# HOTEL MANAGEMENT PROJECT

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INRODUCTION :-

Hotel management system is the system for manage the all facilities of hotel. The main point of developing this system is to help hotel administrator. Manage the hotel facilities and help customer for online booking and reserve table.

My project title is Hotel Management System. I have tried my best to make the complicated process of Hotel Management System as simple as possible using Structured & Modular technique & Menu oriented interface. I have tried to design the Project in such a way that user may not have any difficulty in using this package & further expansion is possible without much effort. 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 activities that are performed in a HOTEL Management System, but utmost care has been taken to make the system efficient and user friendly. “HOTEL Management 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

Hotel management system is the system for manage the all facilities of hotel. The main point of developing this system is to help hotel administrator. Manage the hotel facilities and help customer for online booking and reserve table. So, hotel management system will develop to help the Hotel Administrator to manage facilities and for customer make their online Ordering and reservation table. Other than that, this project is to upgrade the manual System and make the business easily to access and systematic.

OBJECTIVE:-

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:

• Room activities,

• Admission of a New Customer,

• Assign a room according to customer’s demand,

• Checkout of a computer and releasing the room

• Finally compute the bill etc.

• Packages available.

• Advance online bookings.

• Online Cancellation.

• List of Regular customers.

• Email facility.

System Analysis:-

System analysis is the process of studying the business processors and procedures, generally referred to as business systems, to see how they can operate and whether improvement is needed. This may involve examining data movement and storage, machines and technology used in the system, programs that control the machines, people providing inputs, doing the processing and receiving the outputs. The investigation phase is also known as the fact-finding stage or the analysis of the current system. This is a detailed study conducted with the purpose of wanting to fully understand the existing system and to identify the basic information requirements. Various techniques may be used in fact-finding and all fact obtained must be recorded. A through investigation was done in every effected aspect when determining whether the purposed system is feasible enough to be implemented. Investigation As it was essential for us to find out more about the present system, we used the following methods to gather the information: -

1. Observation: - Necessary to see the way the system works first hand.

2 Document sampling: - These are all the documents that are used in the system. They are necessary to check all the data that enters and leaves the system.

3 Questionnaires: - These were conducted to get views of the other employees who are currently employed in the system.

Strengths of the System:-

1. No complex equipment: -The equipment that is used is very simple and no special skills have to be mastered to be able to operate the system. Therefore no training is required for the employees.

2. Low cost:-There is little money spent in maintaining the present system other than buying the necessary office equipment and the ledgers.

Constraints and Limitations:

The constraints and limitation within a system are the drawbacks that occur during the implementation of the system. These limitations and constraints can crop up in almost every system; the most important fact is to find a way to overcome these problems. Software design is the first of three technical activities – design, code generation, and test that are required to build and verify the software. Each activity transforms information in manner that ultimately results in validated computer software. The design task produces a data design, an architectural design, an interface design and component design. The design of an information system produces the details that clearly describe how a system will meet the requirements identified during system analysis. The system design process is not a step by step adherence of clear procedures and guidelines. When I started working on system design, I face different types of problems; many of these are due to constraints imposed by the user or limitations of hardware and software available.

ADVANTAGE:-

I have designed the given proposed system in the VB 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, booking etc.

The following steps that give the detailed information of the need of proposed system are:-

->Performance: During past several decades, the records are supposed to be manually handled for all activities. The manual handling of the record is time consuming and highly prone to error. To improve the performance of the Hotel Management System, the computerized system is to be undertaken. This project is fully computerized and user friendly even that any of the members can see the report and status of the company.

->Efficiency: 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.

->Control: The complete control of the project is under the hands of authorized person who has the password to access this project and illegal access is not supposed to deal with. All the control is under the administrator and the other members have the rights to just see the records not to change any transaction or entry.

->Security: Security is the main criteria for the proposed system. Since illegal access may corrupt the database.

# CODE :-

#include<iostream>

#include<string.h>

#include<conio.h>

#define max 100

using namespace std;

//Class Customer

class Customer

{

public:

char name[100];

char address[100];

char phone[12];

char from\_date[20];

char to\_date[20];

float payment\_advance;

int booking\_id;

};

class Room

{

public:

char type;

char stype;

char ac;

int roomNumber;

int rent;

int status;

class Customer cust;

class Room addRoom(int);

void searchRoom(int);

void deleteRoom(int);

void displayRoom(Room);

};

//Global Declarations

class Room rooms[max];

int count=0;

Room Room::addRoom(int rno)

{

class Room room;

room.roomNumber=rno;

cout<<"\nType AC/Non-AC (A/N) : ";

cin>>room.ac;

cout<<"\nType Comfort (S/N) : ";

cin>>room.type;

cout<<"\nType Size (B/S) : ";

cin>>room.stype;

cout<<"\nDaily Rent : ";

cin>>room.rent;

room.status=0;

cout<<"\n Room Added Successfully!";

getch();

return room;

}

void Room::searchRoom(int rno)

{

int i,found=0;

for(i=0;i<count;i++)

{

if(rooms[i].roomNumber==rno)

{

found=1;

break;

}

}

if(found==1)

{

cout<<"Room Details\n";

if(rooms[i].status==1)

{

cout<<"\nRoom is Reserved";

}

else

{

cout<<"\nRoom is available";

}

displayRoom(rooms[i]);

getch();

}

else

{

cout<<"\nRoom not found";

getch();

}

}

void Room::displayRoom(Room tempRoom)

{

cout<<"\nRoom Number: \t"<<tempRoom.roomNumber;

cout<<"\nType AC/Non-AC (A/N) "<<tempRoom.ac;

cout<<"\nType Comfort (S/N) "<<tempRoom.type;

cout<<"\nType Size (B/S) "<<tempRoom.stype;

cout<<"\nRent: "<<tempRoom.rent;

}

//hotel management class

class HotelMgnt:protected Room

{

public:

void checkIn();

void getAvailRoom();

void searchCustomer(char \*);

void checkOut(int);

void guestSummaryReport();

};

void HotelMgnt::guestSummaryReport(){

if(count==0){

cout<<"\n No Guest in Hotel !!";

}

for(int i=0;i<count;i++)

{

if(rooms[i].status==1)

{

cout<<"\n Customer First Name : "<<rooms[i].cust.name;

cout<<"\n Room Number : "<<rooms[i].roomNumber;

cout<<"\n Address (only city) : "<<rooms[i].cust.address;

cout<<"\n Phone : "<<rooms[i].cust.phone;

cout<<"\n---------------------------------------";

}

}

getch();

}

//hotel management reservation of room

void HotelMgnt::checkIn()

{

int i,found=0,rno;

class Room room;

cout<<"\nEnter Room number : ";

cin>>rno;

for(i=0;i<count;i++)

{

if(rooms[i].roomNumber==rno)

{

found=1;

break;

}

}

if(found==1)

{

if(rooms[i].status==1)

{

cout<<"\nRoom is already Booked";

getch();

return;

}

cout<<"\nEnter booking id: ";

cin>>rooms[i].cust.booking\_id;

cout<<"\nEnter Customer Name (First Name): ";

cin>>rooms[i].cust.name;

cout<<"\nEnter Address (only city): ";

cin>>rooms[i].cust.address;

cout<<"\nEnter Phone: ";

cin>>rooms[i].cust.phone;

cout<<"\nEnter From Date: ";

cin>>rooms[i].cust.from\_date;

cout<<"\nEnter to Date: ";

cin>>rooms[i].cust.to\_date;

cout<<"\nEnter Advance Payment: ";

cin>>rooms[i].cust.payment\_advance;

rooms[i].status=1;

cout<<"\n Customer Checked-in Successfully..";

getch();

}

}

//hotel management shows available rooms

void HotelMgnt::getAvailRoom()

{

int i,found=0;

for(i=0;i<count;i++)

{

if(rooms[i].status==0)

{

displayRoom(rooms[i]);

cout<<"\n\nPress enter for next room";

found=1;

getch();

}

}

if(found==0)

{

cout<<"\nAll rooms are reserved";

getch();

}

}

//hotel management shows all persons that have booked room

void HotelMgnt::searchCustomer(char \*pname)

{

int i,found=0;

for(i=0;i<count;i++)

{

if(rooms[i].status==1 && stricmp(rooms[i].cust.name,pname)==0)

{

cout<<"\nCustomer Name: "<<rooms[i].cust.name;

cout<<"\nRoom Number: "<<rooms[i].roomNumber;

cout<<"\n\nPress enter for next record";

found=1;

getch();

}

}

if(found==0)

{

cout<<"\nPerson not found.";

getch();

}

}

//hotel managemt generates the bill of the expenses

void HotelMgnt::checkOut(int roomNum)

{

int i,found=0,days,rno;

float billAmount=0;

for(i=0;i<count;i++)

{

if(rooms[i].status==1 && rooms[i].roomNumber==roomNum)

{

//rno = rooms[i].roomNumber;

found=1;

//getch();

break;

}

}

if(found==1)

{

cout<<"\nEnter Number of Days:\t";

cin>>days;

billAmount=days \* rooms[i].rent;

cout<<"\n\t######## CheckOut Details ########\n";

cout<<"\nCustomer Name : "<<rooms[i].cust.name;

cout<<"\nRoom Number : "<<rooms[i].roomNumber;

cout<<"\nAddress : "<<rooms[i].cust.address;

cout<<"\nPhone : "<<rooms[i].cust.phone;

cout<<"\nTotal Amount Due : "<<billAmount<<" /";

cout<<"\nAdvance Paid: "<<rooms[i].cust.payment\_advance<<" /";

cout<<"\n\*\*\* Total Payable: "<<billAmount-rooms[i].cust.payment\_advance<<"/ only";

rooms[i].status=0;

}

getch();

}

//managing rooms (adding and searching available rooms)

void manageRooms()

{

class Room room;

int opt,rno,i,flag=0;

char ch;

do

{

system("cls");

cout<<"\n### Manage Rooms ###";

cout<<"\n1. Add Room";

cout<<"\n2. Search Room";

cout<<"\n3. Back to Main Menu";

cout<<"\n\nEnter Option: ";

cin>>opt;

//switch statement

switch(opt)

{

case 1:

cout<<"\nEnter Room Number: ";

cin>>rno;

i=0;

for(i=0;i<count;i++)

{

if(rooms[i].roomNumber==rno)

{

flag=1;

}

}

if(flag==1)

{

cout<<"\nRoom Number is Present.\nPlease enter unique Number";

flag=0;

getch();

}

else

{

rooms[count]=room.addRoom(rno);

count++;

}

break;

case 2:

cout<<"\nEnter room number: ";

cin>>rno;

room.searchRoom(rno);

break;

case 3:

//nothing to do

break;

default:

cout<<"\nPlease Enter correct option";

break;

}

}while(opt!=3);

}

using namespace std;

int main()

{

class HotelMgnt hm;

int i,j,opt,rno;

char ch;

char pname[100];

system("cls");

do

{

system("cls");

cout<<"######## Hotel Management #########\n";

cout<<"\n1. Manage Rooms";

cout<<"\n2. Check-In Room";

cout<<"\n3. Available Rooms";

cout<<"\n4. Search Customer";

cout<<"\n5. Check-Out Room";

cout<<"\n6. Guest Summary Report";

cout<<"\n7. Exit";

cout<<"\n\nEnter Option: ";

cin>>opt;

switch(opt)

{

case 1:

manageRooms();

break;

case 2:

if(count==0)

{

cout<<"\nRooms data is not available.\nPlease add the rooms first.";

getch();

}

else

hm.checkIn();

break;

case 3:

if(count==0)

{

cout<<"\nRooms data is not available.\nPlease add the rooms first.";

getch();

}

else

hm.getAvailRoom();

break;

case 4:

if(count==0)

{

cout<<"\nRooms are not available.\nPlease add the rooms first.";

getch();

}

else

{

cout<<"Enter Customer Name: ";

cin>>pname;

hm.searchCustomer(pname);

}

break;

case 5:

if(count==0)

{

cout<<"\nRooms are not available.\nPlease add the rooms first.";

getch();

}

else

{

cout<<"Enter Room Number : ";

cin>>rno;

hm.checkOut(rno);

}

break;

case 6:

hm.guestSummaryReport();

break;

case 7:

cout<<"\nTHANK YOU! FOR USING SOFTWARE";

break;

default:

cout<<"\nPlease Enter correct option";

break;

}

}while(opt!=7);

getch();

}