

# [Study of a hotel reservation system computer science essay](https://assignbuster.com/study-of-a-hotel-reservation-system-computer-science-essay/)

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This project is about build an Hotel system reservation related to information technology in order to help the employee and provide the assistance they needs for the customer as soon as possible. This project as final project includes four chapters. So the introduction and the background of our project will help the reader to get the idea of this project and understand more when we identifying the aim, objectives and the problem definition. While it come some scope and the constraints of this project. The review of literature is one of the ways that provide the ideas and information around the subject area. So the internet online become important to get more information about my final project and wider used in our life also it carry out a huge number of activities. From our aim of this project that developing Hotel system reservation, there are some tools of web development and project methodology that we discussed in chapter two, so all these tools can help to used and develop our system . In addition the chosen of two cases study of website related to Hotel system reservation it helps us to know the features and the elements of these system. One of the fundamental ways to find and gather the information related to our project (Hotel system reservation), so there are different types of the research methods that help to gather all information we needed and then analysis it to carry out the result. From all these types of research methods we discussed in chapter three and making the questionnaire to collect the information about hotel and analysis it to get the result. However there are some of functional requirement and non functional requirement needed to our Hotel system reservation to be successful and good design of the system. The plan is one of the most important step for this project, so it help to execution of project and know how many time spend in starting time and ending of this project. While there is tool can show the all activities and tasks in this project as namely “ Gantt chart”. In addition there are some project elements and resources need for this project we discussed.

To understand the concept of Hotel reservation .

To design a computer based information system.

To semi-automatic hotel reservation process.

To design and create a more efficient hotel reservation system.

Goals & Objectives

The goals and objectives which my project has are the following:

To learn how I can develop new software system.

To learn how I can develop new website with the control panel .

To work hard and learn and to take responsibility to complete this project on time.

To convert manual way to technology way.

To learn more about Microsoft Access and Visual Basic programs also other program which I use it (Adobe Dreamweaver CS4, Adobe Photoshop CS4 , Adobe After Effects CS4, Adobe Flash CS3 Professional, SmartDraw 2010 and Microsoft Office .

To save time for customer.

To share and get knowledge from internet also books.

To improve my experience through collect information using different facilities and different methods.

To improve skills and knowledge.

To make the Hotel system easy for the employee .

To establish database that can assist with more securities .

To encourage Hotel trainees to give the employee the idea about software.

To help employee to identify their needs of customer.

To reduce paper work .

To monitor can show how many room are reserves in the hotel.

To ensure more secured for the data.

The system can give the employee the better interface to select the option easy.

To show for the guest in Oman or forgine what we have in our website and also the location for the hotel .

To have website with all index page , about hotel , hotel gallery , guestbook , contact us , our offer and news .

Introduction

Hotel Reservation is one of the common business types in whole the world. The company

In ALsharqiya Sands Hotel what have been build in 1991 years old near Ibra hospital that can offer The best service for the customers. This Hotel open every day be using the many worker there Omani and India worker in shift time 24 hours to maintaining all services for the all region or other people . The customer when he/her needs to reserve room from the hotel. they must give the full information what include Customer id , customeraˆ¦aˆ¦. with all documentation need to include it to complete the booking for the room what customer needs to reservation , such as will be for the customer will be allowed for him/her to order the food or the drink or need any help from the reception will by using the phone from room directly . There are many services allowed for the customer to use like the swimming pool and the internet form the service for the hotel . also the hotel having the many sections for the room will be depend for the customer what type will needs to reserve the room with include all the other services if the customer needs for that . Finally the hotel care about the customer with giving the customer him respect and aˆ¦aˆ¦ . As of the success in the business of the hotel reservation adopted a computer base system so as to accommodate more client and provide a convenient and efficient transaction to every one, hence business will become more competitive in nature. It was also noted that those who use a computer base system become more productive and organize records of client efficiently.

For this reason, I decide to propose and design a computer based for Hotel Reservation system to at least change the current manual process to technical system.

Problem Definition

The main problem in this Hotel is a manual system and it is only use paper based with Hotel operation so this problem make the work slow and it is difficult for the Employee member to work easily and faster. Also when the staffs using manual system sometimes occurs several errors such as error in record the number of the Reservation room in Hotel , error when they record the name or the address of the customer and they sometimes make mistake in record and also the calculation. So all these can affect for the Hotel and the customer too . In addition another problem for the customer is they sometimes waste their time by waiting for along time until they are serving.

Data integrity Too many paperwork lead to inaccuracy of filing record hence if a second timer or third timer customer need to reservation of Room , he will repeat the same process of filing up information redundancy in customer record lead to voluminous file of paper work.

Data security Security of confidant information is necessary to avoid an authorize user to gain access to clients record. Hence security must be given a priority to any system.

Time-consuming Time is a very important aspect of every potential client. If heshe can process everything in less time than I can say that I have efficient system with the website about the hotel and general think.

Need for applications:   
Advantages:

Use an easy system for Hotel Reservation .

Save the employee time in processing customer information.

Save all records in database system. These records keeping will be efficient.

Securities and copy right for the hotel .

Benefits of the company:

Storing of customer record will become organize.

Efficient customer-renter relationship.

Data integrity will be preserved.

Secured record keeping.

Smooth operation on transactions.

Proposed System:

I will create a new computerized Hotel Reservation system for the ( Ibra Hotel ). In this project I used some application . first application what I will use is Microsoft Visual Studio 6. 0 software also Microsoft Office Access 2003 to create the database and Adobe Photoshop CS4 to make the background and all icon make it very attractive to use it on the program what I use it to make the Hotel Reservation system , there is also I will use something new application that I didn’t study before for making the higher technique use for the design 3D showing . .

There are three program I will use it to make the website and also the introduction created with higher effective . Firstly I will use Adobe Dreamweaver CS4 , also SQL . Reading and the PHP reader to read this language as showing what I created by using adobe Dreamweaver CS4 , The proposed for this program to show all the services and all thing about hotel such as , Home page , about hotel , services , guest book , photo gallery and contact us .

In this project I used application such as: Visual Basic 6. 0 (used as the main application software used for designing and developing the software. Like Project, Forms and Reports are designed and coding using this application) and Microsoft Access (used as the backbone of the software application where in the database, tables and relationships were conceptualized). I wish that Visual Basic will be very best program for maintain the system and I have to learn about it more than I have knologment to develop me study as I can by searching for new information form the book , also using internet to get coding what will help me more . I will use database to create tables for any requirement what I needed for the hotel Reservation system and link it to gother to be all linked to reduce the redundancy information and to be very exactly or specific information needs for the hotel .

Scope of the Project:

The project is will be help the employees for doing the work very fast . The project study will use primarily the Microsoft Access to making the database also with connection with the second program Microsoft Visual Basic 6. 0 what I will make the system and other programs used are Adobe Dream weaver CS4 , Photoshop CS, Also the Adobe Flash CS3 Professional to make the introduction about the project and also will be website for showing information about the hotel with the gallery and about hotel . There are java script also HTML will be include it to develop the for supporting unit for the program and for the website about the system and the now offer about the hotel , also Visual Basic 6. 0 code will be used to develop the system and make all option working as well .

Building on the project, I will faced a lot of difficulties during working in the project. At first time, it was difficult for me to create the system with database and also website to give the information for the guest , when I start the project I don’t have enough perspectives about the hotel acutely . In other hand I create many and many image in me head to show the idea what I needs to be created by me . To show the all project be higher knwegment with using the technology . The other difficulties are the no enght resource for the hotel form the department for the hotel , but I try the best what I can to show analysis for this hotel and creating the my own resource be using the books and also the internet . At last what I tried that be not engh for me to get what I need less then what I get about all the project so I go to search for the teachers how have skills to help me in this project and to give me more idea such as more understand for the project , overcome all of these problems in suitable time and finish me project to our best.

Hardware / Software Configrative:

The needs for doing the project as wall with out any problem and the hardware mast include it to be handle the all project so I use in my beginning Microsoft Office Access 2003 to make the systematically database be using with check all what I need to create in this database for saving the all information for the hotel , The second thing I use Microsoft Visual Basic 6. 0 to creating the hotel reservation system with making the interface view and the process for the system all included by using this program called Visual Basic , the tired thing I will use Adobe Dreamweaver CS4 to make website including the information for the hotel with design template be Adobe Photoshop CS successfully for the user and can contact us throth the website . What I called before what program what I use for , and the computer what I need must be an (compatible) computer with a higher processor all the requirement must be very good to handle those program with out problem.

So To get reasonable performance , I recommend with at least 4GB Ram . With more engh hard desk at least 160 GB, the process will be 2. 2 Core 2 Duo to be able to run more applications simultaneously, and overall performance will be increased. A fast video card is also recommended to display pictures and graphs.

Hardware Interface:

The following are the recommended requirements for the system.

2. 2 Core 2 Duo GHz.

At list 4GB RAM.

160 GB of Hard disk..

32X CD-DVD-RW-Drive.

External Hard disk 80GB – Backup information & system.

Software Interface:   
Microsoft Office :-   
Microsoft Office Word 2007   
Microsoft Office Access 2003   
Microsoft Office Project 2003   
Microsoft Office PowerPoint 2003   
Microsoft Visual Studio 6. 0   
Adobe Dreamweaver CS4   
Adobe After Effects CS4   
Adobe Flash CS3 Professional   
Adobe Photoshop CS4   
Nero Express

It must be purchased separately . firstly I installed Windows XP services pack 3, After that I started install all the program what I purchased .

Methodology and Analysis Design

Waterfall model :

The Waterfall model

Database Schema   
Table name: Customer

Customer with the following fields:

CustomerID

Text

Size

Description

TitleOfSalutation

Text

20

The car kind name

FirstName

Text

20

The product of company name

LastName

Text

8

The year that that car made in

SecondName

Text

8

The number of car plate

Gender

Text

1

The colour of the car

Birthdate

Date/Time

Date/Time

The daily rent fee

CustomerAddress

Text

20

ContactNo

Number

10

EmailAddress

Text

20

IDDocumentType

Text

Selection

IDDocumentNo

Text

20

DateOfExpiry

Date/Time

Date/Time

CountryOfOrigin

Text

20

Table name: Employee\_

Employee with the following fields:

Fields Name

Data Type

Size

Description

FirstName

Text

20

The product of company name

SecondName

Text

8

The number of car plate

LastName

Text

8

The year that that car made in

Gender

Text

1

The colour of the car

Birthdate

Date/Time

Date/Time

The daily rent fee

Address

Text

20

ContactNo

Number

10

EmailAddress

Text

20

UserID

Text

Selection

PWord

Text

EmployeePhoto

Text

Table name: Payments

Payments with the following fields:

Fields Name

Data Type

Size

Description

BillNo

Text

50

ReservationID

Text

100

BillDate

Date/Time

30

BillTime

Date/Time

10

CheckOutDate

Date/Time

15

CheckOutTime

Date/Time

7

EmployeeID

Text

10

CreditCardType

Text

6

CreditCardNum

Number

8

DateOfExpiry

Date/Time

8

Table name: Miscellaneous

Miscellaneous with the following fields:

Fields Name

Data Type

Size

Description

BillNo

Text

20

Particulars

Text

20

MiscDate

Text

20

Price

Text

20

Remarks

Text

20

Table name: Reservation

Reservation with the following fields:

Fields Name

Data Type

Size

Description

ReservationID

Text

50

ReservationDate

Date/Time

100

ReservationTime

Date/Time

30

RoomID

Text

10

CustomerID

Text

15

EmployeeID

Text

7

CheckInDate

Date/Time

10

CheckInTime

Date/Time

6

ResStatus

text

8

Table name: Payments   
Table name: Rooms

Rooms with the following fields:

Fields Name

Data Type

Size

Description

RoomID

Text

50

RoomType

Text

100

MaximumGuest

Number

30

Smoking

Yes/No

10

Description

Text

15

FloorNumber

Text

7

PhoneCode

Text

10

PricePerHour

Text

6

MinimumHoursStay

Text

8

Feasibility Study

The purpose of our project is:

To convert manual system to technology system.

To save the time of the customer.

Storing of customer record will become organize.

Secured record keeping.

Operationally

The purpose of developing the system of car rental is to convert the annual system to computer

based system. This operation makes the system easy for customer and employee. It also saves the

time for both of them. By this way the storing of customer record will become organize and keeping the

records to be secured.

Technically

The employee does not need to take training to use the system. Because the employee is already

computer literate. The employee just needs to know how to enter the data in the system.

Economically

Since the company already have this system, they can save in the procurement of office supplies

hence there will save in the operational cost of the company.

Figure 1:   
Flowchart of manual process   
ER\_Diagram

Customer

Address

E-mail address

nationality

Type of license

ID-card

gender

Name

Address

House -NO

Work-NO

Phone-NO

Car

Plate-NO

Manufacture

Model

Color

Car type

Rent fee

Customer History

Employee-ID

Employee name

Date in

Date out

Total fee

Deposit-NO

Plate -NO

Name

Car type

ID-card

Employee

Log out

Log in

password

Employee name

Employee -ID

Figure 7 :

Data Link   
Conclusion

In this report, many problems have been taken and discussed. We have given a simple view of our project like that what is the idea of it and the steps that we followed until we finished the project.

Car Rental Monitoring System is one of the necessary thing in business. It is useful for renting agency. This system is important to organize Cars, Customers, Employees and Customer\_History records. From this project we learn many things about car rental and how to use Visual Basic.

Database Design   
Screen Design