



(Established under Galgotias University Uttar Pradesh Act No. 14 of 2011)

OPTIMIZE HOTEL RESERVATION SYSTEM

A Project Report of Project - 1

Submitted by
SHUBHAM CHOUDHARY

(1713104037)

in partial fulfilment for the award of the degree

of

BACHELOR OF COMPUTER APPLICATION(BCA)

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

Under the Supervision of

MR. SACHIN MINOCHA
Professor

APRIL / MAY - 2020



**SCHOOL OF COMPUTING AND SCIENCE AND
ENGINEERING**

BONAFIDE CERTIFICATE

Certified that this project report **“OPTIMIZE HOTRL
RESERVATION SYSTEM”** is the bonafide work of **“SHUBHAM
CHOUDHARY (1713104037)”** who carried out the project work under my
supervision.

SIGNATURE OF HEAD

Dr. MUNISH SHABARWAL
PhD (Management), PhD (CS)
Professor & Dean,
School of Computing Science & Engineering

SIGNATURE OF SUPERVISOR

MR.SACHIN MINOCHA
Professor
School of Computing Science &
Engineering

OPTIMIZED HOTEL RESERVATIONS SYSTEM

Table of Contents

1)ABSTRACT

2)Introduction of the Project.

3)EXISTING SYSTEM AND ITS DISADVANTAGES.

4)PROPOSED SOLUTION ON SYSTEM

5)ARCHITECTURE DIAGRAMS

6)Screenshots

7)SCOPE OF FUTURE APLPLICATION

8)SCOPE OF IMPROOVEMENT

9)Conclusions

1. ABSTRACT

In our project, on “Hotel Reservation System”, we have tried to show how the Data/information in hotels is managed. This is just an overview of management in hotels. This has been achieved by dividing the project into various modules. Customer is provided with different services like checking in, checking out, and editing entries or can be advance payments etc. If the customer wants, he/she can cancel his/her booking. Enquiry about any customer or employee can be made either by customer Id or customer name. Enquiry about rooms available can also be made. Our project also includes the module for employee information. It will generate reports for customer, employees (working in the hotel) and Bill for customer is generated when the customer will check out from the hotel. We have included only few modules, as our purpose is to only have the idea or to study about how the management is done in hotels. By adding many more modules this type of project can have scope in various hotels. After going thought the existing system, problem was identified and the scope of development was finalized. I have designed the given proposed system in the PHP to automate the process of Hotels. This project is useful for the authorities which keep track of all the users registered in a particular state. The authority can add hotel packages, room details, availability of rooms, online booking etc. This project intends to introduce more user friendliness in the various activities such as record updatation, maintenance, and searching. The basic need of this website is efficiency. The website should be efficient so that whenever a new user submits his/her details the website is updated automatically. This record will be useful for other users instantly.

2. INTRODUCTION

This is a Project work undertaken in context of partial fulfillment of BCA. I have tried my best to make the complicated process of Online Hotel Reservation System as simple as possible using Structured & Modular technique & Menu oriented interface. I have tried to design the software in such a way that user may not have any difficulty in using this package & further expansion is possible without much effort. Even though I cannot claim that this work to be entirely exhaustive, the main purpose of my exercise is perform each Employee's activity in computerized way rather than manually which is time consuming.

I am confident that this software package can be readily used by non-programming personal avoiding human handled chance of error. This project is used by two types of users

- i. Online Users.
- ii. Administrator (management of the Hotel). Online users can see the required articles or news

Administrator can maintain daily updates in the hotel records. Administrator is must be an authorized user. He can further change the password. There is the facility for password recovery, logout etc.

The main aim of the entire activity is to automate the process of day to day activities of Hotel like Room activities, Admission of a New Customer, assign a room according to customer's demand, checkout of a computer and releasing the room and finally compute the bill etc.

The limited time and resources have restricted us to incorporate, in this project, only a main activity that are performed in a HOTEL Reservation System, but utmost care has been taken to make the system efficient and user friendly. "HOTEL Reservation System" has been designed to computerized the following functions that are performed by the system:

Room Detail Functions

- Opening a New Room
- Modification to room assigned

Check-in and check-out Detail Functions

- Admission of New customer
- Check-out of customer
- Room assigning related to customer's need.

Statement of Customer Details

Check-in customer

Check-out customer

Room Details

Total number of Customers in the Hotel

Individual customer Report

During the past several decades personnel function has been transformed from a relatively obscure record keeping staff to central and top-level management function. There are many factors that have influenced this transformation like technological advances, professionalism, and general recognition of human beings as most important resources.

- A computer-based management system is designed to handle all the primary information required to calculate monthly statements. Separate database is maintained to handle all the details required for the correct statement calculation and generation.
- This project intends to introduce more user friendliness in the various activities such as record updation, maintenance, and searching.
- The searching of record has been made quite simple as all the details of the customer can be obtained by simply keying in the identification of that customer.
- Similarly, record maintenance and updation can also be accomplished by using the identification of the customer with all the details being automatically generated. These details are also being promptly automatically updated in the master file thus keeping the record absolutely up-to-date.
- The entire information has maintained in the database or Files and whoever wants to retrieve can't retrieve, only authorization user can retrieve the necessary information which can be easily be accessible from the file.
- The main objective of the entire activity is to automate the process of day to day activities of Hotel like:
 1. Room activities,
 2. Admission of a New Customer,
 3. Assign a room according to customer's demand,
 4. Checkout of a computer and releasing the room
 5. Finally compute the bill etc.
 6. Packages available.
 7. Advance online bookings.
 8. Online Cancellation.
 9. List of Regular customers.
 10. Email facility.
 11. Feedbacks

This project has some more features:

- System Connectivity
- No data duplication

- No Paper Work Required
- Time Efficient
- Cost Efficient
- Automatic data validation
- User friendly environment
- Data security and reliability
- Fast data insertion & retrieval
- Easy performance check

3. EXISTING SYSTEM AND ITS DISADVANTAGES

In this phase we carry out the task of defining the problem or in other words we define our need for this project. The organization was using the conventional methods (Excel Sheet or Register) for keeping the information about Hotel Management System i.e. records of hotel management system activities. There is various type of activities performed in dayshift & nightshift. It was quite laborious task & involves large number of data records deployed for this purpose.

DISADVANTAGES

- The word „manual“ itself makes the existing system outdated in today’s high-tech world.
- Processing of application manually takes a lot of time.
- Coordinating various departments in this respect is not only time taking but is also a cumbersome process.
- A lot of time is also wasted in summing up records & repairing day wise reports of activities happened on server.
- The system is not deprived of common manual mistakes.
- The staff is also deviated from its main stream work, by paying more time to manual processing of information. As a result, need of employing more staff is being felt, which involves a lot of expenditure.
- The system is also prone to insecurities.
- Sometime same activity happens multiple times due to lack of proper communication among (DBAs).
- This manual does not help Head of the hotel in taking decisions at various levels.

All above points define the disadvantages of conventional methods & suggest developing the new system.

4.PROPOSED SOLUTION ON SYSTEM

To remove all the disadvantages of conventional methods, a system is proposed which is an automation of Hotel Reservation System. Hotel Management System is a project to maintain the record of Hotel Reservation System activities. There is various type of activities performed in dayshift & nightshift. So, this Hotel Reservation System is used to computerize all these activities. There are two kinds of users:

- 1) Admin
- 2) General User

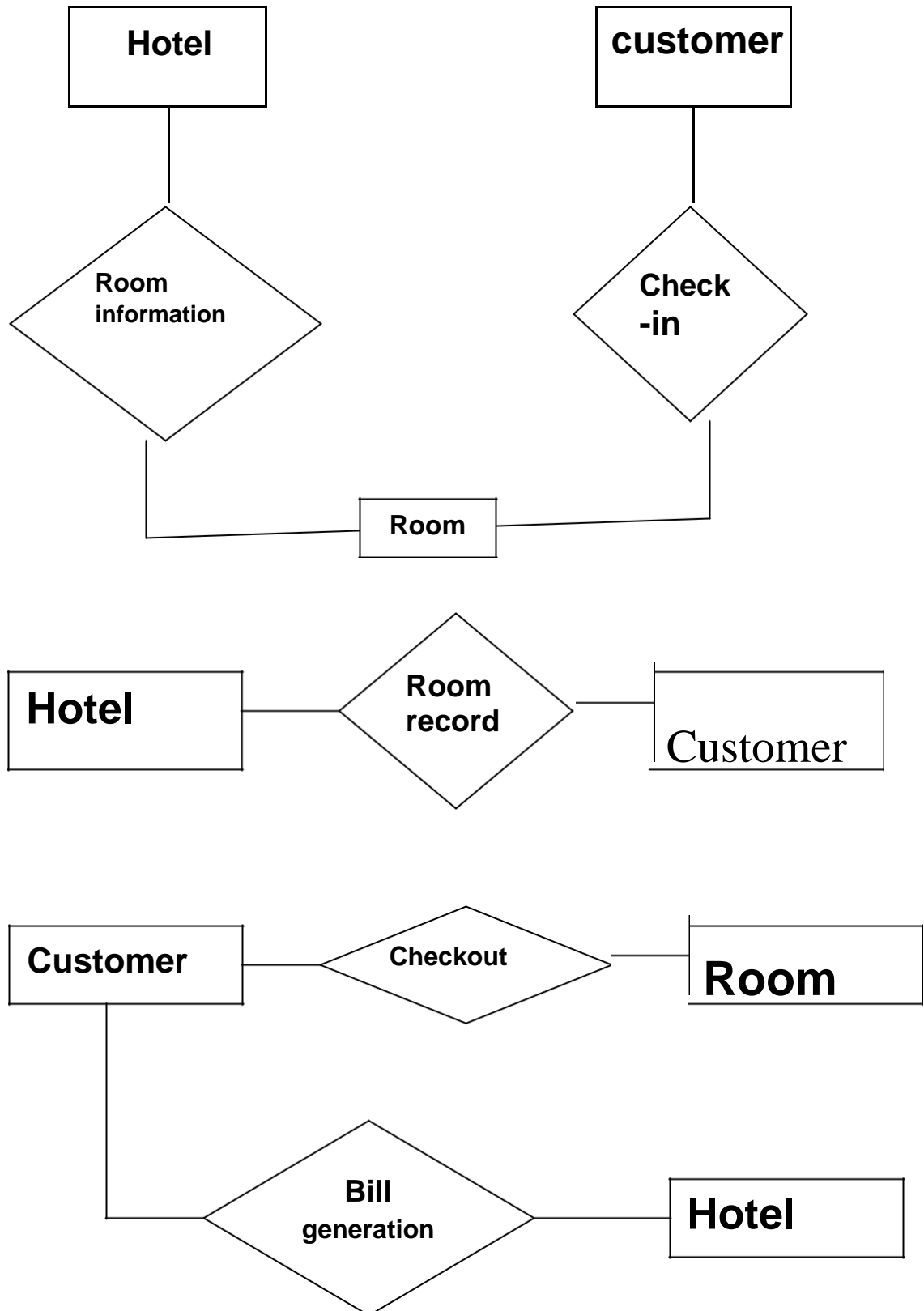
With the help of this project we reduced task deployed for data/information collection to a large extent thereby eliminating the human errors considerably. Therefore, the organization has realized the need for automating the various daily routine activities of hotel & task of data/information collection with the help of database designing. And with this realization our project “HOTEL RESERVATION SYSTEM” comes into practical usage & also benefiting the organization as a whole. Everything that comes into existence must have an objective for its existence. It holds true for our project also. It has been conceived as a powerful tool to help the company in maintaining the various activities of the hotel. It has several benefits over other already existing applications.

ADVANTAGES OF PROPOSED SYSTEM:

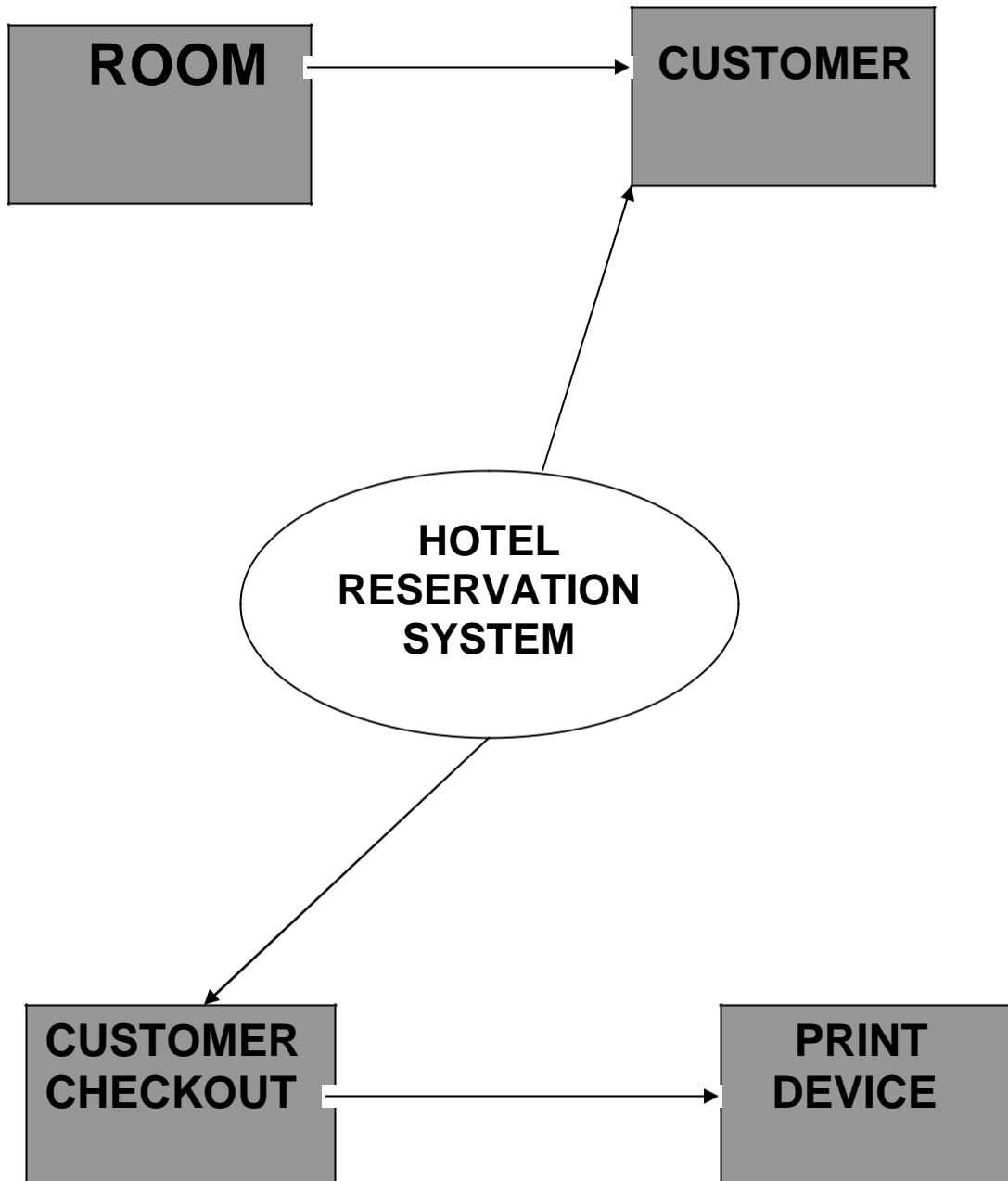
- Huge reduction in the number of pages being used for the data storage.
- Back up facility provided in case of data loss.
- Reduction in cycle time till the updated data will be available.
- Speedy retrieval of data.
- Compatible with the advance versions for future perspective.
- Cost benefits.

5.ARCHITECTURE DIAGRAM:

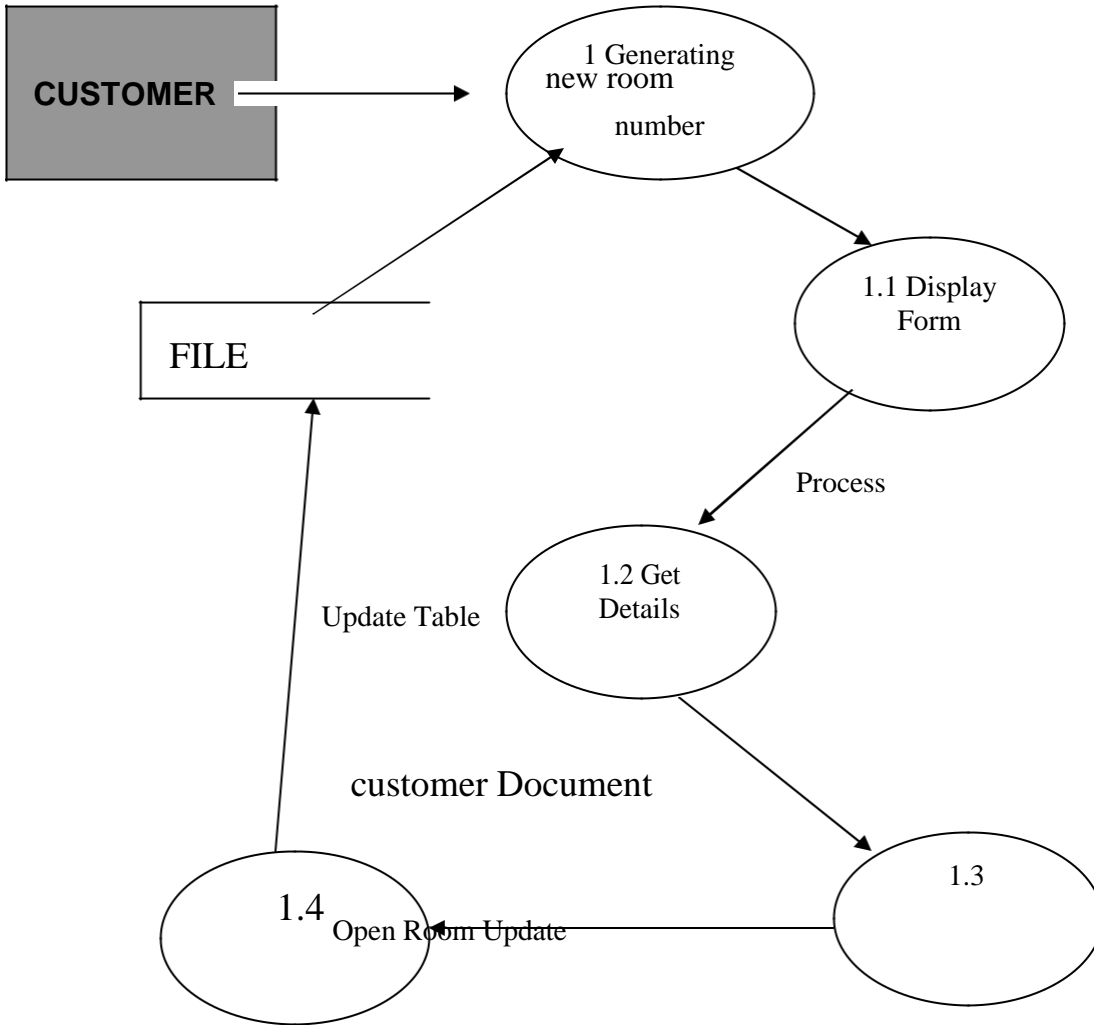
E-R DIAGRAM



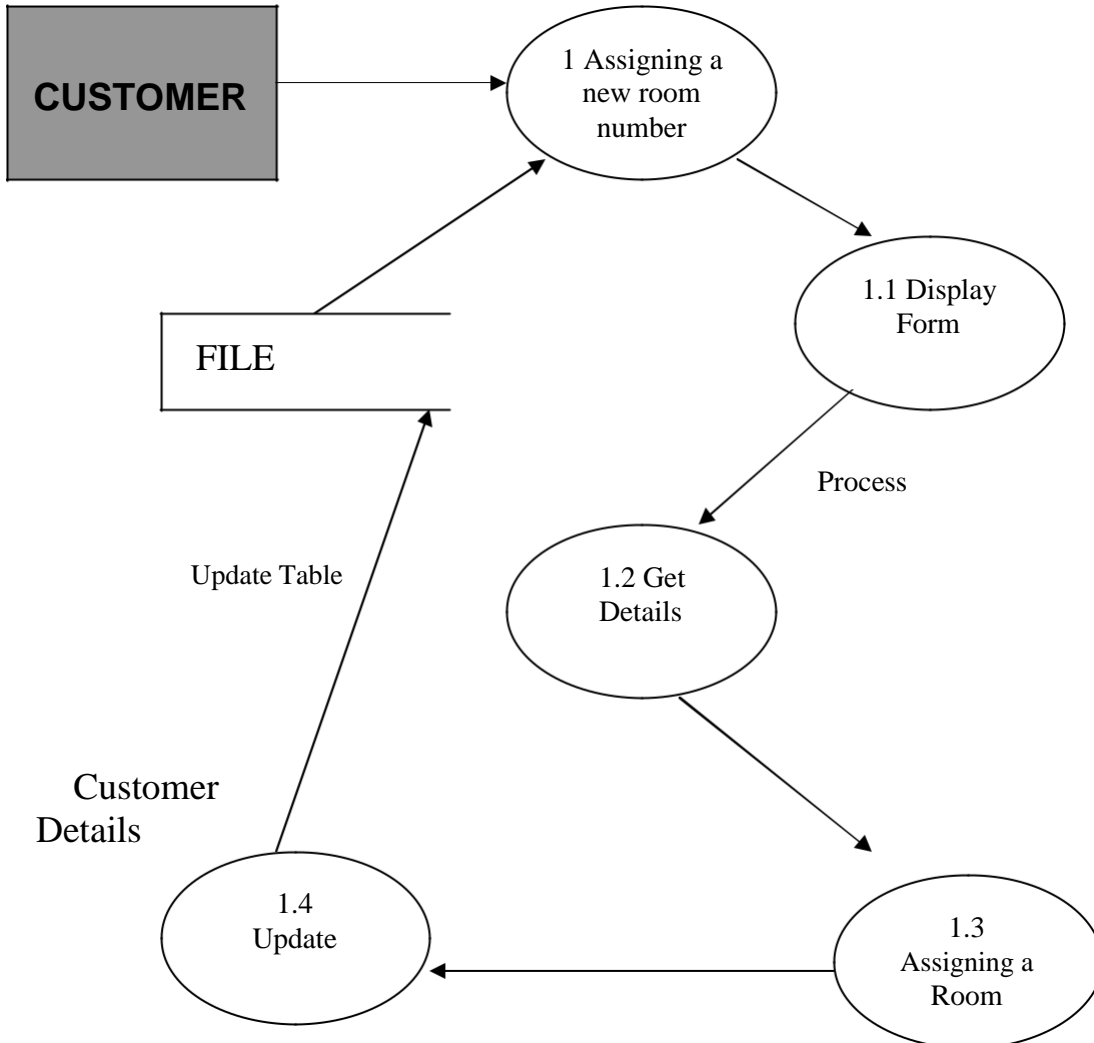
CONTEXT LEVEL DFD HOTEL RESERVATION SYSTEM



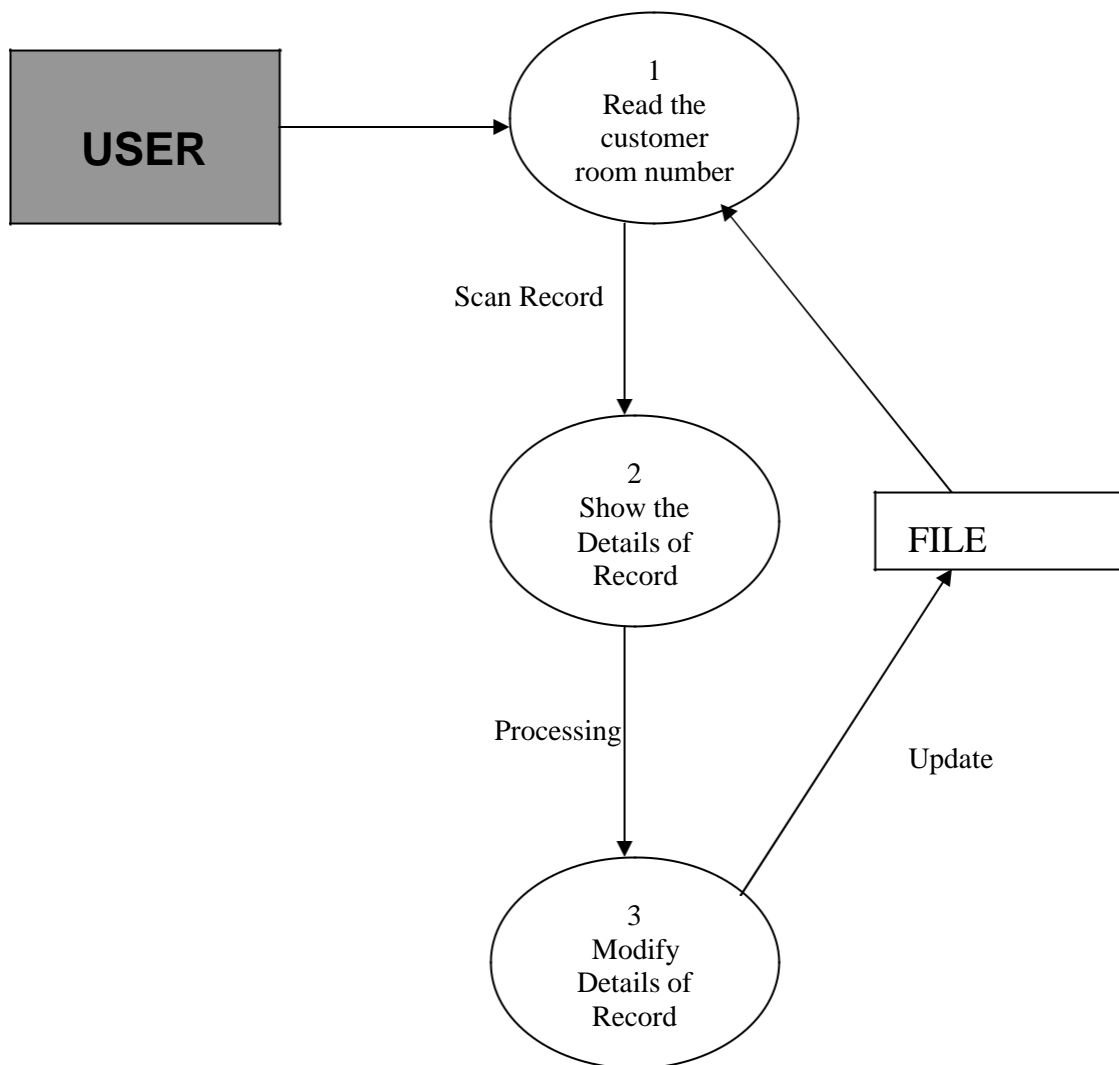
DATA FLOW DIAGRAM OPENING A NEW ROOM



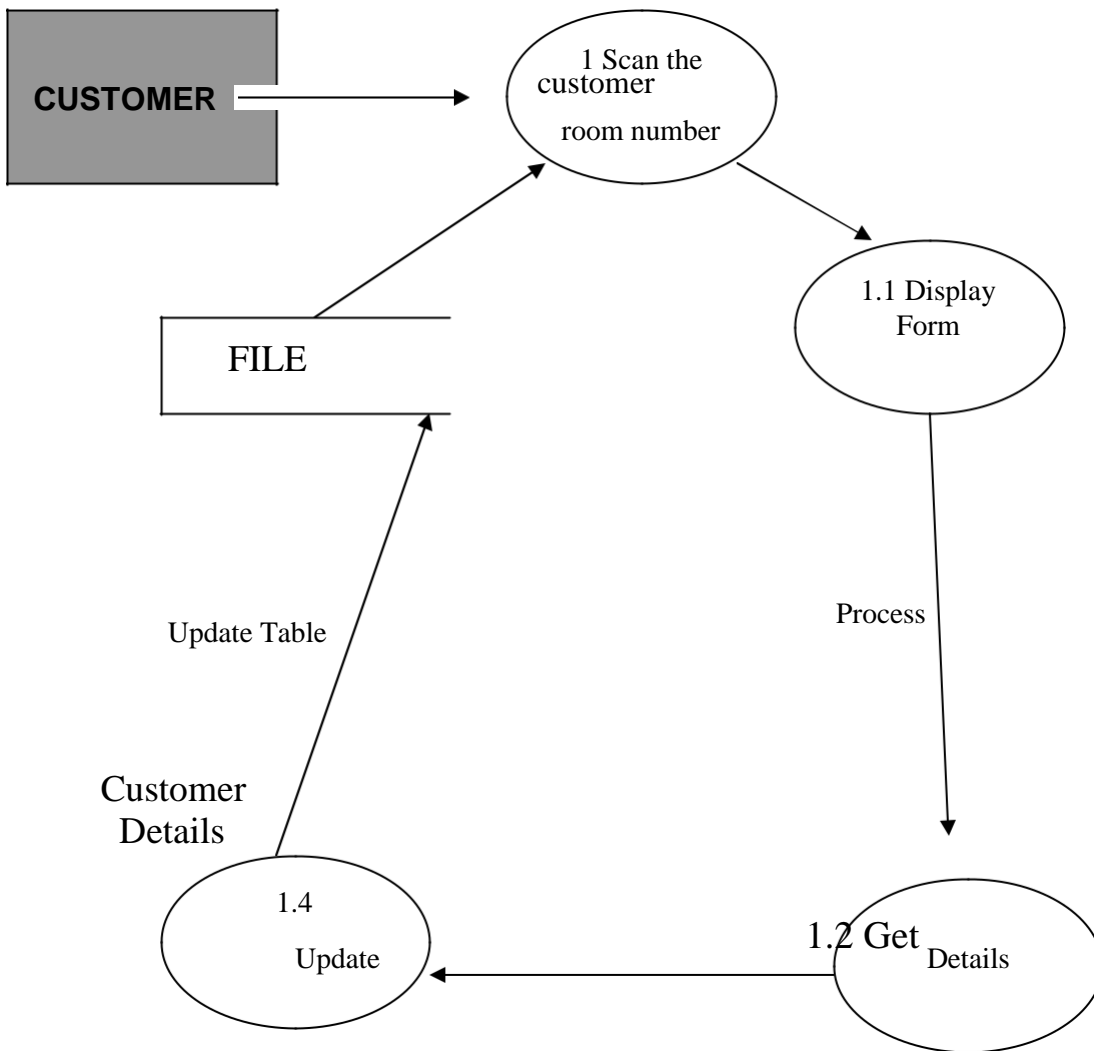
DATA FLOW DIAGRAM CHECK-IN OF A NEW CUSTOMER



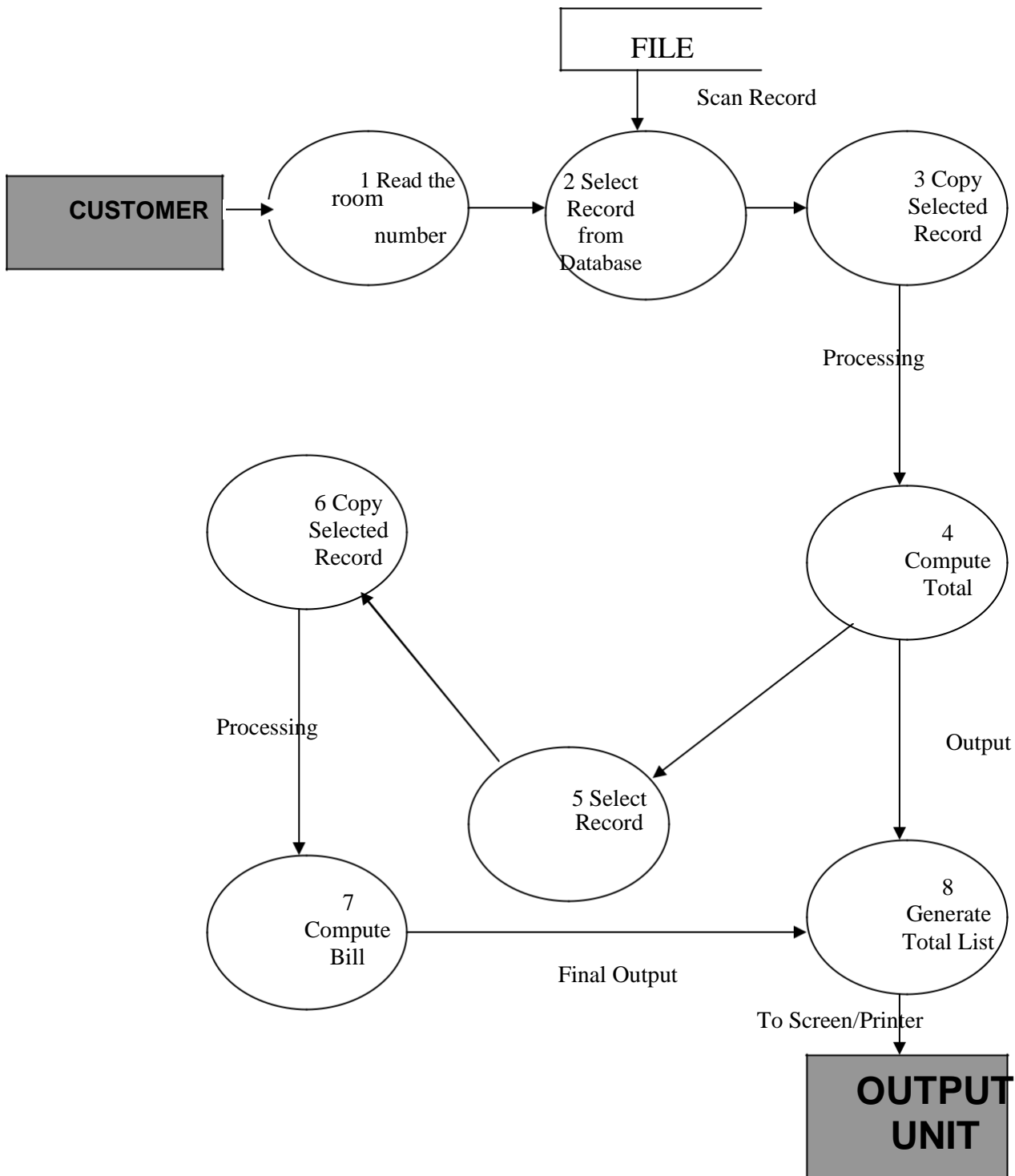
DATA FLOW DIAGRAM RECORD MODIFICATION



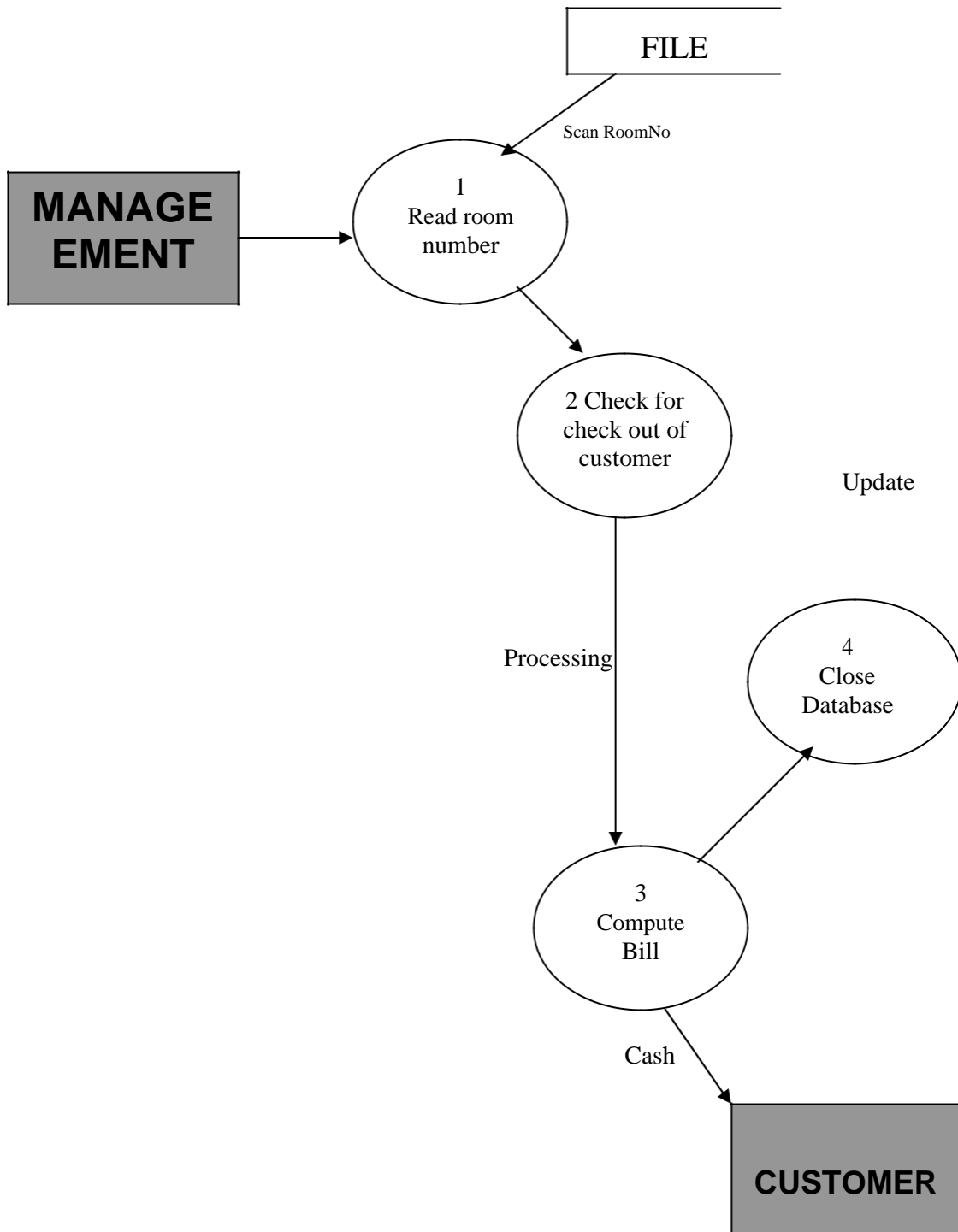
DATA FLOW DIAGRAM CHECK-OUT OF CUSTOMER



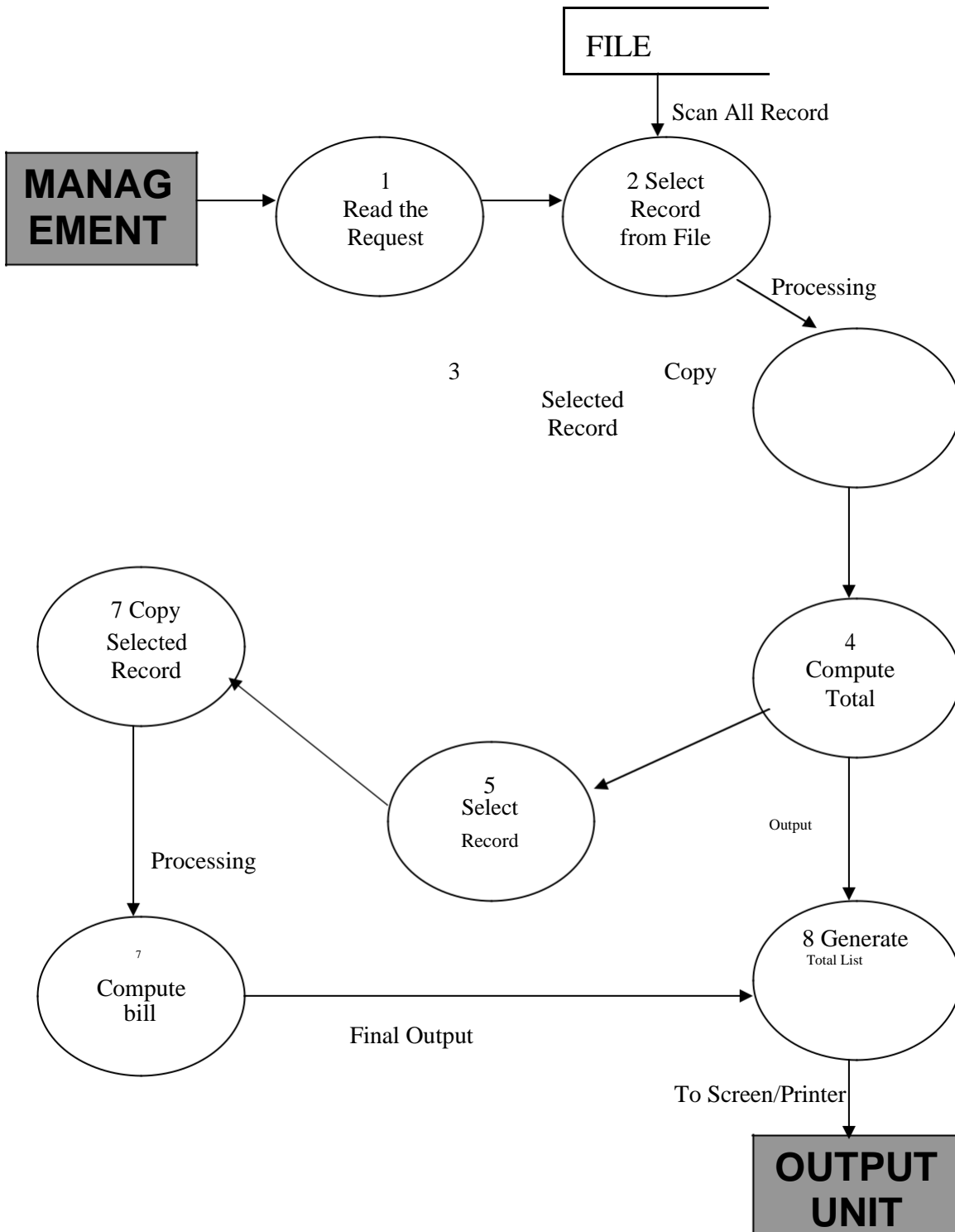
DATA FLOW DIAGRAM LISTING OF CUSTOMERS



DATA FLOW DIAGRAM GENERATING BILL OF CUSTOMER

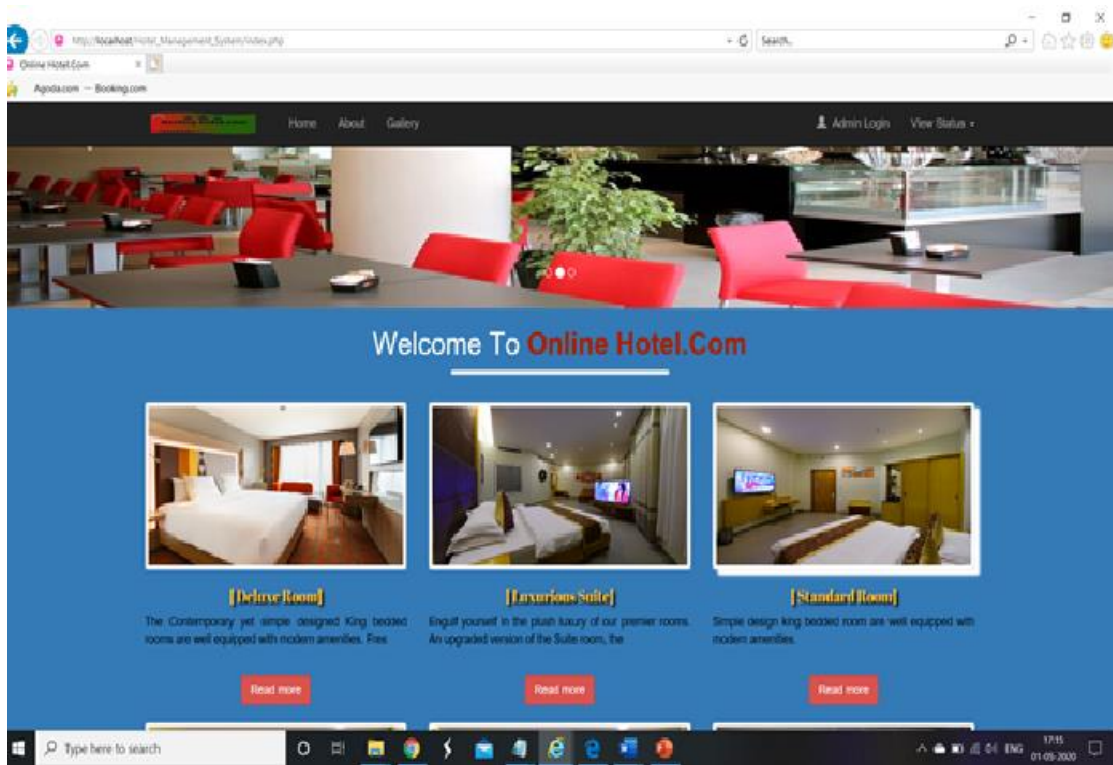


DATA FLOW DIAGRAM LIST OF ALL RECORDS



6. Screenshots:

Home page:



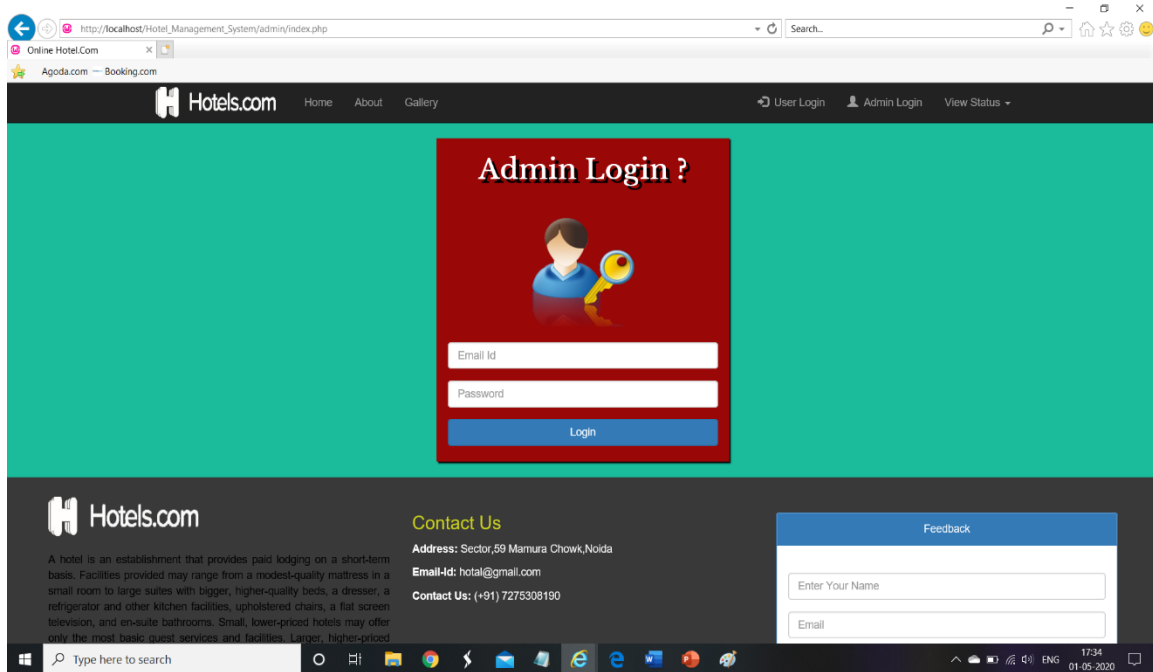
Room page:

The screenshot shows a web browser window with the URL `http://localhost/Hotel_Management_System/room_details.php?room_id=30`. The page features a navigation bar with 'Home', 'About', and 'Gallery' links, and 'Admin Login' and 'View Status' options. A large image of a hotel room is displayed, with a 'Room Type' dropdown menu on the right. The menu is open, showing options: 'Deluxe Room', 'Luxurious Suite', 'Standard Room', 'Suite', 'Twin Deluxe Room', and 'Parking Area'. Below the image, the text reads: **Luxurious Suite** **16000**. A description follows: 'Engulf yourself in the plush luxury of our premier rooms. An upgraded version of the Suite room, these rooms offer an elegant design with larger room space.'

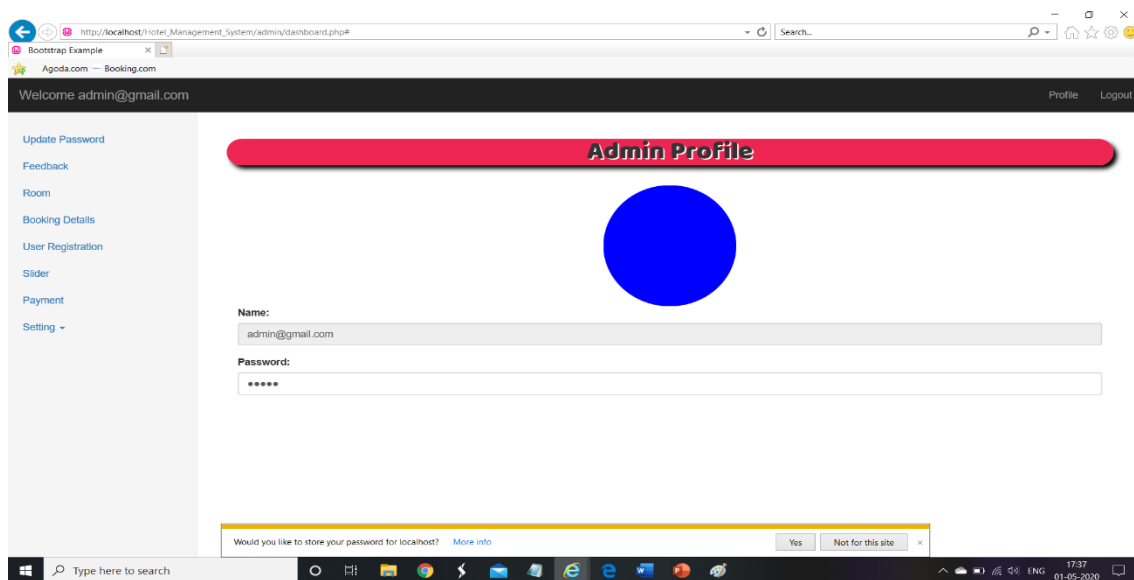
Gallery page:

The screenshot shows a web browser window with the URL `https://localhost/Hotel_Management_System/image%20gallery.php`. The page has a navigation bar with 'Home', 'About', and 'Gallery' links, and 'Admin Login' and 'View Status' options. The main content is titled 'Image Gallery' and displays a grid of nine images showing various hotel interiors, including a lobby, lounge areas, and a conference room. The browser's taskbar at the bottom shows the time as 17:30 on 01-05-2020.

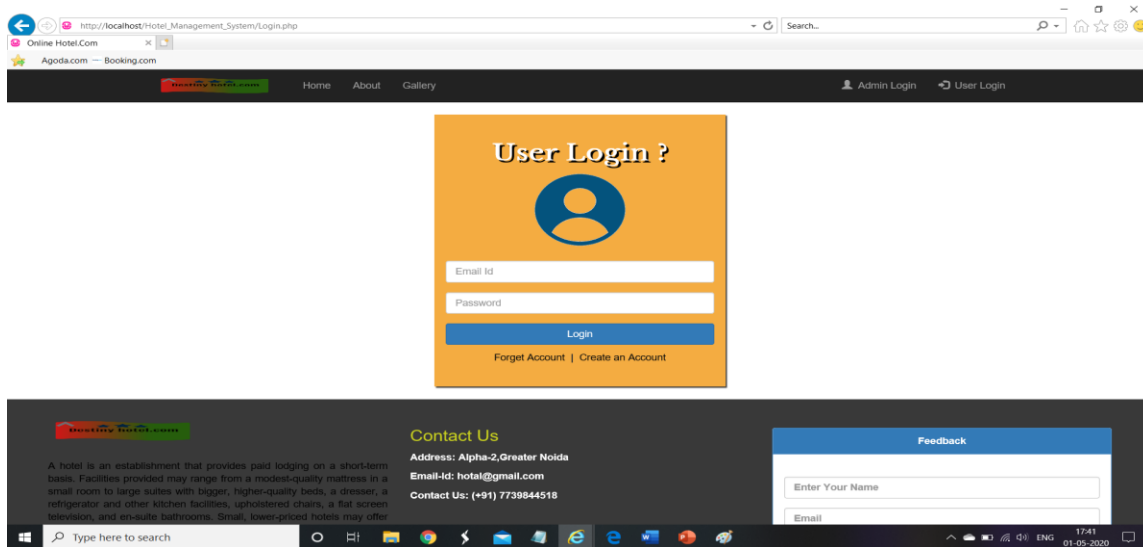
Admin login page:



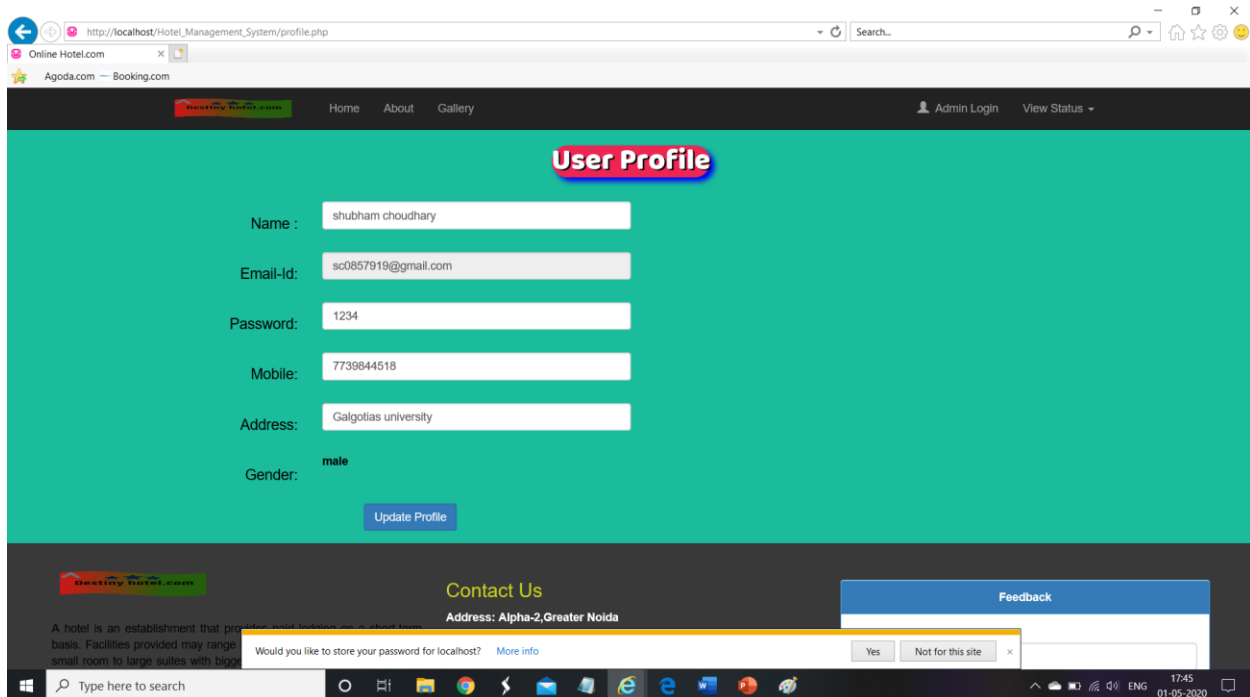
Admin home page:



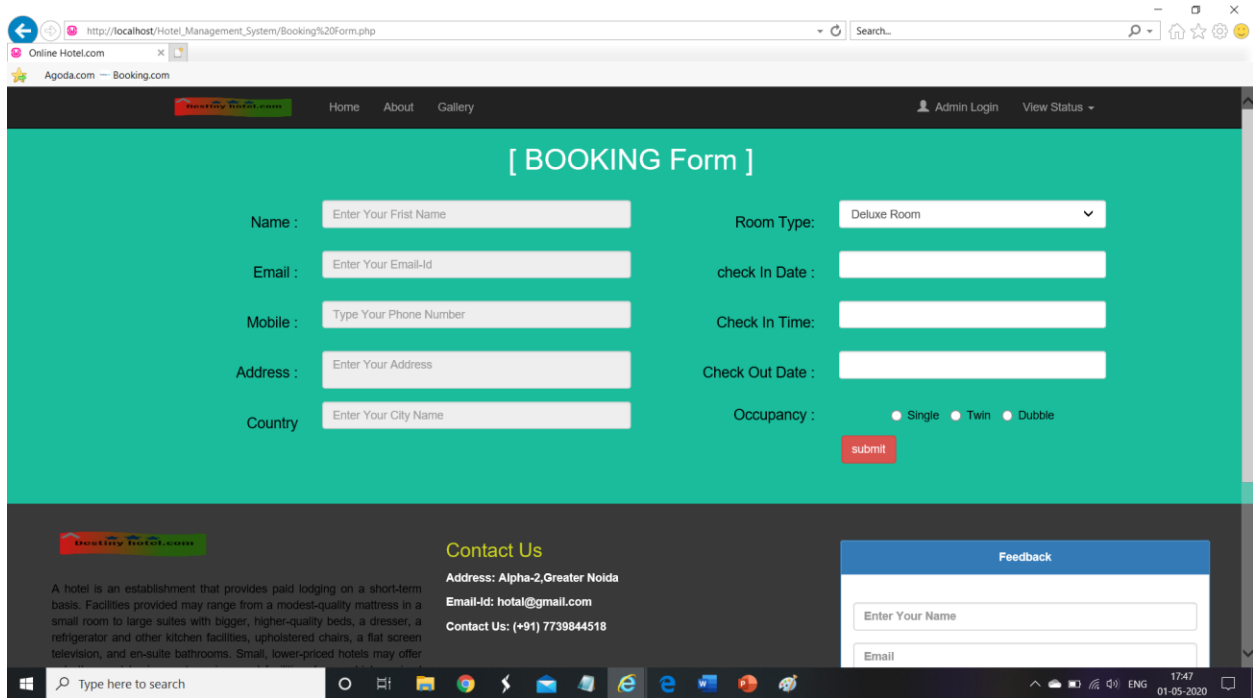
User login page:



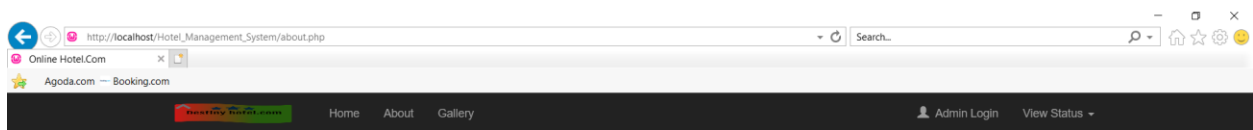
User profile page:



Booking page:



About page:



{ Hotel.com }

A hotel is an establishment that provides paid lodging on a short-term basis. Facilities provided may range from a modest-quality mattress in a small room to large suites with bigger, higher-quality beds, a dresser, a refrigerator and other kitchen facilities, upholstered chairs, a flat screen television, and en-suite bathrooms. Small, lower-priced hotels may offer only the most basic guest services and facilities. Larger, higher-priced hotels may provide additional guest facilities such as a swimming pool, business centre (with computers, printers, and other office equipment), childcare, conference and event facilities, tennis or basketball courts, gymnasium, restaurants, day spa, and social function services. Hotel rooms are usually numbered (or named in some smaller hotels and B&Bs) to allow guests to identify their room. Some boutique, high-end hotels have custom decorated rooms. Some hotels offer meals as part of a room and board arrangement. In the United Kingdom, a hotel is required by law to serve food and drinks to all guests within certain stated hours.[citation needed] In Japan, capsule hotels provide a tiny room suitable only for sleeping and shared bathroom facilities. The precursor to the modern hotel was the inn of medieval Europe. For a period of about 200 years from the mid-17th century, coaching inns served as a place for lodging for coach travelers. Inns began to cater to richer clients in the mid-18th century. One of the first hotels in a modern sense was opened in Exeter in 1768. Hotels proliferated throughout Western Europe and North America in the early 19th century, and luxury hotels began to spring up in the later part of the 19th century. Hotel operations vary in size, function, complexity, and cost. Most hotels and major hospitality companies have set industry standards to classify hotel types. An upscale full-service hotel facility offers luxury amenities, full service accommodations, an on-site restaurant, and the highest level of personalized service, such as a concierge, room service, and clothes pressing staff. Full service hotels often contain upscale full-service facilities with a large number of full service accommodations, an on-site full service restaurant, and a variety of on-site amenities. Boutique hotels are smaller independent, non-branded hotels that often contain upscale facilities. Small to medium-sized hotel establishments offer a limited amount of on-site amenities. Economy hotels are small to medium-sized hotel establishments that offer basic accommodations with little to no services. Extended stay hotels are small to medium-sized hotels that offer longer-term full service accommodations compared to a traditional hotel.

[Services]

Full-service hotels often provide a wide array of guest services and on-site facilities. Commonly found amenities may include: on-site food and beverage (room service and restaurants), meeting and conference services and facilities, fitness center, and business center. Full-service hotels range in quality from mid-scale to luxury. This classification is based upon the quality of facilities and amenities offered by the hotel. [8] Examples include: Holiday Inn, Kimpton Hotels, Hilton, Marriott, and Hyatt Regency brands.



7.Scope of Future Application

This project can be used in the hotel after adding some more useful modules in the project for which hotel are providing services.

Utmost care and back-up procedures must be established to ensure 100% successful implementation of the computerized hotel system. In case of system failure, the organization should be in a position to process the transaction with another organization or if the worst comes to the worst, it should be in a position to complete it manually

8.Scope of Improvement

Now a days hotel are providing many other facilities, this project can also be improved with the improvement in the Hotels.

Utmost care and back-up procedures must be established to ensure 100% successful implementation of the computerized banking system. In case of system failure, the organization should be in a position to process the transaction with another organization or if the worst comes to the worst, it should be in a position to complete it manually

9.CONCLUSION

This project is designed to meet the requirements of Online Hotel Reservation. It has been developed in Php, Servlets keeping in mind the specifications of the system.

For designing the system we have used simple data flow diagrams.

Overall the project teaches us the essential skills like:

Using system analysis and design techniques like data flow diagram in designing the system.

Understanding the database handling and query processing.

