**FORMATION OF THE APPLICATION**

* SOFTWARE AND HARDWARE USED
* Hardware Interfaces
* Processor: INTEL CORE 1.5
* SYSTEM MODEL: DELL INSPIRON N3010
* Hard Disk: 160 GB
* Software Interfaces
* OPERATING SYSTEM: Windows 7
* SOFTWARE: TURBO C++ 3.0
* HEADERS USED
* #include<iostream.h> for I/O console
* #include<conio.h> for clrscr() and getch()
* #include<stdio.h> for gets()
* #include<process.h> for exit()
* #include<string.h> for string handling
* #include<fstream.h> for data file handling
* #include<time.h> for getting current date and time

**SOURCE CODE**

#include<iostream.h>

#include<conio.h>

#include<string.h>

#include<time.h>

#include<process.h>

#include<fstream.h>

int trap=0;

struct logindata // please note the password : dkb

{

char username[10];

char password[10];

};

void login();

void coupd();

void coup();

void gen();

void dlx();

void spd();

void login()

{

clrscr() ;

char pass1, pass2, pass3 ;

gotoxy(30,12) ;

cout<<"Enter the password : " ;

pass1=getch() ;

cout<<"\*" ;

pass2=getch() ;

cout<<"\*" ;

pass3=getch() ;

cout<<"\*" ;

getch();

if (pass1 == 'd' && pass2 == 'k' && pass3 == 'b')

{

return;

}

clrscr();

cout<<" WRONG PASSWORD " ;

getch() ;

exit(0) ;

}

class room

{

protected:

int r\_no;

int r\_charge;

char r\_cust[20];

char c\_city[20];

int c\_mem;

char c\_nat[20];

char r\_avail;

int r\_per;

int no;

char type[20];

int charge;

char cust[20];

char avail;

int per;

int year;

int mon;

int day;

public:

char r\_type[20];

char getavail()

{

return(r\_avail);

}

void getr1()

{

r\_no=1;

strcpy(r\_type,"Sp Dlx");

r\_charge=1500;

r\_avail='Y';

strcpy(r\_cust,"N.A");

r\_per=0;

}

void getr2()

{

r\_no=2;

strcpy(r\_type,"Dlx");

r\_charge=1000;

r\_avail='Y';

strcpy(r\_cust,"N.A");

r\_per=0;

}

void getr3()

{

r\_no=3;

strcpy(r\_type,"Gen");

r\_charge=750;

r\_avail='Y';

strcpy(r\_cust,"N.A");

r\_per=0;

}

void getr4()

{

r\_no=4;

strcpy(r\_type,"Coupl");

r\_charge=1250;

r\_avail='Y';

strcpy(r\_cust,"N.A");

r\_per=0;

}

void getr5()

{

r\_no=5;

strcpy(r\_type,"C Dlx");

r\_charge=1500;

r\_avail='Y';

strcpy(r\_cust,"N.A");

r\_per=0;

}

void putinfo()

{

cout<<"\n"<<r\_no<<"\t "<<r\_type<<"\t "<<r\_charge<<"\t "<<r\_avail<<"\t "<<r\_cust<<"\t "<<r\_per;

}

void modify()

{

cout<<"\n Enter modifyied data";

cout<<"\n\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_";

cout<<"\n Enter Room no :";

cin>>no;

cout<<"\n Enter Room type :";

cin>>type;

cout<<"\n Enter Room charges :";

cin>>charge;

cout<<"\n Enter Room Availability :";

cin>>avail;

cout<<"\n Enter name of cust living :";

cin>>cust;

cout<<"\n For how many days cust want the room :";

cin>>per;

cout<<"\n...... Data is modified";

r\_no=no;

strcpy(r\_type,type);

r\_charge=charge;

r\_avail=avail;

strcpy(r\_cust,cust);

r\_per=per;

}

void allocate()

{

if(r\_avail=='Y')

{

cout<<"\n Enter Name of cust living :";

cin >>cust;

cout<<"\n For how many days cust want the room :";

cin>>per;

cout<<"\n Enter city name :";

cin>>c\_city;

cout<<"\n Enter nationality :";

cin>>c\_nat;

cout<<"\n Enter no. of member in your group :";

cin>>c\_mem;

cout<<"\n Enter the date of arrival ";

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

cout<<"\n Year : ";

cin >>year;

cout<<"\n Month :";

cin >>mon;

cout<<"\n Day :";

cin >>day;

cout<<"\n... Room is allocated to "<<cust<<" for "<<per<<" days.";

strcpy(r\_cust,cust);

r\_per=per;

r\_avail='N';

}

else

{

cout<<"\n ERROR : Room cannot be allocated ...";

cout<<"\n Room is not available...";

}

}

void putcust()

{

int i,j;

i=day+r\_per;

j=strcmp(r\_cust,"N.A");

if(j==0)

{

cout<<"\n Data not available ";

}

else

{

cout<<"\n Room No :"<<r\_no;

cout<<"\n Customer Name :"<<r\_cust;

cout<<"\n Days :"<<r\_per;

cout<<"\n City :"<<c\_city;

cout<<"\n Nationality :"<<c\_nat;

cout<<"\n No of member :"<<c\_mem;

cout<<"\n Arrival Date :"<<day<<"/"<<mon<<"/"<<year;

date(i,mon,year);

}

}

friend void date(int d,int m,int y);

};

void date(int d,int m,int y)

{

int i;

i=m%12;

if(i==0)

{

if(d>31)

{

d=d-31;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==1)

{

if(d>31)

{

d=d-31;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==2)

{

if(d>30)

{

d=d-30;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==3)

{

if(d>31)

{

d=d-31;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==4)

{

if(d>30)

{

d=d-30;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==5)

{

if(d>31)

{

d=d-31;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==6)

{

if(d>30)

{

d=d-30;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==7)

{

if(d>31)

{

d=d-31;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==8)

{

if(d>31)

{

d=d-31;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==9)

{

if(d>30)

{

d=d-30;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==10)

{

if(d>31)

{

d=d-31;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

else

if(i==11)

{

if(d>30)

{

d=d-30;

m=m+1;

}

if(m>12)

{

m=m-12;

y=y+1;

}

cout<<"\n Departure Date :"<<d<<"/"<<m<<"/"<<y;

}

}

class bill: public room

{

private:

long total;

int food;

long room;

float ser;

int t;

int oc;

public:

void calculate()

{

room= r\_charge \* r\_per;

cout<<"\n Enter the bill amount of restaurant:";

cin>>food;

cout<<"\n Enter other charges:";

cin>>oc;

t=(int) room + food + oc;

ser=(int)(0.103\*t);

total=t+ser;

}

void dispbill()

{

clrscr();

cout<<"\n\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_";

cout<<"\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Hotel Management System \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

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

cout<<"\n IBRAHIM KHAN, MAHIN RAHMAN ";

cout<<"\n T.C.S ";

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

cout<<"\n Customer name : "<<r\_cust;

cout<<"\n ";

cout<<"\n Stayed for "<<r\_per<<" days";

cout<<"\n Room charges : "<<r\_charge<<"(Per day)";

cout<<"\n Room charges : "<<room<<"(total)";

cout<<"\n Restaurant bill : "<<food;

cout<<"\n Other charges : "<<oc;

cout<<"\n Ser.tax % = 10.3%";

cout<<"\n Ser.tax ="<<ser;

cout<<"\n Bill Amount >>>>>> Rs "<<total;

cout<<"\n ";

cout<<"\n THANK YOU !!!!!";

cout<<"\n Do Visit Us Again !";

strcpy(r\_cust,"N.A");

r\_per=0;

r\_avail='y';

day=0;

mon=0;

year=0;

strcpy(c\_city,"N.A ");

strcpy(c\_nat,"N.A ");

c\_mem = 0;

}

void check();

};

void bill:: check()

{

if(r\_avail=='y')

{

cout<<"\n"<<r\_no<<"\t "<<r\_type<<"\t"<<r\_charge<<"\t "<<r\_avail<<"\t "<<r\_cust<<"\t "<<r\_per;

}

}

void main()

{

int i,ch;

login();

bill R[5];

char c;

clrscr();

getch();

clrscr();

R[0].getr1();

R[1].getr2();

R[2].getr3();

R[3].getr4();

R[4].getr5();

time\_t t;

clrscr();

t = time(NULL);

cout<<"\n "<<ctime(&t);

t -= 24L\*60L\*60L;

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

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

cout<<"\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* WELCOME TO HOTEL MANAGEMENT SYSTEM \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

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

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

cout<<"Submitted By:";

cout<<"IBRAHIM KHAN, MAHIN RAHMAAN ";

cout<<" Guided By:-";

cout<<"MR. MISHAL";

getch();

xyz:

clrscr();

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

cout<<"\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Hotel Management System \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

cout<<"\n \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ";

cout<<"\n IBRAHIM KHAN, MAHIN RAHMAAN ";

cout<<"\n T.C.S ";

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

cout<<"\n ";

cout<<"\n 1.ROOM INFORMATION 2.CUSTOMER INFO ";

cout<<"\n ";

cout<<"\n 3.MODIFY INFORMATION 4.CHECK THE AVAILABILITY ";

cout<<"\n ";

cout<<"\n 5.RESERVE ROOM 6.FEATURES OF ROOMS ";

cout<<"\n ";

cout<<"\n 7.CREATE BILL 8.EXIT ";

cout<<"\n\n Enter your choice : ";

cin >>ch;

if(ch>8)

{

clrscr();

cout<<"\n Wrong choice ....";

getch();

goto xyz;

}

if(ch==1)

{

clrscr();

cout<<"\n ROOM INFO ";

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

cout<<"\nRoom No| Type | Charge | Availability | Cust\_Name | Period |";

for(i=0;i<=4;i++)

{

R[i].putinfo();

}

getch();

clrscr();

cout<<"\n ";

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

cout<<"\n Do you want to exit :";

cin>>c;

if (c=='n')

{

goto xyz;

}

else

{

goto mno;

}

}

else

if(ch==2)

{

abc:

clrscr();

int n;

cout<<"\n Enter room no. :";

cin>>n;

if(n>5)

{

cout<<"\n Wrong choice ....";

getch();

goto abc;

}

n=n-1;

clrscr();

cout<<"\n CUSTOMER INFO ";

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

R[n].putcust();

getch();

clrscr();

cout<<"\n ";

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

cout<<"\n Do you want to exit :";

cin>>c;

if (c=='n')

{

goto xyz;

}

else

{

goto mno;

}

}

else

if(ch==3)

{

pqr:

clrscr();

int a;

cout<<"\n Enter Room no :";

cin>>a;

if(a>5)

{

cout<<"\n Wrong choice ...";

getch();

goto pqr;

}

a=a-1;

R[a].modify();

getch();

clrscr();

cout<<"\n ";

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

cout<<"\n Do you want to exit :";

cin>>c;

if (c=='n')

{

goto xyz;

}

else

{

goto mno;

}

}

else

if(ch==4)

{

clrscr();

cout<<"\n AVAILABLE ROOMS ";

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

cout<<"\nRoom No| Type | Charge | Availability | Cust\_Name | Period|";

for(i=0;i<=4;i++)

{

R[i].check();

}

getch();

clrscr();

cout<<"\n ";

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

cout<<"\n Do you want to exit :";

cin>>c;

if (c=='n')

{

goto xyz;

}

else

{

goto mno;

}

}

else

if(ch==5)

{

int b;

def:

clrscr();

cout<<"\n Enter room no to be allocated:";

cin >>b;

if(b>5)

{

cout<<"\n Wrong choice ...";

getch();

goto def;

}

b=b-1;

R[b].allocate();

getch();

clrscr();

cout<<"\n ";

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

cout<<"\n Do you want to exit :";

cin>>c;

if (c=='n')

{

goto xyz;

}

else

{

goto mno;

}

}

else

if(ch==6)

{

ghi:

clrscr();

int a,d,e,f,g,h;

char c;

char b[5];

cout<<"\n Enter Room No:";

cin>>a;

if(a>5)

{

cout<<"\n Wrong choice ...";

getch();

goto ghi;

}

a=a-1;

strcpy(b,R[a].r\_type);

d=stricmp(b,"Sp Dlx");

e=stricmp(b,"Dlx");

f=stricmp(b,"Gen");

g=stricmp(b,"Coupl");

h=stricmp(b,"C Dlx");

if(d==0)

{

spd();

}

else

if(e==0)

{

dlx();

}

else

if(f==0)

{

gen();

}

else

if(g==0)

{

coupd();

}

else

if(h==0)

{

coup();

}

getch();

clrscr();

cout<<"\n ";

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

cout<<"\n Do you want to exit :";

cin>>c;

if (c=='n')

{

goto xyz;

}

}

else

if(ch==7)

{

stu:

clrscr();

int b;

cout<<"\n Enter Room no :";

cin>>b;

if(b>5)

{

cout<<"\n Wrong choice ...";

getch();

goto stu;

}

{

char av;

av=R[b-1].getavail();

if(av=='y')

{

cout<<"\n ERROR: Room is not allocated.";

cout<<"\n Bill cannot be created ";

getch();

goto stu;

}

else

{

R[b-1].calculate();

R[b-1].dispbill();

getch();

}

}

clrscr();

cout<<"\n ";

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

cout<<"\n Do you want to exit :";

cin>>c;

if (c=='n')

{

goto xyz;

}

}

else

if(ch==8)

{

goto mno;

}

mno:

}

void spd()

{

clrscr();

cout<<"\n FEATURES OF THIS ROOM ";

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

cout<<"\n\n Room Type >>> Sp.delux ";

cout<<"\n\n Room charges >>> Rs.1500 per day";

cout<<"\n\n 1. Bed >>> 2";

cout<<"\n\n 2.Capacity >>> 5";

cout<<"\n\n 3.Balcony available ";

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

cout<<"\n ADDITIONAL FEATURES ";

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

cout<<"\n\n 1.A/C available ";

cout<<"\n\n 2.Geyser available";

cout<<"\n\n 3.TV available ";

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

cout<<"\n NOTE :- Extra bed will cost Rs.50 per bed ";

}

void dlx()

{

clrscr();

cout<<"\n FEATURES OF THIS ROOM ";

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

cout<<"\n\n Room Type >>> Delux ";

cout<<"\n\n Room charges >>>Rs.1000 per day";

cout<<"\n\n 1. Bed >>> 2";

cout<<"\n\n 2.Capacity >>> 5";

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

cout<<"\n ADDITIONAL FEATURES ";

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

cout<<"\n\n 1.A/C avaalable ";

cout<<"\n\n 3.Geyser available";

cout<<"\n\n 4.TV available ";

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

cout<<"\n NOTE :- Extra bed will cost Rs.50 per bed ";

}

void gen()

{

clrscr();

cout<<"\n FEATURES OF THIS ROOM ";

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

cout<<"\n\n Room Type >>> General ";

cout<<"\n\n Room charges >>>Rs.750 per day";

cout<<"\n\n 1. Bed >>> 2";

cout<<"\n\n 2.Capacity >>> 5";

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

cout<<"\n ADDITIONAL FEATURES ";

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

cout<<"\n\n 1.Geyser available";

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

cout<<"\n NOTE :- Extra bed will cost Rs.50 per bed ";

}

void coup()

{

clrscr();

cout<<"\n FEATURES OF THIS ROOM ";

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

cout<<"\n\n Room Type >>> Couple ";

cout<<"\n\n Room charges >>>Rs.1250 per day";

cout<<"\n\n 1. Bed >>> 1";

cout<<"\n\n 2. Capacity >>> 2";

cout<<"\n\n 3.Balcony available ";

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

cout<<"\n ADDITIONAL FEATURES ";

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

cout<<"\n\n 2.Geyser available";

cout<<"\n\n 3.TV available ";

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

cout<<"\n NOTE :- Extra bed will cost Rs.50 per bed ";

}

void coupd()

{

clrscr();

cout<<"\n FEATURES OF THIS ROOM ";

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

cout<<"\n\n Room Type >>> Couple delux ";

cout<<"\n\n Room charges >>> Rs.1500 per day";

cout<<"\n\n 1. Bed >>> 1";

cout<<"\n\n 2.Capacity >>> 2";

cout<<"\n\n 3.Balcony available ";

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

cout<<"\n ADDITIONAL FEATURES ";

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

cout<<"\n\n 1.A/C available ";

cout<<"\n\n 2.Geyser available";

cout<<"\n\n 3.TV available ";

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

cout<<"\n NOTE :- Extra bed will cost Rs.50 per bed ";

}