

CHAPTER 1

INTRODUCTION

1.1 Overview

The project, Hotel Management System is a web-based application that allows the hotel manager to handle all hotel activities online. Interactive GUI and the ability to manage various hotel bookings and rooms make this system very flexible and convenient. The hotel manager is a very busy person and does not have the time to sit and manage the entire activities manually on paper. This application gives him the power and flexibility to manage the entire system from a single online system. Hotel management project provides room booking, staff management and other necessary hotel management feature.

Objective & Purpose

AIM: - The aim of this project is to design a hotel management system for running a hotel business. The system should be as flexible as possible so that it can be used for hotel.

ADVANTAGE

1. Sometime it happens that the rooms get booked soon when one visits the place therefore user can make advance booking using this system.
2. It saves user time in searching a room.
3. The system is useful as it calculates an exact cost of rooms for requested number of days.
4. It saves organization resources and expenses.
5. This system is effective and saves time and cost of users.

DISADVANTAGE

1. The booking process usually requires a customer identity, which the system cannot detect
2. It requires a reliable internet connection.

CHAPTER 2

(Analysis of System Requirement)

2.1 INTRODUCTION

A detailed study to determine whether, to what extent, and how automatic data-processing equipment should be used; it usually includes an analysis of the existing system and the design of the new system, including the development of system Specification which provide a basis for the selection of equipment.

Analysis is the study of the various operations performed by the system and their relationship within and outside of the system. During analysis, data collected on the files, decision points and transactions handled by the present system. Different kinds of tools are used in analysis of which interview is a common one.

System analysis can be categorized into four parts:

1. System planning and initial investigation.
2. Information gathering.
3. Applying analysis tools for structured analysis.
4. Feasibility study.

2.2 INITIAL INVESTIGATION

The first step in system development life cycle is the identification of need of change to improve or enhance an existing system. An initial investigation on existing system was carried out. Many problems were identified during the initial study of the existing system.

2.2.1 EXITING SYSTEM

System analysis is a detailed study of the various operation performed by a system and their relationship within and outside of the system.

Here the key question is:

What must be done to solve the problems?

What all problems exist in the present system?

Analysis begins when a user or manager begins a study of the programs using existing system.

2.2.2 Proposed System

. User friendly:

The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Moreover the graphical user interface is provided in the proposed system, which provides user to deal with the system very easily.

. Report are easily generated: - Report can be easily generated in the proposed system so user can generate the report as per the requirement (monthly) or in the middle of the session.

. Very less paper work: The proposed system requires very less paper work. All the data is feted into the computer immediately and reports can be generated through computers. Moreover work become very easy because there is no need to keep data on papers.

. Computer operator control: Computer operator control will be there so no chance of errors. Moreover storing and retrieving of information is easy. So work can be done speedily and in time.

2.3 External interface requirement

2.3.1 Hardware Requirement

2.3.2 Software requirement

Hardware Requirements:

1.1 Processor : Pentium IV 2GHz and Above

1.2 RAM : 1GB

1.3 Monitor : VGA Color Monitor

Software Requirements:

2.1 Operating System: Windows XP onward

2.2 Developing Tool : .Net framework (visual studio 2010) (

2.3 Database : My Access (back end)

2.4 Browser : Chrome, Opera

2.4 Feasibility study

2.4.1 Economically Feasibility

Economic feasibility analysis mainly analysis and Assessment the construction project of the funding need And capital efficiency, including budget estimates, the input-output ratio, payback period of investment, investment benefit analysis, and so on. The development and maintenance of this hotel management information system requires hotel put into expense, but as an important aid to the hotel management, after it put into use, it can dramatically improve the department efficiency, its business volume, improved quality of service will far outweigh the upfront investment. Therefore, hotel's selection of management information systems has high investment returns and strong economic feasibility.

2.4.2 Technical feasibility:

The technical requirement for the system is economic and it does not use any other additional Hardware and Software.

2.4.3 Behavioral Feasibility:

The System working is quite easy to use and learn due to its simple but attractive interface. User requires no special training for operating the system.

2.4.4 Schedule Feasibility

Time evolution is the most important consideration in the development of project. The time schedule required for the development of this project is very important since more development time effect machine time, cost and cause delay in the development of other systems.

2.5 System Requirement Specification

A **software requirements specification** (SRS) is a detailed description of a software system to be developed with its functional and non-functional requirements. The SRS is developed based the agreement between customer and contractors. It may include the use cases of how user is going to interact with software system. The software requirement specification document consistent of all necessary requirements required for project development. To develop the software system we should have clear understanding of Software system.

2.5.1 Functional

Functional requirements may involve calculations, technical details, data manipulation and processing, and other specific functionality that define what a system is supposed to accomplish. Functional requirements drive the application architecture of a system, while non-functional requirements drive the technical architecture of a system.

2.5.2 Non-Functional

A **non-functional requirement** (NFR) is a [requirement](#) that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. They are contrasted with [functional requirements](#) that define specific behavior or functions. The plan for implementing *functional* requirements is detailed in the [system design](#). The plan for implementing *non-functional* requirements is detailed in the [system architecture](#), because they are usually [architecturally significant requirements](#).

Non-functional requirements describe how a system must behave and establish constraints of its functionality. This type of requirements is also known as the system's *quality attributes*.

CHAPTER 3

(System design)

3.1 INTRODUCTION

System design is the process of definition the architecture, modules, interfaces, and data for a system to satisfy specified requirement. System design could be seen as the application of system theory to product development.

3.2 DFD (DATA FLOW DIAGRAM)

Data flow diagram (DFD) is a picture of the movement of data between external entities and the processes and data stores within a system it is usually beginning with a context diagram as the level 0 of DFD diagram, a simple representation of the whole system. To elaborate further from that, we drill down to a level 1 diagram with lower level functions decomposed from the major functions of the system. This could continue to evolve to become a level 2 diagram when further analysis is required.

3.2.1 DFD SYMBOLS

The five different type of primitive symbols used for constructing DFDs are:

- i. **Symbol used**
- ii. **External entity**
- iii. **Data flow**
- iv. **Data store**
- v. **Output symbols**

1. SYMBOLS USED

PROCESS:

A function is represented using a circle. This symbol is called a process or a bubble is annotated with the names of the corresponding functions.

2. EXTERNAL ENTITY:

An external entity such as a librarian, a library member, etc. is represented by a rectangle. The external entities are essentially those physical entities external to the software system that interact with the system by inputting data to the system or by consuming the data produced by the system.

3. DATA FLOW:

A directed arc or an arrow is used as a data flow symbol. A data flow symbol represents the data flow occurring between two processes, or between an external entity and a process. The direction of the data flow arrow shows whether data is being read from or written into a data store. Data flow symbols are usually annotated with the corresponding data names.

4. DATA STORE:

A data store represents a logical file. It is represented using two parallel lines. A logical file can represent either a data store symbol, which can represent either a data structure, or a physical file on disk. Each data store is connected to a process by means of a data flow symbol. The direction of the flow arrow shows whether data is being read from or written into a data store. An arrow flowing in or out of a data store implicitly represents the entire data of the data store and hence connecting to a data store not be annotated with the name of the corresponding data items.

5 OUTPUT SYMBOL

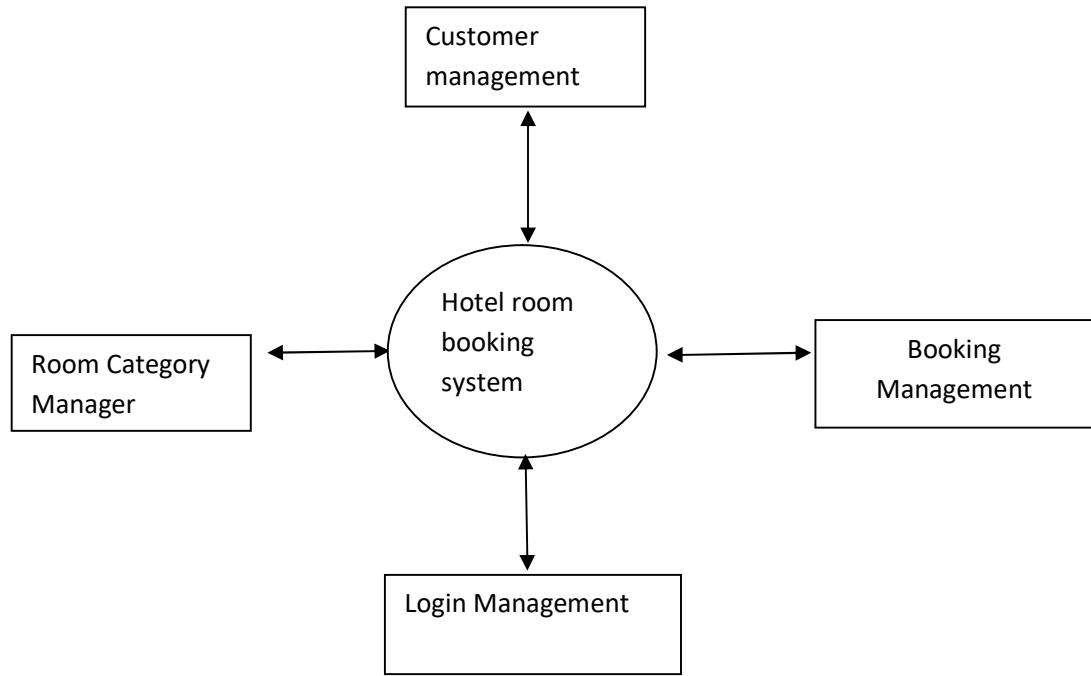
The output symbol is used when a hard copy is produced and the user of the copies cannot be clearly specified or there are several users of the output.

3.2.2 DFD LEVELS

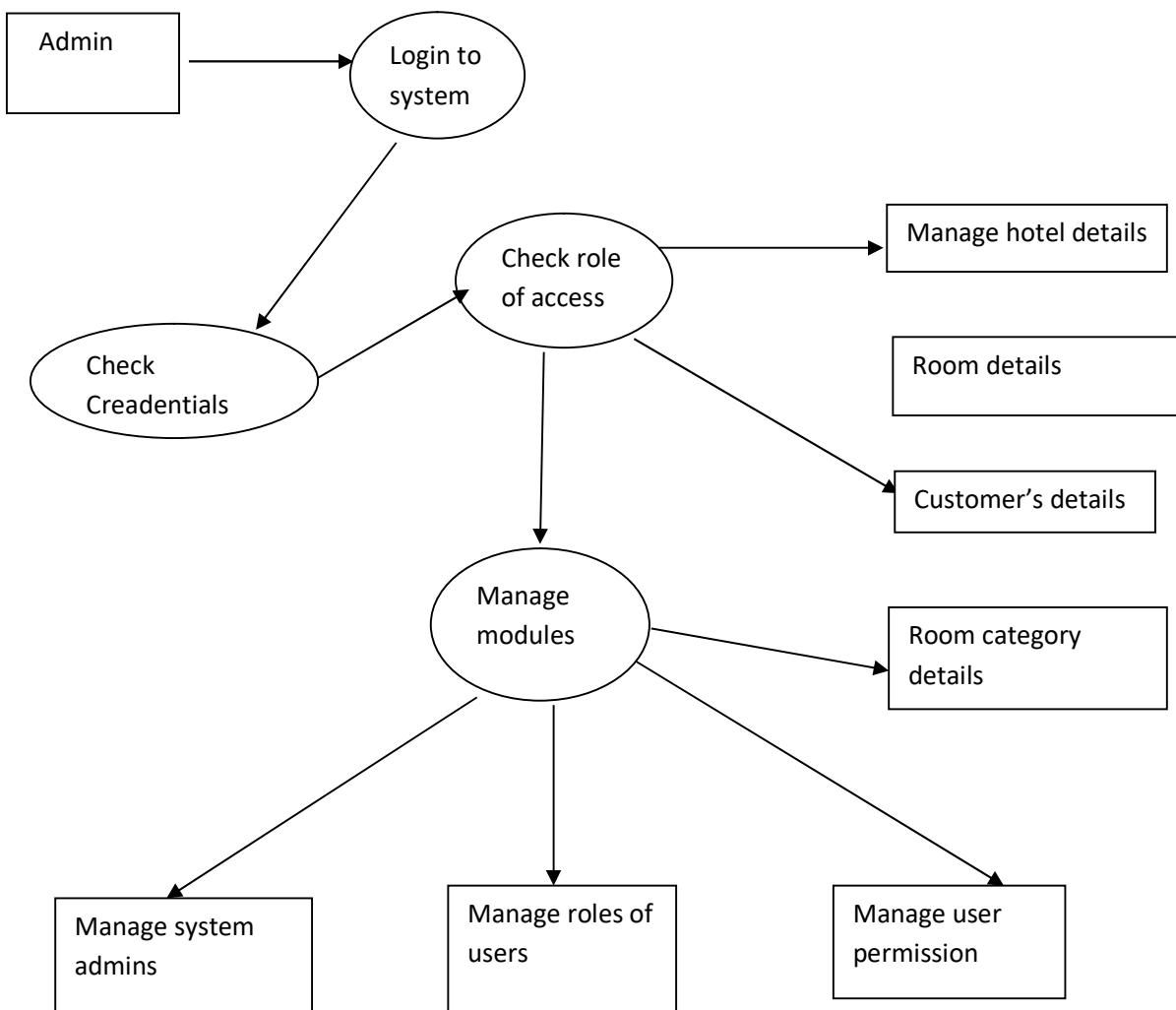
In this project, three levels of DFD are defined i.e.

- i. 0-level DFD**
- ii. 1-level DFD**
- iii. 2-level DFD**

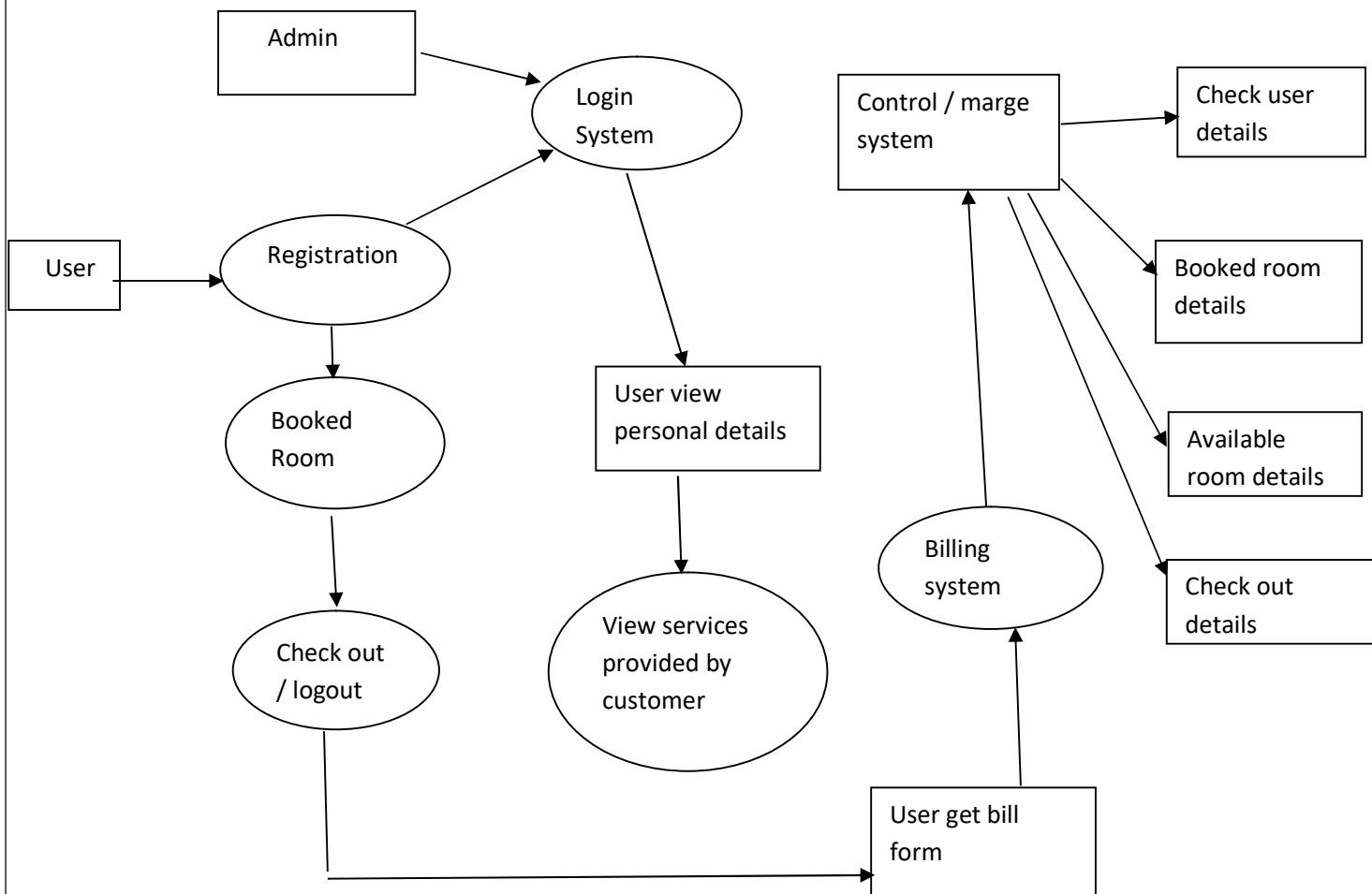
(i) 0-Level DFD:



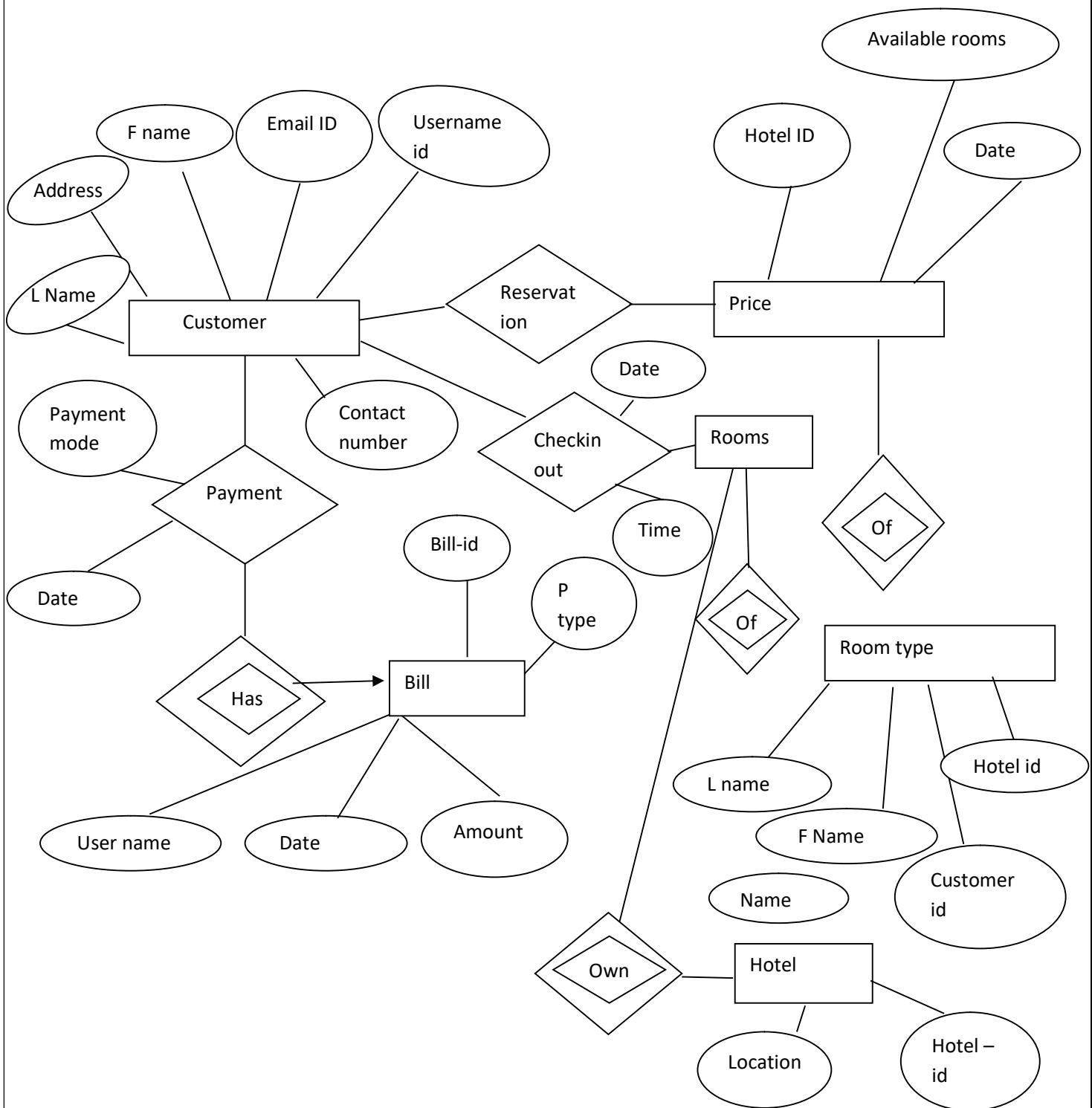
(ii) 1-Level DFD:



(iii) 2- LEVEL DFD



3.3 ER Diagram



3.4 VB.NET

INTRODUCTION TO VB.NET

VB.Net is a Microsoft object oriented programming (OOP) language.it evolved from visual basic 6(VB6) to meet an increasing need for easy web services and web development.

VB.Net was designed to take advantage of the .NET framework based classes and run time environment it was re-engineered by Microsoft as part of its .NET product group.VB.NET supports abstraction, inheritance and polymorphism.

The most substantial VB6 to VB.NET modification is OOP which allows for class and object creation and increased code reusability. Many new controls were added to streamline program development.VB.NET also supports multithreading and web development services, such as Web forms and services. VB.NET'S

Data handling is represented and exchanged via XML-based ADO.NET, which allows for efficient and easy handling of large amounts of data via the web.

There is a huge base of VB developers given its long history. Many prefer C#, but this can get into a somewhat subjective debate as to the merits of each language.

VB includes a wide variety of visual tools, which may be used to create advanced applications with an extended GUI .thus VB is more than a programming langauge.it also includes a variety of libraries, which are useful for creating object oriented programs. Programs usually involve large development teams working on projects simultaneously.

While many developers look down on visual basic as an antiquated language, one cannot deny that there is a ton of VB code out there.so while most Microsoft-centric developers would rather use C#, there will be work in VB for a long time given its widespread use in the past.

Chapter-4

SYSTEM TESTING

4.1 INTRODUCTION

System testing of software or hardware is testing conducted on a complete integrated system to evaluate the system's compliance with its specified requirements.

Testing is basically categories into two parts:

- 1. Black box testing**
- 2. White box testing**

1. Black box testing:

In this strategy some test cases are generated as input conditions that fully execute all functional requirements for the program. This testing has been uses to find errors in the following categories:

- a. Incorrect or missing functions**
- b. Interface errors**
- c. errors in data structure or external database access**
- d. performance errors**
- e. initialization and termination errors.**

In this testing only the output is checked for correctness. The logical flow of the data is not checked.

2. White box testing:

In this text cases are generated on the logic of each module by drawing flow graphs of that modules and logical decisions are tested on all the cases.

It has been uses to generate the test cases in the following cases:

- a. Guarantee that all independent paths have been executed.**
- b. Execute all logical decisions on their true and false sides.**
- c. Execute all loops at their boundaries and within their operational bounds.**
- D .Execute internal data structures to ensure their validity.**

4.2 TESTING TYPES

- I. Unit testing
- ii. Integrating testing
- iii. System testing
- iv. Acceptance testing

4.2.1 Unit Testing:

Unit testing is a software testing method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures, and operating procedures, are tested to determine whether they are fit for use .it is confined only to the designer's requirement

4.2.2 Integrating Testing:

Integration testing ensures that software and subsystems work together as a whole.it test the interface of all the modules to make sure that the modules behave property when integrated together.

4.2.3 System Testing:

Involves in house testing of the entire system before delivery to the user. Its aim is to satisfy the user the system meets all requirements of the client's specifications.

4.2.4 Acceptance Testing:

It is a pre delivery testing in which entire system is tested at client's site on real world data to find error.

Chapter 5

Implementation

5.1 Welcome

The screenshot displays a web browser window with two tabs open, both titled "hotel management". The active tab shows the URL "localhost:54093/hotelmanagement/Home.aspx". The page content is the homepage of Hotel Radisson Blu. It features a red header bar with the Radisson Blu logo and navigation links for "home", "about", "services", and "contact". Below the header is a large image of the hotel building and a welcome banner. The banner includes the text "welcome to our hotel" and a note about the hotel's location. The Windows taskbar at the bottom shows various icons and the date/time.

Radisson BLU

home about services contact

New User Login Admin

welcome to our hotel

Activate Windows
Go to Settings to activate Windows.

Our Standard

1. Hotel

Situated on the shores of ganga river, Hotel radision blu has become renowned for its untouched splendid views over Ganga river. A sanctuary for travelers with its peaceful atmosphere, friendly staff, wonderful accommodation, convenient location and excellent facilities.

2. Rooms

Hotel radision blu's rooms are available in both standard and deluxe. All rooms come with free Wifi, television & en suite bathroom. Deluxe rooms have the additional facilities of air conditioning, balcony overlooking the lake and in room tea and coffee amenities. Room service and Laundry service and Laundry services are provided to all guests and rooms are cleaned regularly.

3. Restaurant

Hotel radision blu restaurant & Bar offers a wide range of cuisines prepared by the restaurants experienced chef. Service is provided in the indoor restaurant as well as open terraces overlooking the lake which is the perfect place to relax watching the sunset with a drink in hand!

hotel management localhost:54093/hotelmanagement/services.aspx

Radisson BLU

home about
New User services
Login contact
Admin

Our services

Stay first, Pay After!

- *Decorated room
- *Proper air conditioner
- *Private balcony
- *24 hour restaurant
- *24 hour room services
- *24 hour concierge services

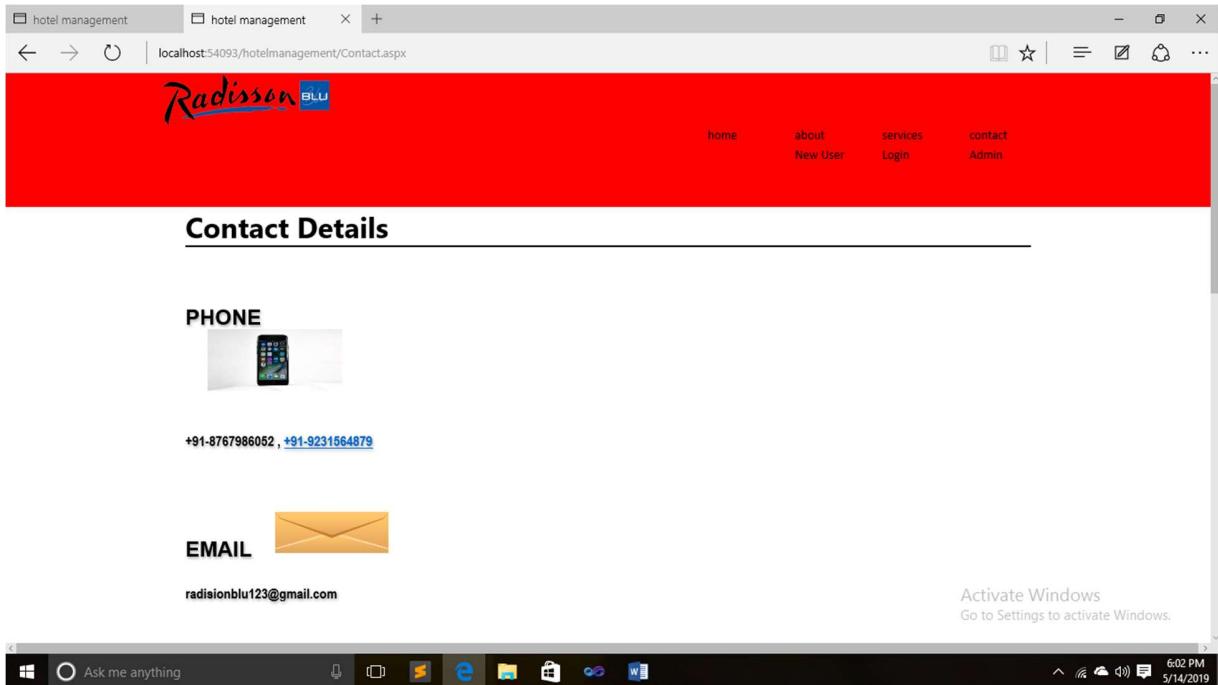
Experience a good stay , enjoy fantastics offer

Ask me anything

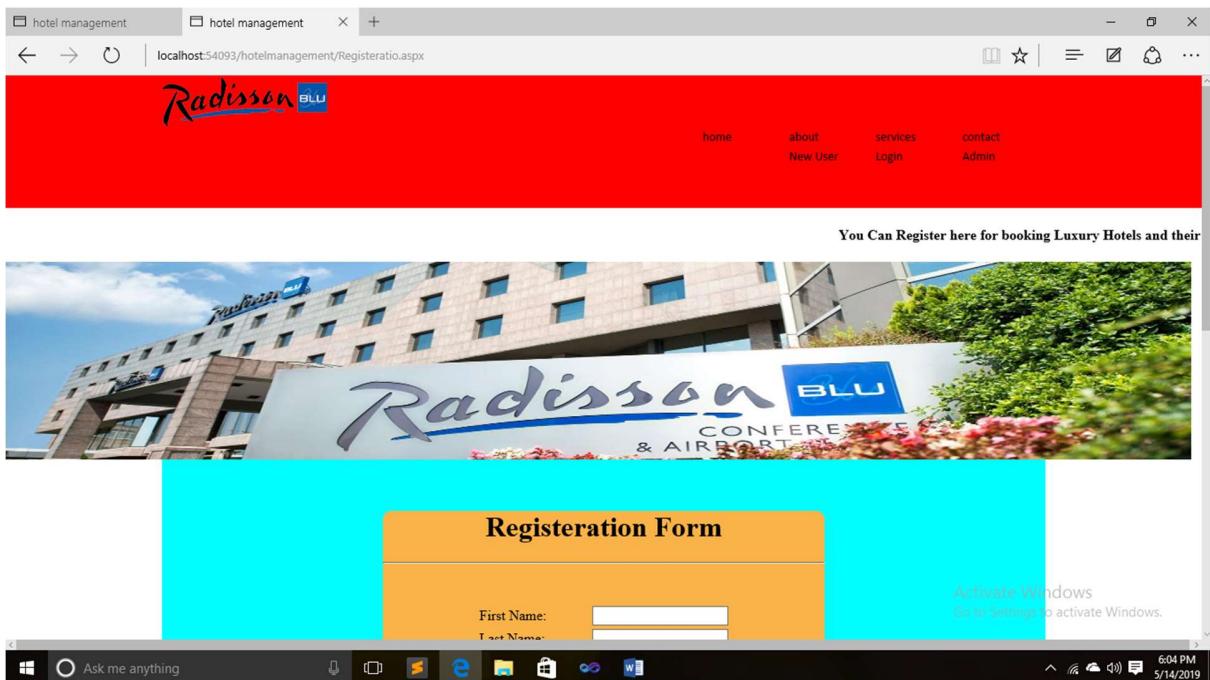
Windows Go to Settings to activate Windows.

5:56 PM 5/14/2019

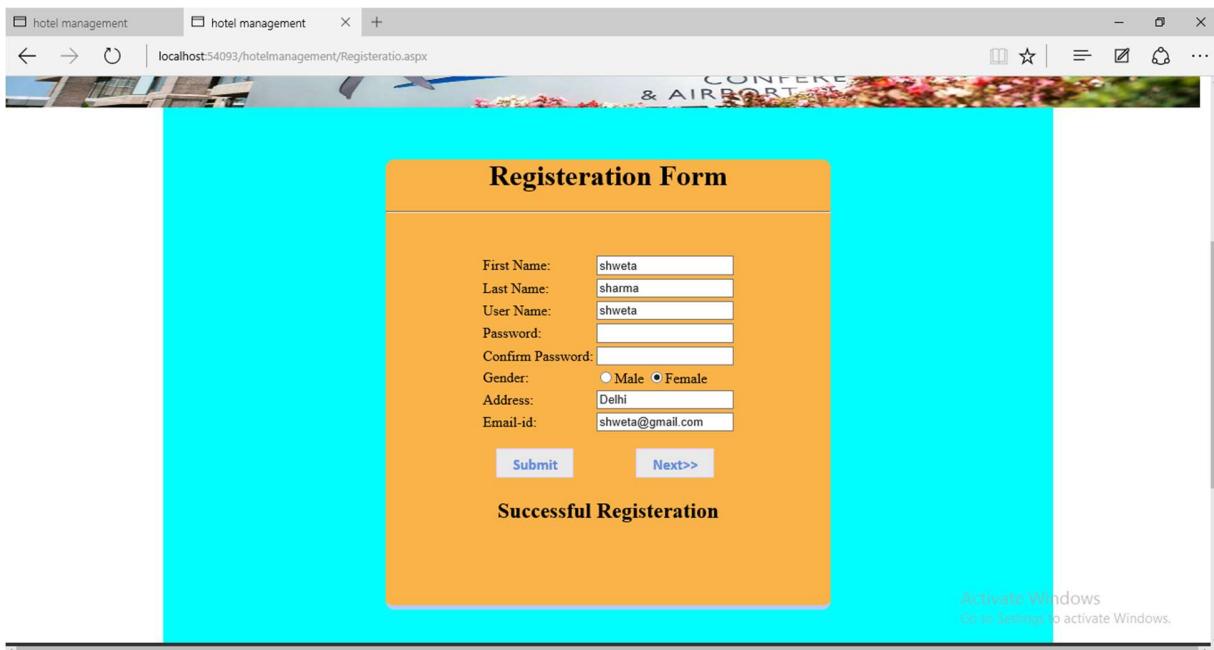
5.2 Login



5.2.1 Customer Registration Form



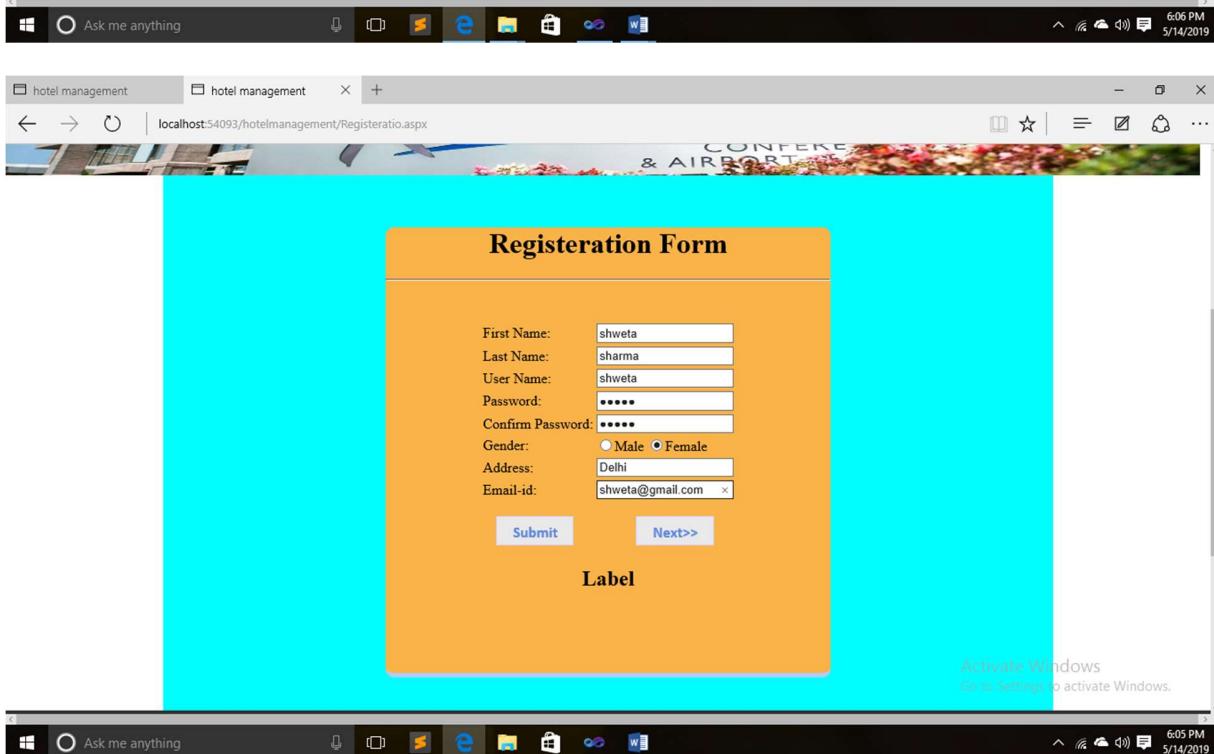
5.2.1 Customers Detail



The screenshot shows a web browser window with two tabs labeled "hotel management". The active tab displays a registration form titled "Registration Form". The form fields are filled with the following data:

First Name:	shweta
Last Name:	sharma
User Name:	shweta
Password:	[redacted]
Confirm Password:	[redacted]
Gender:	<input checked="" type="radio"/> Male <input type="radio"/> Female
Address:	Delhi
Email-id:	shweta@gmail.com

Below the form are two buttons: "Submit" and "Next>>". A success message "Successful Registration" is displayed at the bottom of the form area.



The second screenshot shows the same browser window after an attempt to submit the form. The "Email-id" field now contains "shweta@gmail.com" and has a red "X" icon indicating an error. The message "Label" is displayed below the form area, likely indicating a validation error for the email field.

5.2.3 About:

Room details are available:

1. Room No.
2. Ac or Non Ac
3. Single Bed or Double Bed

The screenshot shows a web browser window with the title 'hotel management' and the URL 'localhost:54093/hotelmanagement/AvailableRoom.aspx'. The page has a red header with the 'Radisson BLU' logo. Below the header is a navigation menu with links: 'home', 'about', 'New User', 'services', 'Login', and 'contact'. A link 'Back To Admin Page' is visible. The main content area displays a table of room availability:

Roomno	Roomtype	bedding
101	Ac	Single
102	Ac	Single
104	Ac	Double
106	Ac	Double
103	Non-Ac	Single
105	Non-Ac	Single
110	Ac	Single

At the bottom of the page, there is a footer with links: 'home', 'about', 'services', and 'contact'. A watermark 'Activate Windows Go to Settings to activate Windows.' is present in the center of the page. The browser's taskbar at the bottom shows various pinned icons and the date/time '6:15 PM 5/14/2019'.

CHAPTER 6

Maintenance

MAINTENANCE

Our project will be able to implement in future after making some changes and modifications as we make our project at a very low level. So the modifications that can be done in our project are:

In future one change can be done by adding the fingerprints of the persons of which the address is Entered .and one more major change which can be done in this project is that to add the snaps of the person of which the address is Entered. We can also add or subtract details of the individual.

CONCLUSION

Computer has got clear advantage over the manual system. The computerized system is more reliable, efficient and fast at the end of the project, I can say that computer play a very crucial role in the development of firm. All the daily reports generated by the system are to be checked by the concerned official so as to ensure that all the transactions have been put through in appropriate accounts and this is tallied with the new vouchers. Computer does maximum work with in minimum time. Because it is used in every field so that it provides comfort and suitability to everyone. Providing maximum facilities and comfort to customers to customers is main goal of the firm. To achieve this goal, other modern facilities relating to computer should have to be provided.