# **Hotel Management System**



Department of Computer Science and Engineering Bangladesh University of Business and Technology Dhaka-1216

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# **Hotel Management System**

# A Project

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# By

Shakil Ahmed (ID:17182103010)

Arifur Rahman Kawser(ID: 17182103012)

Faiz Ahmed (ID: 17182103030)

Tanvir Hossain Reza (ID: 17182103020)

## Supervised by

MD. Abdullah Al Mamun

Lecturer

Department of Computer Science and Engineering (CSE) Bangladesh University of Business and Technology (BUBT) Mirpur-2, Dhaka-1216, Bangladesh

# **Problem Description**

- Difficulty in location of guest files: Due to the large number of guests' files, location of guest files during checking in, updating of daily expenditures, receipt generation and checking out is extremely difficult for the hotel employees.
- Large storage space: The physical files occupy too much space of about two rooms full of storage cabinets. This occupies the hotel's space that could have otherwise been used for income generation by the hotel.
- Human and computational errors: Many errors enabled by the system due to tedious computations required during data processing cost the hotel management heavily.
- Poorly generated records: poorly generated records encourage omission of some important data by the employees. Such data as the guests' luggage is omitted. This leads to security problems at the hotel such as armed robberies.
- Complains from guests: Due to poor management of documents encouraged by the manual system, several cases were reported where guests complained of overcharging, charging of services not used by the guests.
- Poor communication: Due to poor communication between the departments, guests are often served with services they didn't order.
- Difficulty in data analysis: The accountants usually found it difficult to analyze the guests' data during generation of expenditure bills due to missing of some records.

#### Motivation

The main purpose of this vision document is to list the requirements of the Hotel Management project. This document also helps us to collect and analyze the ideas gathered for the project. The vision document will be subject to change, if more requirements are added to the project. This document is mainly prepared to set stage for the design phase of the project. The document being prepared is the first version of vision document for the Hotel Management project. c#.NET is a new technology which is being used a lot in the IT field. My interest to learn this new technology has prompted me to take up this project, which would set the stage for the applications I would be developing in the future.

## **Feathers Description**

#### Objectives:

- To enable online booking via the internet.
- To enable automated data entry methods.
- Ensure efficient and reliable communication within the hotel.
- Avoid data entry errors by use of input masks.
- Enable easy authorized modification of data.
- Enforce security measures to avoid unauthorized access to guest records.
- Enable fast and easy retrieval of guest records and data for fast reference activities.

#### Scope of the system:

The system will cover; booking, accommodation, meals, and accounts details. Moreover, special services such as laundry, ironing and room service will be automated by the system also, not to forget the additional facilities information that will be efficiently handled by the system. To help the system smoothly carry out its intended purpose to meet the hotel management needs, the following tables will be used to store data:

- 1. Booking Table: The table contains guest details that will be input when the guest books into the hotel. For booking, the system will give room for online booking, personal visit to the booking office, telephone calls or facsimiles. For online booking, the guest will have to log on to the hotel's website and fill his/her personal details in the booking web page provided by the system. For telephone call the guest provides his personal details over the phone as the hotel's booking staff do the actual entry of the details into the system. For personal visit to the hotel, the guest provides his details verbally which the booking staff enters into the computer system. The table has the following fields: (regno, fname, sname, nationality, id card no, gender contacts, address, email, Date.
- 2. Accommodation Table. The table contains the accommodation details of a guest. These details help uniquely identify the guest with his room and services offered for the room. These details include: (regno, fname, sname, id card no, Room no, Category, Telephone ext, charges, amount charged, Total charge, Rcpt no, Payment, Nationality)
- 3. Admission Table: The table contains guest details input on admission of the guest into the hotel at the reception. This information keeps track of the duration that the guest has stayed at the hotel. If the guest intends to stay for more than a day, he has to book in for accommodation in advance; else, his information will be input into the system at the reception. The guest luggage information is entered in the system to ensure maximum security of luggage at the hotel. For this to become a reality, the following fields have

been used :( room no, out date, in date, luggage, Id card no, nationality, sname, fname, regno)

- 4. Meals Table: The table contains the hotels catering transactions information. This information is vital as this department is the backbone of any hotel aspiring to achieve its goals and realize its maximum potential. The table contains the following records:( date, regno, fname, sname, id card no, Meal, charges, rcpt no, payment, Nationality, Amount charged, Total amount, Room service). The system will enable automatic calculation of the total amount charged for the meals offered to guests. Room service refers to provision of meals to guests in their rooms. Room service is charged 5% of the charge of the meal.
- 5. Laundry Table. The table contains laundry details for clothes washed at the hotel laundry. The table contains the following fields (date, fname, sname, regno, id card no, linen, type, charges, rcpt no, payment, Nationality, Number of clothes, Amount charged, Total amount)
- 6. Ironing Table: This table contains the ironing service information for the clothes washed both at the hotel and outside the hotel. Payment is done on clothes that are washed outside the hotel. Clothes washed at the hotel laundry are not charged. The table contains the following fields (Total amount, Amount charged, Number of clothes, payment, Rcpt no, charges, type, linen, Nationality, id card no, sname, fname, regno, date)
- 7. Transport Table. The table contains information of the transport services offered to the guests at an extra cost. The guest is charged depending on the type of vehicle used. The following is a list of fields used to store transport department information (Date, Regno, Fname, Sname, Rcpt No, id card no, vehicle, Nationality, payment, Charges, commission, Total amount)
- 8. Ambulance Table: The table contains information on the ambulance facility services offered by the hotel to local, foreign individuals and groups. The table stores information on charges and can be used to generate detailed reports on request by the management. The following fields aid the table efficiently and reliably perform its functions to the expectations: (date, type, fname, sname, regno, amblreg no, duration (days), charges, payment, Rcpt no)
- 9. Conference Table. This is a facility table that contains information on the conference facility services offered to the customers at an extra cost. The table keeps track of the hotel's conference rooms in use and the amount generated from the facility per meeting. The following are the fields that help the table fulfill its purpose at the hotel: (date, type, fname, sname, regno, amblreg no, Rcpt no, duration (days), charges, payment)
- 10. Swimming pool facility table. Swimming pool facility table contain information on the swimming facility services offered o customers at an extra cost. The table can be used to

generate reports on the daily activities in the swimming department, on request by the management. The table has the following fields to enable it perform the above described functions: (date, guest type, regno, sname, Nationality, duration(hrs), charges, payment, no of guests, Total amount, Rcpt no)

- 11. Sporting Facility Table: This table ensures that the information of those who are lovers of physical fitness both as a career and as a hobby is well managed. The table holds their information safely and ensures maximum data integrity values. To enable the table accomplish its intended purpose successfully, the table contains the following fields (date, Rcpt no, Total amount, payment, charges, duration, facilities, sport activity, Nationality, regno, sname, fname, type)
- 12. Employees Details Table: The table contains valuable and delicate information about the employees. The table is for use by the hotel management to keep track of the employee records and performance at the hotel to enable the hotel realize its maximum potential and reduce any possible irrelevant expenditure. The table has the following fields that enable it ensure maximum operability and co-operation (residence, mobile no, account no, salary, position, department, position, office tel, office number, email, address, contacts, id card no, staff names, staff no)

#### **Tools**

- 1. JDK
- 2. NetBeans
- 3. My SQL
- 4. Java Swing
- 5. Xampp

#### Conclusion

Hotel Management System now-a-day have the advantage of modernization. Computer have done the work easier. Computer is playing an important role in management. Reports are made on daily basis for every customer check in or check out which can easily be seen by the management. Hotel management system has also primary purpose is to provide facilities to customers. A software for computers makes the things many times easy, these are made as user friendly and to keep a check and balance in hotel management and accounts as well. So, these things are important.