

Analysis of a hotel management system

[Technology](#), [Computer](#)



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This is software which has mainly made for management of a Hotel. The software has been designed with front-end as VB and backend as Oracle. The project Hotel Management manages maintains the records of customers and room in the hotel. The rooms have different categories. So there charges and records will be maintained accordingly. This software has been made in a user friendly interface, so that normal persons can add, delete the entries of customers and handle all the transactions easily.

SYSTEM ANALYSIS

The initial analysis is made by knowing the user requirements. In analysis phase, we have analyzed the

user's requirement such as:-

Addition of the record of the customer who comes into the hotel , deletion of the record when customer leaves the hotel, printing and calculation of the bill , record of facilities available in the hotel , allotment of the rooms etc. In this project we have also analyzed that the product or software should not be very costly but its quality and interface must be attractive. If any wrong operation is being performed then the software must invoke the operator accordingly.

FEASIBILITY STUDY

A feasibility study is carried out to select the best system that must performance requirement

and its working ability in an organization. The feasibility of the system has been done in three types:-

-Technical Feasibility Study

-Economical Feasibility Study

-Behavioral Feasibility Study

TECHNICAL FEASIBILITY

Technically we have made feasibility in keeping mind about the hardware so that the designed software can work smoothly with maximum efficiency with the hardware.

ECONOMICAL FEASIBILITY

In this we mainly calculate the cost of proposed system and the cost of customer and compare the cost to meet the users cost. The cost of hardware, facility cost, operating and supply costs are considered. The cost of feasibility is also considered on this such as wiring, lightning, A. C. etc.

BEHAVIOURAL FEASIBILITY

We have to consider the cost of staff which has special efforts to educate, sell train on new

ways.

SOFTWARE & HARDWARE REQUIREMENTS

There are some software and hardware requirements of the software hotel management system.

SOFTWARE REQUIREMENTS

- Visual Basic. net as frontend
- Oracle Database as backend
- Windows 7 home Premium

HARDWARE REQUIREMENTS

- Pentium- 4 processor
- 40 & more GB for data storage
- 128 to 512 KB RAM
- Printer for reporting and printing

IMPLEMENTATION

To implement this project, HOTEL MANAGEMENT will require a visual basic as front end &

Oracle Database as back end.

SYSTEM DESIGN

In this software we have developed some forms. The brief description about them is as follow:-

MDI FORM

This is the main form. It contains following fields:-

Hotel

Customer

Reservation

Room

Room Category

Search

On moving the cursor to any of the above fields, drop down menus will be displayed user can click on any of the options available in them and their respective forms will open.

Hotel

The main purpose of this form is to add a new hotel to the database. For this purpose, the user will be required to fill the Hotel id, Hotel Name and their address. After filling all the entries, when we click on the on the save button, the record will be added to the database.

Customer

In this form, user can add a new customer to the records. For this purpose, the user will be required to fill the customer id, name of the occupants, their

address. After filling all the entries, when we click on the Submit button, the record will be added to the database.

Reservation

This is the reservation form where the user inputs customer's reservation details, for example: Reservation Id, Customer Id, Hotel Id, Reservation date, Arrival dates and so on. The user can select the type of rooms by inputting the room category id from the list box. The charges per day of this room are displayed in the list itself. After filling all the entries, when the user click save button, the records will be added to the database.

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Room

This is the room form, where the user search total rooms in the hotel by the room details like hotel id, room number and room category id. After filling all the entries, when the user click search button, the user will be able to view the types of room by their room details.

Room Category

This is the room category form where the user inputs details in the room categories in the hotel by the room details like category id, category name and number of beds. After filling all the entries, when the user click save button, the user will be able to view the types of room by their room details

Search

This form search all the database according the input of the user, If the input is found in the database, then message box “ input found” and the result will be displayed, In the other hand, if the user inputs incorrect input, a msg box displays “ input not found please try again”. And no result will be displayed.

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System Study & Analysis

PRINCIPLES OF SYSTEM ANALYSIS

- Understand the problem before you begin to create the analysis model.
- Develop prototypes that enable a user to understand how human machine interaction will occur.
- Record the origin of and the reason for every requirement.
- Use multiple views of requirements like building data, function and behavioral models.
- Work to eliminate ambiguity.

ENTITY RELATIONSHIP DIAGRAM (ERD)

Entity-Relationship Diagram

This depicts relationship between data objects. The attribute of each data objects noted in the entity- relationship diagram can be described using a data object description. Data flow diagram serves two purposes:

-To provide an induction of how data are transformed as they move through the system.

-To depict the functions that transformation the data flow.

Data Objects

A data object is a representation of almost any composite information that must be understood by the software. By composite information, we mean something that has a number of different properties or attributes. A data object encapsulates data only there is no reference within a data object to operations that act on the data.

Attributes: Attributes define the properties of a data object and take on one of three different characteristics. They can be used to;

-Name an instance of data object.

-Describe the instance

-Make reference to another instance in other table.

Relationship

Data objects are connected to one another in a variety of different ways. We can define a set of object relationship pairs that define the relevant relationships.

E-R DIAGRAM

CUSTOMER

HOTEL

CHECK IN

ROOM

INFORMATION

ROOM

ROOM RECORD

CUSTOMER

HOTEL

CHECK OUT

CUSTOMER

ROOM

ROOM PRICE

HOTEL

DATA MODELING

Data modeling defines primary data objects, composition of each data object, and attributes of the object and other objects and between objects and processes.

Hotel Table

Fields

Type

Hotel Id

Varchar2

Hotel Name

Varchar2

Address

Varchar2

City

Varchar2

Phone No

Number

Number of Stars

Varchar2

Customer Table

Fields

Type

Customer Id

Varchar2

First Name

Varchar2

Last Name

Varchar2

Gender

Varchar2

Address

Varchar2

Phone No

Number

Email Address

Varchar2

Reservation

Fields

Type

Reservation Id

Varchar2

Customer Id

Varchar2

Hotel Id

Varchar2

Reservation Date

Date

Arrival Date

Date

Departure Date

Date

Room Category

Varchar2

Status

Varchar2

Total Cost

Number

Room

Field

Type

Hotel Id

Varchar2

Room Number

Number

Category Id

Varchar2

Room Category

Field

Type

Category Id

Varchar2

Category Name

Varchar2

Number Of Beds

Number

Search

In this function, room, customer as user can search detail from the database according to their authentication.

CONCLUSION

This project have been designed in a great user friendly and largely providing attribute interface and tp meet the requirement of a Hotel Management System.. The project is working with quick response and same level of security is also maintained. The Oracle database is maintained and frontend with Visual Basic.

In this designing system, I have used an ER Diagrams; overall this project teaches us the essential skill like;

- Understanding the Oracle database handling and query processing.

- Using system analysis and design techniques like ER diagram and Data modeling in designing the system.