



Project Report on

HOTEL MANAGEMENT SYSTEM

SUBJECT: CSE215 (LAB)
SECTION: 13

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Hotel Management System

Introduction:

Software that manages all information of every task, person information etc. is called a management system. We are going to build a management system based on java and its swing library. The application can manage the information, store information, and also updates those information. In addition, hotel management system plays a great role and has a potential effect on day to day performance measures, this type of system have highly evolved from decades due to high demand for their use, effective and efficiency in any given institutions. Due to the rapid change of technology the use of such system has become a necessity to any given high learning institution for better performance and be used with quite a large number of users at the same time but it can save time, resources and creates awareness of the evolving technology.

What is a hotel reservation system?

A hotel reservation system is a software application that is implemented by hotels to allow guests to create secure online reservations. The hotel reservation system can be synced, not only with your current website, but also with Facebook. This allows guests to reserve rooms in a way that is convenient for them via social media.

In addition to allowing guests to book online directly, these reservation systems can also provide hotel operators with additional resources.

For example, a 'channel manager' may be a part of the reservation system, giving hotel operators the chance to distribute their products and live availability simultaneously to their entire network of online agents.

Tools:

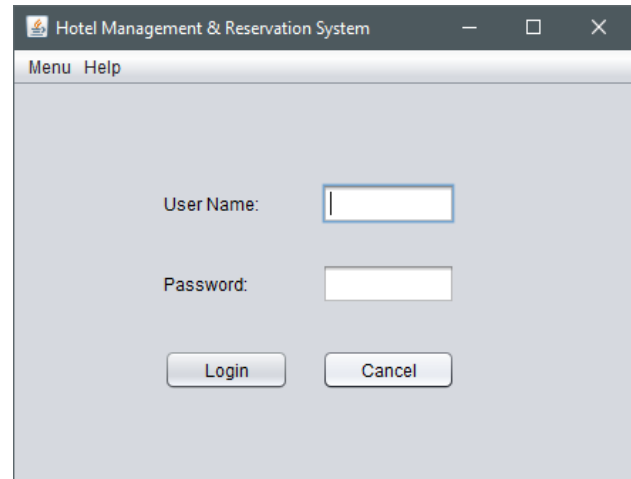
- Programming Language: JAVA & its Swing library
- Eclipse/NetBeans IDE
- Text file as database

Features:

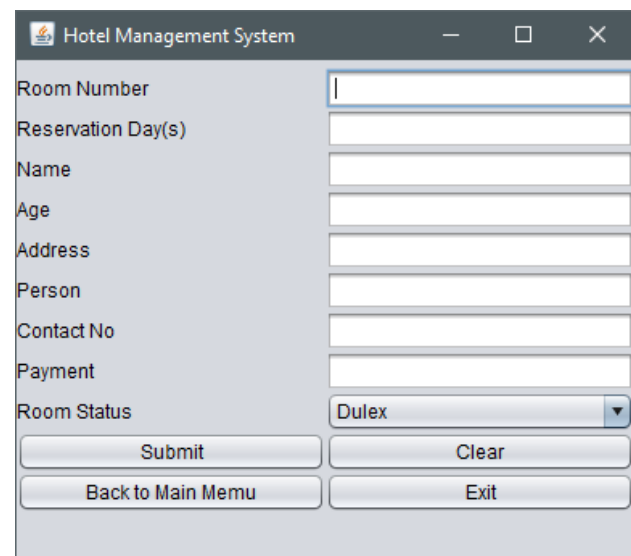
- Manager can login to his account
- Customize the type of Hotel rooms with prices.
- Booking for the customer for specific date with advance payment
- Check in into the hotel for the duration
- Manager can collect the payment and submit it to the database
- Each time make a reservation, room status is updated and the customer details are added to your hotel database
- Manager can delete, update, insert any info of customer
- Manager can cancel the booking and view the info
- Manager can calculate the tax, print a receipt

Classes to use:

- **Login Class:** This class is used for the login to the management system as security is highly need for this kind of applications. Is implements swing components for graphical interface.
- **Add_Guset Class:** This class is used for adding new customer's information to the database



The screenshot shows a Java Swing window titled "Hotel Management & Reservation System". It has a menu bar with "Menu" and "Help". The main area contains a "User Name:" label next to a text input field, a "Password:" label next to a password input field, and two buttons at the bottom: "Login" and "Cancel".



The screenshot shows a Java Swing window titled "Hotel Management System". It contains a form with the following fields: "Room Number", "Reservation Day(s)", "Name", "Age", "Address", "Person", "Contact No", "Payment", and "Room Status" (which is a dropdown menu currently showing "Dulux"). At the bottom, there are four buttons: "Submit", "Clear", "Back to Main Memu", and "Exit".

- ***Change_info class:*** This class is used for changing any info of the customer. Basically it will be used for handling the update, insertion purposes.

- ***Check_out class:*** This class will erase the data of the customer from the database.

- ***Guest Method:*** This class is used for Guest info checking.
- ***Info Method:*** This class is used for implementation of checking all information of the hotel.
- ***Main_Window class:*** This class is the driver class.

- **Search Implementation:**

```

if (e.getSource() == search) {
    Update mga = new Update();
    Guest[] obj = mga.GuestInitialization();
    Guest mb = new Guest();
    String key = searchL.getText();
    boolean found = false;
    try {
        for (int i = 0; i < obj.length; i++) {
            if (key.equals(obj[i].getRoom_no())) {
                //JOptionPane.showMessageDialog(null, ".getText() + " is Found \n");
                JOptionPane.showMessageDialog(null, "Room No : " + searchL.getText() + ""
                    + "\nThe Room is Booked! Search for another room. ");
                Guest ci = new Guest();

                found = true;
                break;
            }
        }
    }
}

```

- **Payment_Window:** This class is used for implementation of making payment from the customer.
- **Updates Method:** This class is used for implementation of updating information of the customer or room status.
- **View_Window:** This class is used for viewing any information.

- **Database:** Used different Text file as Database for storing all information.

```

101
3
Md Rashad Tanjim
24
Dhaka
Student
0000
1000
Dulex
=====

```

Real life applications:

A hotel management system works by processing secure online/offline reservations made through a hotel's website or POS machine. The data is then passed onto a backend system which can be accessed by hotels to manage bookings. Other features may come with it – for example, the automation of reservation confirmation emails. Small hotel managers and owners recognize that technology is key to growing their business and increasing their bookings overtime. To sell rooms to capacity and to appeal to a global audience, a hotel reservation system is required. However, it can be intimidating to select a system, particularly when so many are designed for large hotel operations and chains.

Why do you need it?

A hotel management system is a necessity for today's accommodation providers, both large and small.

An increasing number of travelers are relying solely on online reservations in order to book their accommodations, and without this capability, you will lose a significant amount of business.

Other reasons to consider investing in hotel reservation systems include:

- **It gives you an advantage over your competitors.** There are still many small hotels today that do not have online booking capabilities. Less people are staying at those locations, and you can get the competitive edge with an online booking system.
- **It improves your efficiency as a business.** Your availability is updated immediately upon receiving a reservation, not only in your own system, but across all of your channels. You will save time on administrative tasks while also minimizing the risk of overbooking the rooms at your property.

Future prospective:

Bangladesh is a growing tourist destination, there has been a good rise in the number of hotels and resorts in Bangladesh and the tourist sector is broadening thus I have chosen this sector to do my project and I am making Hotel Management System. The rapid development and commercialization of Information and Communication Technologies (ICTs) for the travel and tourism industry has prompted hotels and other enterprises in this sector to increasingly adopt these technologies. The ICT based products and processes help the hotels to enhance the operating efficiency, improve the service experience as well as provide a means to access markets

on a global basis. ICTs were used in the hotel industry from the late seventies in the form of Computerized Reservation systems and Global distribution systems. In this case, this type of application is highly recommended to any hotel for growing big their business with low cost.

Acknowledgement:

I have also uploaded our project source code and previous documentation (Proposal) on GitHub. Here is the link:

GitHub: https://github.com/RashadTanjim/Hotel_Managemnet_System_using_JAVA_swing