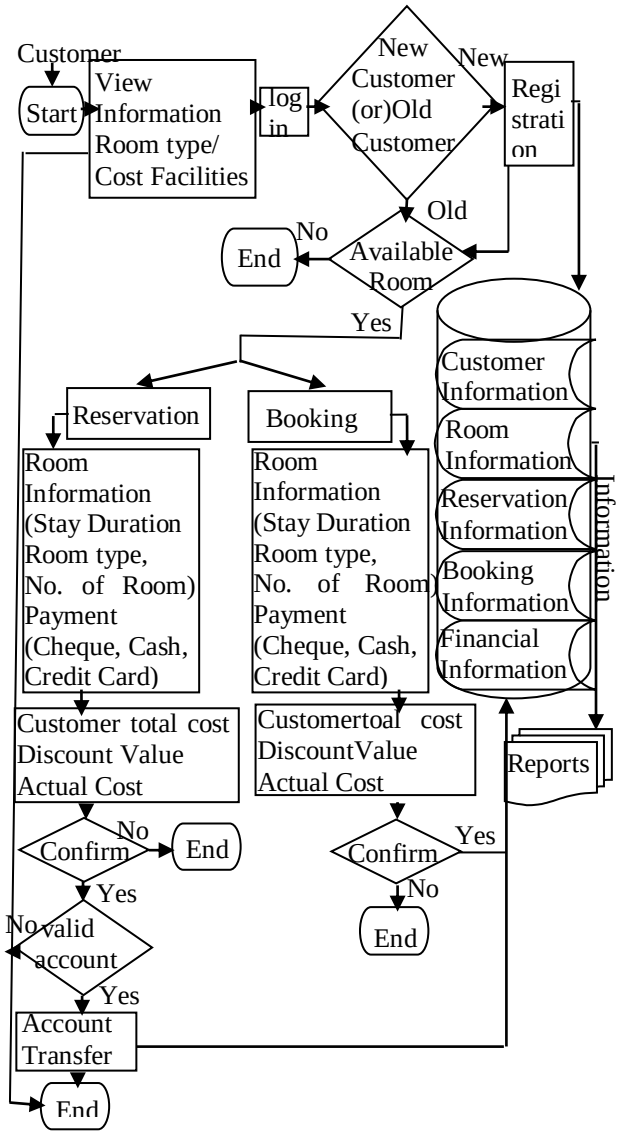

Figure 3.1 System Flow Diagram

This system classifies the room types such as eg.JSuite(18000Ks),Suite(24000ks),Superior(1500 0ks), Standard(12000ks). There are three room for JSuite and Suite i.e...Single room, Double room and Family room. The two room types of Standard and Superior there are Single room and Double room.

The hotel services and facilities for customers are Laundary; Room services; Tour Guide service land and Air Tickets reservation. Taxi and limousine service; Sightseeing on request Hotel reservation for kalaw, Pindaya and Nyaung Shwe.

IDD phone,Fax,Tennis Court,Table-Tennis Special function hall,bar,large and cosy lobby for relaxatoin.Myanmar, Chinese, Traditional Shan Cuisine and other can be order.A golf course, satellite TV, special rates for long-stay guests, car and boat rental service are available.

The step by step process of a customer can be shown in the following algorithms.

Reservation Confirmation Algorithms

```
Begin
        View Hotel Information;
        If (not satisfy) exit;
        Else (satisfy)
                Logging in system;
                If (New Customer)
                do registration process;
                Checking Available room;
        If (! available) exit;
        if (available)
        IF (Reservation)
                Calculate Cost;
                Calculate Discount;
                Calculate Actual Cost;
        If Payment type is credit card
                Check credit card
        If (Valid)
                Transfer Account;
        else exit;
        If (booking)
                Get booking Information;
End
```

Booking Confirmation Algorithm

```
Begin
        IF (Booking target time is reach)
                Send mail to customers for
                confirmation
        If (Booking is confirmed)
                do reservation process by customer
        else
                Cancel this booking;
End
```

4. Report Income Amount by Chart

This section generates financial reports for Taunggyi Hotel. This system prepares comparison data for hotel's income situations in various ways such as comparing annual financial data by years, monthly income data on different room types, comparing each room types for period and so on. The sample annual report for year 2009 can be shown in Figure 4.

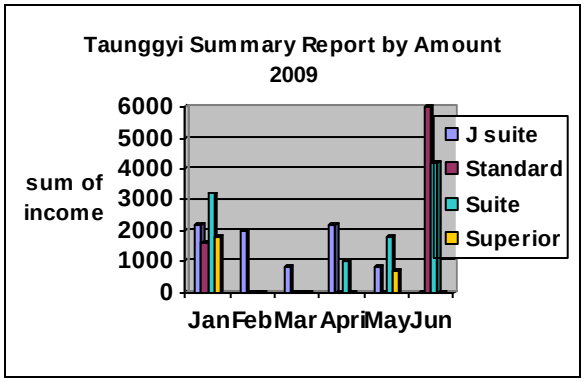

Figure.4 Financial Summary Report by Amount

5. Conclusion

This software is implemented by using ASP.NET, Visual Studio 2005, Ajax control, JavaScript and Microsoft Access is used to provide the services necessary for maintaining data on the server. Computerized Reservation system allows the users to create the web site that is specific to the readers. This Calculation results Verify that the current information design was researched free from Onlines if it would be used within the booking (or) reservation. Morever, the growing trend toward information along with greater capabilities to provide of web sites Information. IT technology improve nowadays, will likely be seen more Web content Informations. The author has briefly described computerized reservation System and Relational Database System.

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