

A

Project Report on

“ONLINE HOTEL MANAGEMENT”



“.Net Xpert web solution”

Submitted for partial fulfillment towards the degree of
Bachelor of Computer Applications (BCA)
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1. PROJECT PROFILE

Project Title	:	Online Hotel Management
Objectives	:	To easy the work of Room booking and to automate the work of Bill generation through credit card.
Company	:	.Netxpert web solution.
Education Institute	:	Balaji College of Computer Application
Front End	:	Microsoft Visual ASP 2008 (C#.Net)
Back End	:	MS Sql Server 2005
Application Builder	:	Microsoft Visual Studio 2008
Operating System	:	Windows XP
Modules	:	<ol style="list-style-type: none">1. Registration2. Login3. Search destination4. Booking hotel5. Payment6. Updation
No. of Web Forms	:	45
No. of Reports	:	10
No. of Team members	:	3
Project Submitted	:	<ol style="list-style-type: none">1) Gujarat University2) Balaji College of Computer Application

2. COMPANY PROFILE

Dot NetXpert Web Solution

Dotnet expert web solution is engaged in business of Software and Networking consultancy since last 6 years. Our area of activity includes Licensed Software sales- Support and Customized Software Development. We are also in specialized Networking like Remote Office connectivity, Network Security, server maintenance.

Our Services

- 1 Web Development
- 2 Software Consulting
- 3 Live Project Training and Certifications
- 4 Training, Outsourcing & Placement Services
- 5 Internet Marketing
- 6 Web Hosting & Domain Registration
- 7 Website Designe

Web development

DotNet Xpert Web Solution offers turnkey website design and development centers from India, our services span from development of your corporate identity to web development services for both offline & online media. DotNet Xpert Web Solution excels in custom Corporate Training, Website Solutions, Web Hosting, Web Programming, Internet Marketing, and Web Application Development using Asp.Net 4.0, 3.5, 2.0, e-commerce design and development, ERP implementations, PHP etc. We are using Open Source Technologies (PHP, Perl, Ruby, and RoR) and Microsoft Technologies (ASP, C#, VB.Net, ASP.Net)

WebSite Designing

Website's design is of greatest significance for a successful presence on the web for your business. Nowadays websites are increased for business and also personal purposes. We apply specific, measurable business goals to create sites and web design solutions that really help you to Bring in more quality enquiries, Increase sales revenue, Make your business more efficient, improve your customer service. We are providing services for web site design, website re-design, Website Template Design, Logo Designing, Brochure Design.

Online Hotel Management

- 1 As per requirement customized application
- 2 Desktop/Web application

Our clientele list includes some of the corporate houses, limited companies, Pvt. Ltd. Companies and Professionals too. We believe in firm commitment to our clients and providing the best solutions both economical as well as taking care of the requirement.

Web Hosting

.Net Xpert Web Solution is a Premium web hosting company offers business Web Site Hosting, Web Site Designing and SEO Services to Indian clients.

Our professional hosting solution ranges from shared Linux hosting, Windows hosting to Reseller hosting and VPS (Virtual Private Server) hosting to Dedicated Server hosting.

Our web hosting solutions guarantee 99.99% server uptime and facilitate a web hosting environment that is completely protected from virus and E-mail spam..

Search Engine Optimization

.Net Xpert Web Solutions, is an Internet Marketing services provider and its (SEM) Search Engine Marketing are planned after we undertake a complete analysis on your core business objectives and your internet marketing goals. A custom internet marketing strategy is then defined to derive maximum ROI.

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Project Definition

The “**Online Hotel Management**” is a system for online hotel reservations agency. Its goal is to provide business and leisure travelers worldwide with a pleasant, efficient and a cost effective way to book hotel accommodations.

2.2 Existing System

- The almost work of the organization is carried out based on manual file System.
- Records of day-to-day daily transactions are written in rough notebooks by operator.
- Modifications of data in files are tedious.
- Calculation of amount of payment and done by manually by calculator, which is very time consuming, and subject to loss of accuracy.

2.3 Problem areas and need for new system

- Entire conventional manual file system is changed into Contemporary Database Management system.
- New system also facilitates to automatically make hotel reservation for room by day registers that gives tactical information.

2.4 New System (Project initiation)

2.5 Scope of the System

- Visual Studio .Net version 3.5 only supports MS SQL SERVER-2008 or higher version on the server.

2.6 Feasibility Study

Feasibility is the measure of how beneficial or practical the development of information system will be to an organization.

The feasibility study involves following main criteria:

- Whether the identified user needs may be satisfied using current software and hardware technologies.
- The study will decide if the proposed system will be cost-effective and if it can be developed given existing budgetary constraints.
- Feasibility study should be cheap and quick.
- The result should inform the decision of whether to go ahead with a more detailed analysis.

❖ FOR TESTS FOR FEASIBILITY:

1. OPERATIONAL FEASIBILITY:

It is a measure of how well the solution will work in the organization. It is also a measure of how people feel about the system/process. Operational feasibility is people oriented.

2. TECHNICAL FEASIBILITY:

It is a measure of the practicality of specific technical solution and the availability of technical resources and expertise. Technical feasibility is computer oriented.

3 SCHEDULE FEASIBILITY:

It is a measure of how reasonable the web application timetable is.

4 ECONOMIC FEASIBILITY:

-It is a measure of the cost-effectiveness of a web application or solution. This is often called a cost-benefit analysis. Economic feasibility deals with the costs and benefits of the information system.

5 IMPLEMENTATION FEASIBILITY:

It is a measure of the how application will run efficiently.

Feasibility Analysis of Inventory Control Module:-

❖ Operational Feasibility

Operational feasibility is people oriented. Some question arises in the operational feasibility we discuss on this question.

1. Is the problem worth solving or will the solution to the problem work?

Yes, the problem is off course worth solving because the system existing today which is manual may have certain time consuming & less efficient as compared to computerized system, eliminate paper work and reduce man power so, the problem is worth solving.

1) Performance:-

From Our module point of view performance is better than manual system because we can easily find the status information and also easily adds, modify the records.

2) Information:-

Our module gives the information to right person at right time because it only access by the authorized person and it gives the right information at right time.

3) Efficiency:-

Our module efficiency is better than manual system because of mainly all the resources is used in this module.

4) Control:-

Our module is developed for the Planning Cell department. An admin gives the rites to the operators and according to the rites operator controls the system so, from control point of view this system is very good.

5) Economic:-

Economic is totally depends on the extra resources we used in the project or module. In our module we also used extra resources.

6) Service:-

In our module all the things are most of user friendly so on confusion with the user to use the system.

❖ Technical Feasibility

To check whether the module technically Feasible or not we have to give the following three questions answers.

Q1. Is the proposed website practical?

Ans. The proposed website is definitely practical as we have all the resources available. Also building up this module requires the basic/ minimum amount of SRS that are easily available. As the analysis part has been carried out, taking into account the requirements of a module the proposed system is extremely efficient and practical.

Q2. Do we currently possess the necessary Technology?

Ans. Looking into the SRS chart we can see that we possess all the h/w and s/w requirements. Also the technology used is easily available and deployed all around the world.

Q3. Do we possess the necessary technical expertise?

Ans. Well, the module once developed can be easily handled by a non-technical person. So a technically sound expert is not required here. Hence this problem does not arise at all.

❖ Economical Feasibility

As this not begins a conversion of the present module into and rather begins creating a new module from scratch, the cost of the module includes cost of the module development; implementation and it not included the maintenance.

❖ Schedule Feasibility

This feasibility use for the complete project within allotted time for it we use all resources which is given by the company.

Schedule feasibility deals with the deadline offered to complete the project. The procedure of submitting the project report at regular interval period are described in our project profile is four months so we will complete our report and project within given time. So, this totally in schedule feasible.

• 2.7 Development Tools (S/W & H/W Requirement Front end & Back end)

Hardware Interfaces:

Minimum Server requirements

- Processor : P4 3.0 GHz
- RAM : 1 GB
- Hard disk : 80 GB

Minimum Client requirements

- Processor : Intel Pentium II or more
- RAM : 64 MB or More
- Hard disk : 4 GB or More

Software Interfaces:

- Microsoft Visual studio 2008(**Front end**)
- With(.net framework 3.5)
- Microsoft Windows XP(with service pack2) or Higher
- IIS(Internet Information Services)
- Sql Server 2005 Express(**Back end**)
- Ajax Tool Kit 3.5
- Captcha Image (Third Party Control)

3. SYSTEM ANALYSIS

3.1 System Features (Detailed description Of modules)

1. Registration:

- New user or new hotel admin gets registered in our booking portal.
- Admin gives details of registration.

2. Login:

- Existing user and existing hotel admin gets login and access the system components.
- Admin gives the permission to the user and hotel admin for serve.

3. Search Destination:

- Here, user can search the particular hotel and booking from that hotel which is search by the user.

4. Booking Hotel:

- User can book particular hotel and get information about that booking.
- Hotel admin provides some offer for particular time period.
- Also, admin provide the offers.

5. Payment:

- User can payment via credit card or debit card.
- And Hotel admin pay decided commission on particular booking to Admin.
- Admin can get decided commission on particular booking.

6. Updation:

- After the completion overall transaction Admin can manage the whole system.
- Hotel admin can also manage their user.

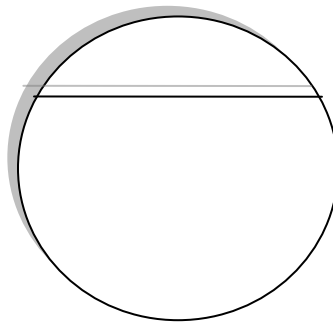
Data Diagram Symbol

It yields visual model of the Information System. It shows how data moves through an Information System but does not show program logic or processing steps. DFD shows what the system does, not how it works it.

We use Gane and Sarson Symbol set for drawing DFDs.

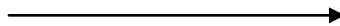
Process Symbol: -

A process receives input data and produces output that has a different content, form, or both. It contains business logic also called Business rules that transform the data and produce the required results. Process name is the function name and consists of a verb followed by a singular noun.



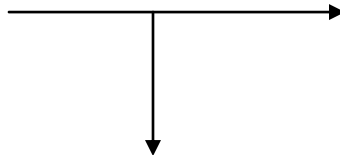
DATA FLOW SYMBOL: -

A data flow symbol is a path for data to move from one part of the information system to another. A data flow in a DFD represents one or more data items. A data flow name consists of a singular noun and an adjective, if needed. A data flow must have a process at its either end.



DIVERGING DATA FLOW: -

It is a data flow in which the same travels to 2 or more different locations.



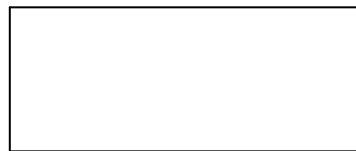
DATA STORE SYMBOL: -

A data store or data repository in a DFD represent a situation in which the system must retain data because one or more processes need to use the stored data at a later time, A data store name is a plural name consisting of a noun and adjectives,if needed.A data store must be connected to a process with a data flow.



EXTERNAL ENTITY: -

An external entity is a person, department, outside organization or other information system that provides data to the system or receives output from the system. It shows the boundaries or terminators of system. They act as either source or sink. An external entity must be connected to a process by a data flow.



CONTEXT DIAGRAM

It is a top-level view of the entire information system. It does not shows any data stores because it is internal to the system.

Conventions: -

1. Each context diagram must fit on one page.
2. The process name in the context diagram should be the name of the information system.
3. Use unique names within each set of symbols.
4. Do not cross lines. If it occurs then avoid it by duplicating an external entity or data store.
5. Use unique reference number for each process symbol.

Diagram 0 or exploded view of context diagram. it zooms in on the context diagram and shows major processes, data flows and data stores. The process numbers do not suggest that the processes are accomplished in a sequential order, it is also called partitioned or decomposed view of process 0.

In DFD processing logic is divided into smaller units known as functional primitive. It is a process that consists of a single function that is not exploded forth.

3.2 Context Level Diagram

3.3 1st Level DFD

3.4 2nd Level DFD

3.5 Entity Relationship Diagram (ERD)

4.6 Data Dictionary

Admin_details: This table contains details of the administrator.

Sr No.	Name	Data Type	Size	Constraint	Description
1.	Admin_id	int		Primary key	Id of the admin
2.	User_name	Varchar	25	Not Null	User name of admin
3.	Password	Varchar	30	Not Null	Password of admin

Booking_details: This table stores the record about the booking details like who has booked the hotel, which room for how many days etc.

Sr No.	Name	Data Type	Size	Constraint	Description
1.	Booking_Id	int		Primary key	Book Id of Hotel
2.	First_name	varchar	25	Not Null	Name of user
3.	Last_name	varchar	25	Not Null	Sername of user
4.	Hotel_name	Varchar	30	Foreign key Hotel_details	Name of the hotel From(Hotel_details)
5.	Room_name	varchar	20	Not Null	Name of the room
6.	Check_in_date	datetime		Not Null	Check in date of user
7.	Check_out_date	datetime		Not Null	Check out date of user
8.	No_of_rooms	int		Not Null	No of rooms booked by the user
9.	Total amount	decimal	(18, 0)	Not Null	Total amt of the book hotel.

Country_details: This table contains details of different countries.

Sr No.	Name	Data Type	Size	Constraint	Description
1.	Country_Id	int		Primary key	Id of the country
2.	Country_name	varchar	30	Not Null	Name of the country
3.	Currency	varchar	30	Not Null	Name of the currency

State_details: This table contains details of states of different countries.

Sr No.	Name	Data Type	Size	Constraint	Description
1.	State_Id	int		Primary key	Id of state
2.	State_name	varchar	30	Not Null	Name of state
3.	Country	varchar	30	Not Null	Name of the country

City_details: This table contains details of cities of different states.

Sr No.	Name	Data Type	Size	Constraint	Description
1.	City_Id	int		Primary key	Id of the city
2.	City_name	varchar	25	Not Null	Name of city
3.	State	varchar	30	Foreign key State_details	Name of the state From(State_details)

Currency_details: This table contains records of differ countries used in different part of the world.

Sr No.	Name	Data Type	Size	Constraint	Description
1.	Currency_Id	int		Primary key	Id of the admin
2.	Currency_name	Varchar	30	Not Null	Name of the currency

Commission_details: This table contains the details of commission gained from different hotels for booking.

Sr No.	Name	Data Type	Size	Constraint	Description
1.	Commission_Id	int		Primary key	Id of the commission
2.	Hotel_name	vvarchar	30	Not Null	name of the hotel
3.	Booking_id	Int		Foreign key Booking_details	Id of book From(Booking_details)
4.	Amount	float		Not Null	Amount of commission

User_details: This table contains the personal details of the users of the system.

Sr No.	Name	Data Type	Size	Constraint	Description
1.	User_Id	int		Primary key	Id of user
2.	User_name	vvarchar	30	Not Null	Name of user
3.	Password	vvarchar	30	Not Null	Password of user
4.	Address	vvarchar	40	Not Null	address of user
5.	Zip_code	vvarchar	10	Not Null	User zip code
9.	Phone_no	vvarchar	15	Not Null	Phone no
10.	Email_address	vvarchar	30	Not Null	Email id
11.	Gender	vvarchar	5	Not Null	Gender of the user
12.	Country	vvarchar	30	Foreign key Country_details	Name of country From(Country_details)
13.	State	vvarchar	30	Foreign key State_details	Name of state From(State_details)
14.	City	vvarchar	30	Foreign key City_details	Name of city From(City_details)
15.	Captcha	vvarchar	20	Not Null	for Security due to virus attacks or spam reduced.

Hotel_details: This table contains details of the hotel .

Sr No.	Name	Data Type	Size	Constraint	Description
1.	Hotel_id	int		Primary key	Id of hotel
2.	Hotel_name	varchar	15	Not Null	name of hotel
3.	Address	varchar	25	Not Null	Address of hotel
4.	Zip_code	varchar	15	Not Null	Zipcode of hotel
5.	Phone_no	varchar	15	Not Null	Contact no hotel
6.	Email_Id	varchar	15	Not Null	Email id for hotel
7.	Star_rattng	varchar	15	Not Null	Rattng of hotel
8.	Country	varchar	30	Foreign key Country_details	Name of country From(Country_details)
9.	State	varchar	30	Foreign key State_details	Name of state From(State_details)
10.	City	varchar	30	Foreign key City_details	Name of city From(City_details)
11.	Facilities	varchar	30	Not Null	Facilities provided by hotel
12.	Main_photo	varchar	25	Not Null	Main photo of hotel
13.	Status	varchar	10	Not Null	Status of the hotel good or best

Hoteladmin_details: This table contains records of the personal details of the hotelperson detail.

Sr No.	Name	Data Type	Size	Constraints	Description
1.	Hoteladmin_id	int		Primary key	Id of hotel admin
2.	User_name	varchar	30	Not Null	Name of the user
3.	Password	varchar	20	Not Null	Password of user
4.	Name	varchar	25	Not Null	Name of the hotel admin
5.	Address	varchar	50	Not Null	Address of user
6.	Zip_code	varchar	10	Not Null	Department of person
7.	Phone_number	varchar	15	Not Null	Contact no of user
8.	Email_address	varchar	30	Not Null	Email id of the user
9.	Gender	varchar	5	Not Null	Cast for he/she User.
10.	Country	varchar	30	Foreign key Country_details	Name of country From(Country_details)
11.	State	varchar	30	Foreign key State_details	Name of state From(State_details)
12.	City	varchar	30	Foreign key City_details	Name of city From(City_details)

Payment_details: This table contains records of the payment by the user through credit card details.

Sr No.	Name	Data Type	Size	Constraints	Description
1.	Payment_Id	int		Primary key	Id of payment
2.	Name	varchar	40	Not Null	Name of the user
3.	Address	varchar	50	Not Null	Address of the user
4.	Phone_number	varchar	15	Not Null	Contact no of user
5.	Email_Id	varchar	30	Not Null	Email id of the user
6.	Card_type	varchar	15	Not Null	Type of the card(master,visa)
6.	Card_number	varchar	10	Not Null	Credit Card no
7.	Payment_status	varchar	10	Not Null	Status of the payment Complete or Incomplete.

Room_details: This table contains details of different types of rooms in the hotel.

Sr No.	Name	Data Type	Size	Constraint	Description
1.	Room_Id	int		Primary key	Id of room
2.	Hotel_name	vvarchar	30	Not Null	Id of hotel
3.	Room_type	vvarchar	30	Not Null	Type of room
4.	Room_rate	vvarchar	100	Not Null	Rate room of the hotel
5.	Facilities	vvarchar	50	Not Null	Facilities provided in the room
6.	Photo_room	vvarchar	50	Not Null	No of such rooms in the hotel

Offer_details: This table contains records of the offer details by hoteladmindetails of the hoteladmin.

Sr No.	Name	Data Type	Size	Constraints	Description
1.	Offer_Id	int		Primary key	Id of payment
2.	Hotel_Id	int		Foreign key Hotel_details	Id of hotel from(Hotel_details)
3.	Offer_description	vvarchar	50	Not Null	Amount for payment
4.	Start_Date	datetime		Not Null	On which date pay
5.	End_date	datetime		Not Null	On which end of date pay

4. SYSTEM DESIGN

4.1 Forms Layout

4.2 Reports Layout

5. CODING

5.1 Naming Convention

To read and understand code easily, code must be written consistently to conform to agree Naming conventions. Readers familiar with the naming conventions for coding can easily understand.

We have followed the usual naming conventions for all windows controls used, which is like: [Tag prefixed] [Comprehensive words]

The following table lists the control tags used by many Visual Basic programmers:

Tag prefixed	windows Controls	Example
txt	textbox	Txtusername
btn	command button	Btnadd
drp	dropdown list	Drpcountry
dr	Datareader	dr1,dr2
lbl	Label	lblmessage
rbtnu	Radio button	Radiobutton1

Procedures:-

For All Functions that we have defined, the names of functions are formulated in uppercase.

E.g. bindUpdate ()

For all Subroutines, the names of them are formulated in proper case that means first letter of all separate words are in capital letter.

E.g. con.open (), con.close (), etc.

6. TESTING

6.1 Testing Strategy

After the phase of coding Programmers work on the phase of testing and debugging.

All programs are must tested to ensure that it functions correctly.

Program testing involves fixing two types of errors.

1) Compile time testing: -

Programs are compiled using a CASE tools or a language compiler. This process detects syntax errors, which are language grammar errors. Programmer corrects the errors until the program executes properly.

2) Desk checking: -

Desk checking is the process of reviewing the program code to spot logic errors, which produces incorrect results.

Two formal types of desk checking:-

- 1) Structured work through: -Group of three or five IT staff members participate in code review. Other programmers and analysts who did not work on project, also involved in code review.
- 2) Design work through: -This involves people who are users, to review the interface of the system.

Test Plan: -

A test plan consists of detailed procedures that specify how and when the testing will be performed, who will participate, and what test data will be used. Test data should contain both correct and error prone data and should test all possible situations that could occur.

For example:-for a field that allows a range of numeric values, the test data should contain minimum values, maximum values, values outside the acceptable range and alphanumeric characters.

Sequence of Testing: -

Unit Testing:-

Testing of individual program or module is called Unit Testing.

Objective: -To identifies and eliminates execution errors that could cause the program to terminate abnormally.

Integration testing or link testing: -

In such testing two or more program that depends on each other is tested. For example, one program that checks and validate customer balance then another program that update that data into customer master file.

System Testing: -

During a system testing, users enter data, including samples of actual, or live data, perform queries, and produce reports to simulate actual operating conditions.

Objectives: -

- 1) Perform a final test of all programs.
- 2) Demonstrates those users can interact with the system successfully.
- 3) Confirm that the information system can handle predicted volumes of data in a timely and efficient manner.

Acceptance test: -

Successful completion of system testing is the key to user and management approval. Final acceptance test will be performed during systems installation and evaluation.

6.2 Test Cases

7. PROPOSED ENHANCEMENTS

This defines the thing that can be included in the project in order to make it professional and have been not included due to lack of the time.

- We can make a Central data base that contain all the data and periodically up date it without any redundancy.
- We can extend it to provide Anti virus security.

8. CONCLUSION

9. BIBLIOGRAPHY

REFERENCES :

BOOKS :~

For C#.NET

Professional C#.NET 2008 - Mathew Macdonald Publication (Black book).

For MS SQL SERVER 2008

Related URLs: ~

- <http://www.csharpecode.com>
- <http://www.w3schools.com>
- <http://www.dynamicdrive.com>