SOURCE CODE

#include<fstream.h>

#include<constream.h>

#include<dos.h>

#include<stdio.h>

#include<string.h>

fstreamfile,file1;

class customer

{ char name[20];

intmobno;

char \*add;

public:

intc\_rno;

void getdata()

{ gotoxy(25,7);

cout<<"Enter customer name :";

gotoxy(47,7);

gets(name);

gotoxy(25,9);

cout<<"Enter mobile number :" ;

gotoxy(47,9);

cin>>mobno;

gotoxy(25,11);

cout<<"Enter address :";

gotoxy(47,11);

gets(add);

}

intgetname(char nm[])

{ return(strcmpi(name,nm));

}

void dispname()

{ puts(name);

}

intmno()

{ returnmobno;

}

};

class room : public customer

{

intrno;

int type;

float charges;

int status;

float amt;

public:

void gendata ();

void display();

void checkin();

void checkout();

void inquiry();

void report();

}o1,rp1,a1;

void main()

{intch;

do

{

clrscr();

gotoxy (30,2);

cout<<"## HOTEL SERVICE ##";

gotoxy (30,5);

cout<<" -HOTEL RESERVATION-" ;

gotoxy (24,8);

cout<<"THE MENU";

gotoxy(25,10);

cout<<"1.INQUIRY" ;

gotoxy(25,11) ;

cout<<"2.REPORT" ;

gotoxy(25,12);

cout<<"3.CHECK IN";

gotoxy(25,13);

cout<<"4.CHECK OUT";

gotoxy(25,14);

cout<<"5.ROOM STATUS";

gotoxy(25,15);

cout<<"6.GENERATE DATABASE";

gotoxy(25,16);

cout<<"7.EXIT";

gotoxy(20,17);

cout<<"Enter your choice - ";

cin>>ch;

switch(ch)

{ case 1:o1.inquiry();

break;

case 2:o1.report();

break;

case 3:o1.checkin();

break;

case 4:o1.checkout();

break;

case 5:o1.display();

break;

case 6:o1.gendata();

break;

case 7:break ;

default:gotoxy(40,17);

cout<<"Invalid choice";

}

getch();

}while(ch!=7);

}

void room::gendata()

{clrscr();

char choice;

do

{ gotoxy(30,2);

cout<<"-- GENERATE DATABASE --";

gotoxy(25,8);

cout<<"# Room no.:" ;

gotoxy(25,10);

cout<<"# type : ";

gotoxy(18,20);

cout<<"Enter '0' for ordinary room and '1' for delux room";

gotoxy(25,12);

cout<<"# charges :";

fstream file;

file.open("room.dat",ios::app|ios::binary);

gotoxy(40,8);

cin>>o1.rno;

gotoxy(40,10);

cin>>o1.type;

gotoxy(40,12);

cin>>o1.charges;

o1.status=0;

gotoxy(25,14);

file.write((char\*)&o1,sizeof(o1));

file.close();

gotoxy(25,16);

cout<<"Want to enter more? (y/n) ";

cin>>choice;

clrscr();

}while(choice=='y'||choice=='Y');

}

void room:: display()

{ file.open("room.dat",ios::in |ios::binary);

room r1;

int r=5;

clrscr();

gotoxy(30,2);

cout<<"-- ROOM STATUS --";

gotoxy(5,4);

cout<<"Room no:";

gotoxy(25,4);

cout<<"Type:";

gotoxy(45,4);

cout<<"Charges:";

gotoxy(65,4);

cout<<"Status:";

while((file.read((char \*) &r1,sizeof(r1))))

{ r++;

gotoxy(5,r);

cout<<r1.rno ;

if(r1.type==0)

{ gotoxy(25,r);

cout<<"Ordinary";

}

else

{ gotoxy(25,r);

cout<<"Deluxe";

}

gotoxy(45,r);

cout<<r1.charges;

gotoxy(65,r);

if(r1.status==0)

{ gotoxy(65,r);

cout<<"Vacant";

}

else

{ gotoxy(65,r);

cout<<"Occupied";

}

}

file.close();

}

void room::checkin()

{clrscr();

intty,flag=0;

gotoxy(32,2);

cout<<"-- CHECK IN --";

gotoxy(25,5);

cout<<"Enter room type:";

gotoxy(18,22);

cout<<"Enter '0' for Ordinary and '1' for Deluxe";

gotoxy(43,5);

cin>>ty;

file1.open("report.dat",ios::app|ios::binary);

file.open("room.dat",ios::in|ios::out|ios::binary);

long pos=file.tellg();

while(file.read((char \*)&a1,sizeof(a1)))

{ pos=file.tellg();

if(a1.type==ty)

{ if(a1.status==0)

{

a1.getdata();

gotoxy(25,13);

cout<<"Your room no is : "<<a1.rno;

a1.status=1;

file.seekp(pos-sizeof(a1),ios::beg);

file.write((char\*)&a1,sizeof(a1));

file1.write((char\*)&a1,sizeof(a1));

flag=1;

break;

}

}

}

if(flag==0)

{ gotoxy(25,7);

cout<<"No room available.";

}

file.close();

file1.close();

}

void room :: checkout()

{ clrscr();

long pos=file.tellg();

intrmno,days,flag=0;

gotoxy(32,2);

cout<<"-- CHECK OUT --";

gotoxy(25,6);

cout<<"Enter room number:";

gotoxy(45,6);

cin>>rmno;

file.open("room.dat",ios::in|ios::out|ios::binary);

file1.open("report.dat",ios::in|ios::out|ios::binary);

while(file.read((char \*)&o1,sizeof(o1)))

{ pos=file.tellg();

if(o1.rno==rmno)

{ if(o1.status==1)

{ o1.status=0;

file.seekp(pos-sizeof(o1),ios::beg);

file.write((char\*)&o1,sizeof(o1));

gotoxy(25,8);

cout<<"Enter no. of days stayed: ";

cin>>days;

if(o1.type==0)

{ o1.amt=days\*o1.charges;

gotoxy(25,10);

cout<<"Your total amount= "<<o1.amt;

}

else

{ o1.amt=days\*o1.charges;

gotoxy(25,10);

cout<<"Your total amount= "<<o1.amt;

}

gotoxy(25,12);

cout<<"Checkout successfull.";

flag=1;

break;

}

}

}

while(!file1.eof())

{ pos=file1.tellg();

file1.read((char\*)&a1,sizeof(a1));

{ if(a1.rno==o1.rno)

{ if(a1.mno()==o1.mno())

{ a1.amt=o1.amt;

file1.seekp(pos);

file1.write((char\*)&a1,sizeof(a1));

}

}

}

}

if(flag==0)

{ gotoxy(25,8);

cout<<"Invalid room";

}

file.close();

file1.close();

}

void room :: inquiry()

{ clrscr();

char nm[20];

int flag=0;

room c1;

gotoxy(32,2);

cout<<"-- INQUIRY --";

gotoxy(25,6);

cout<<"Enter your name: ";

gets(nm);

file.open("room.dat",ios::in|ios::binary);

while(file.read((char \*)&c1,sizeof(c1)))

{

if(c1.getname(nm)==0)

{

gotoxy(25,8);

cout<<"Your room no.is:"<<c1.rno;

flag=1;

break;

}

}

if(flag==0)

{ gotoxy(25,8);

cout<<"No room booked by this name";

}

file.close();

}

void room :: report()

{ clrscr();

int r=5;

file1.open("report.dat",ios::in|ios::binary);

gotoxy(30,2);

cout<<"-- REPORT --";

gotoxy(5,4);

cout<<"Room no:";

gotoxy(25,4);

cout<<"Name:";

gotoxy(45,4);

cout<<"Charged:";

while((file1.read((char \*) &rp1,sizeof(rp1))))

{ r++;

gotoxy(5,r);

cout<<rp1.rno ;

gotoxy(25,r);

rp1.dispname();

gotoxy(45,r);

{ if(rp1.amt==0)

cout<<"Not yet checked out";

else

cout<<rp1.amt;

}

}

file1.close();

}