**MINI PROJECT**

Input: #include<iostream>

#include<string>

#include<cstdlib>

#include<conio.h>

#include<iomanip>

using namespace std;

const int n = 10;

int p = 0;

int patients\_no = 0;

class hospital {

protected:

string h\_name;

int available\_bed;

int doctor\_no;

public:

hospital()

{

cout << "\t\t\t\t\tEnter hospital name:";

cin >> h\_name;

cout << "\t\t\t\t\tEnter number of avaliable beds:";

cin >> available\_bed;

cout << "\t\t\t\t\tEnter number of doctors in the hospital:";

cin >> doctor\_no;

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

}

int putdata0() {

cout << "\t\t\t\t\tHOSPITAL NAME IS: " << h\_name << endl;

cout << "\t\t\t\t\tAVAILABLE BED IS: " << available\_bed << endl;

cout << "\t\t\t\t\tNUMBER OF PATIENT IS: " << patients\_no << endl;

cout << "\t\t\t\t\tNUMBER OF DOCTOR IN HOSPITAL: " << doctor\_no << endl;

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

return 0;

}

};

class patient

{

public:

string name;

float number;

int age;

string ID;

string blood\_group;

string gender;

int operator++()

{

cout << "\t\t\t\t\tEnter Name of Patient\n\t\t\t\t\t";

cin >> name;

cout << "\t\t\t\t\tEnter Phone Number of Patient\n\t\t\t\t\t";

cin >> number;

cout << "\t\t\t\t\tEnter Age of Patient\n\t\t\t\t\t";

cin >> age;

cout << "\t\t\t\t\tEnter Blood group of Patient\n\t\t\t\t\t";

cin >> blood\_group;

cout << "\t\t\t\t\tEnter the gender of patient\n\t\t\t\t\t";

cin >> gender;

cout << "\t\t\t\t\tEnter the ID of patient\n\t\t\t\t\t";

cin >> ID;

p++;

patients\_no++;

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

return 0;

}

void putdata1()

{

cout << "\t\t\t\t\tName of Patient: ";cout << name << endl;

cout << "\t\t\t\t\tID of patient: " << ID << endl;

cout << "\t\t\t\t\tNumber of Patient: " << number << endl;

cout << "\t\t\t\t\tAge of Patient: " << age << endl;

cout << "\t\t\t\t\tBlood group of Patient: " << blood\_group << endl;

cout << "\t\t\t\t\tThe gender of patient: " << gender << endl;

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

}

void getname()

{

cout << name;

}

void discharge()

{

name = name + " (Discharged)";

}

};

template <class t>

t room(t price, t days)

{

t PRICE;

PRICE = price\*days;

return PRICE;

}

class bill

{

int rprice = 500, sevice\_charge = 200, doc\_charge = 1000, total, days;

int a, b, c;

public:

void cal\_data4()

{

cout << "\t\t\t\t\tEnter number of days:";

cin >> days;

a = room(rprice, days);

cout << "\t\t\t\t\tprice of room in days:" << a << endl;

b = room(sevice\_charge, days);

cout << "\t\t\t\t\tservice charges of room in days: RS:" << b << endl;

c = room(doc\_charge, days);

cout << "\t\t\t\t\tdoctor charges of room in days: RS:" << c << endl;

total = a + b + c;

cout << "\t\t\t\t\tTOTAL PRICE= RS:" << total << endl;

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

}

};

class patient\_history :public patient, public bill

{

int time[10];

string condition[10];

string date[10];

int i = 0, j = 0;

public:

void get\_data2()

{

cout << "\t\t\t\t\tEnter date:";

cin >> time[i];

cout << "\t\t\t\t\tEnter time:";

cin >> date[i];

cout << "\t\t\t\t\tEnter condition:";

cin >> condition[i];

i++;

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

}

void put\_data2()

{

if (i == 0)

cout << "\t\t\t\t\tData not Avaliable\n";

else

{

cout << "\t\t\t\t\tEnter Sr.no\n";

cout << "\t\t\t\t\tDate" << "\t" << "Time" << "\t" << "condition" << endl;

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

{

cout << "\t\t\t\t\t" << date[j] << "\t" << time[j] << "\t" << condition[j] << endl;

}

}

}

};

int choice2, choice3;

int m = 0;

void patmenu(patient\_history a[])

{

int choice3;int choice2;

cout << "\t\t\t\t\t";

cin >> choice2;

choice2 = choice2 - 1;

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

do {

cout << "\n\t\t\t\t\t1.Excess patient details\n\t\t\t\t\t2.Make an entry in records\n\t\t\t\t\t3.Excess patient Records\n\t\t\t\t\t4.Create bill\n\t\t\t\t\t5.Exit patient menu\n\t\t\t\t\t";

cin >> choice3;

switch (choice3)

{

case 1:

a[choice2].putdata1();

break;

case 2:

a[choice2].get\_data2();

break;

case 3:

a[choice2].put\_data2();

break;

case 4:

a[choice2].cal\_data4();

a[choice2].discharge();

break;

case 5:

cout << "\t\t\t\t\tMenu exited sucessfully\n";

break;

default:

cout << "\t\t\t\t\tWrong input\n";

break;

}

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

} while (choice3 != 5);

}

int exc\_pat\_list(patient\_history a[])

{

if (p == 0)

{

cout << "\t\t\t\t\tData Not Avaliable\n";

}

else

{

cout << "\t\t\t\t\tEnter Sr.no\n";

cout << "\t\t\t\t\tSr.no\t\tPatient's name\n";

for (int g = 0;g < p;g++)

{

cout << "\t\t\t\t\t" << g + 1 << "\t\t";

a[g].getname();

cout << endl;

}

patmenu(a);

}

return 0;

}

int main()

{

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

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

cout << "\t\t\t\t\t ";

cout << "\t\t\t\t\t ";

cout << "\t\t\t\t\t ";

cout << "\t\t\t\t\t ";

cout << "\t\t\t\t\t ";

cout << "\t\t\t\t\t \n";

cout << "\t\t\t\t\t WELCOME TO \n";

cout << "\t\t\t\t\t \n";

cout << "\t\t\t\t\t HOSPITAL MANAGEMENT SYSTEM \n";

cout << "\t\t\t\t\t \n";

cout << "\t\t\t\t\t \n";

cout << "\t\t\t\t\t \n";

cout << "\t\t\t\t\t \n";

cout << "\t\t\t\t\t \n";

cout << "\t\t\t\t\t \n";

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

int choice1;

hospital h;

patient\_history a[n];

patient b[n];

do {

cout << "\t\t\t\t\t1.Excess hospital details\n\t\t\t\t\t2.Excess patient list\n\t\t\t\t\t3.Enter new patient\n\t\t\t\t\t4.Close the program\n\t\t\t\t\t";

cin >> choice1;

switch (choice1)

{

case 1:

h.putdata0();

break;

case 2:

exc\_pat\_list(a);

break;

case 3:

if (p<n)

{

++a[p];

}

else

cout << "\t\t\t\t\tSORRY! beds full\n";

break;

case 4:

cout << "\t\t\t\t\tProgram exited sucessfully\n";

break;

default:

cout << "\t\t\t\t\tWrong input\n";

break;

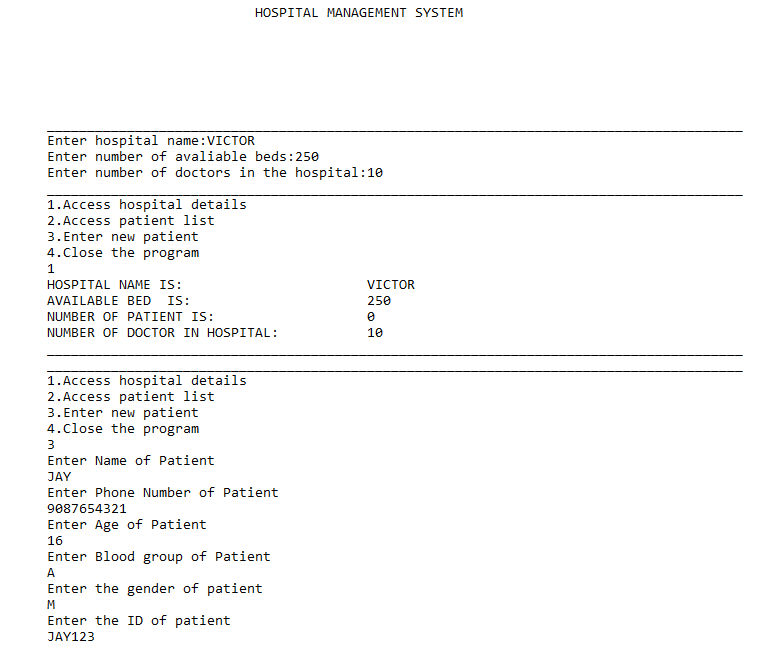
}

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

} while (choice1 != 4);

}

Output:

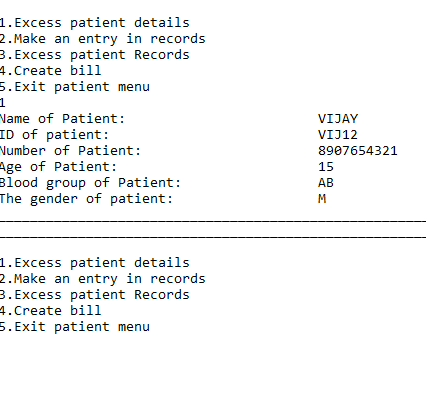


A picture containing text

Description automatically generated

Text

Description automatically generated



A screenshot of a computer

Description automatically generated with medium confidence

