//Hospital Management System

#include<iostream>

#include<fstream>

#include<cstdlib>

#include<conio.h>

#include<time.h>

#include<iomanip>

#include<string.h>

using namespace std;

int pid=1000;

class stfmanage

{

public:

void getinfo()

{

cout<<"ENTER THE ID OF STAFF MEMBER "<<endl;

cout<<"ID STARTS FROM 1 TO 10"<<endl;

int id;

cin>>id;

switch (id)

{

case 1:

{

cout<<"NAME - DR. HARSHITA"<<endl;

cout<<"SEX - FEMALE"<<endl;

cout<<"CARDIOLOGIST"<<endl;

cout<<"AGE - 30 YEARS"<<endl;

break;

}

case 2:

{

cout<<"NAME - DR. RAM"<<endl;

cout<<"SEX - MALE"<<endl;

cout<<"NEPHROLOGIST"<<endl;

cout<<"AGE - 42 YEARS"<<endl;

break;

}

case 3:

{

cout<<"NAME - DR. VAISHNAVI"<<endl;

cout<<"SEX - FEMALE"<<endl;

cout<<"UROLOGISTS"<<endl;

cout<<"AGE - 46"<<endl;

break;

}

case 4:

{

cout<<"NAME - DR. ANJALI SHARMA"<<endl;

cout<<"SEX - FEMALE"<<endl;

cout<<"NEUROLOGIST"<<endl;

cout<<"AGE - 50"<<endl;

break;

}

case 5:

{

cout<<"NAME - DR. NITIN "<<endl;

cout<<"SEX - MALE"<<endl;

cout<<"ORTHOPADIC"<<endl;

cout<<"AGE - 55"<<endl;

break;

}

case 6:

{

cout<<"NAME - DEEPIKA "<<endl;

cout<<"SEX - FEMALE"<<endl;

cout<<"NURSE"<<endl;

cout<<"AGE - 35"<<endl;

break;

}

case 7:

{

cout<<"NAME - KAVYA "<<endl;

cout<<"SEX - FEMALE"<<endl;

cout<<"NURSE"<<endl;

cout<<"AGE - 30"<<endl;

}

case 8:

{

cout<<"NAME - ANUSHKA "<<endl;

cout<<"SEX - FEMALE"<<endl;

cout<<"NURSE"<<endl;

cout<<"AGE - 28"<<endl;

break;

}

case 9:

{

cout<<"NAME - VAMSHITA "<<endl;

cout<<"SEX - FEMALE"<<endl;

cout<<"NURSE"<<endl;

cout<<"AGE - 26"<<endl;

break;

}

case 10:

{

cout<<"NAME - KIRANMAI "<<endl;

cout<<"SEX - FEMALE"<<endl;

cout<<"NURSE"<<endl;

cout<<"AGE - 35"<<endl;

break;

}

default:

cout<<"SORRY NO MORE";

break;

}}};

struct app

{

char symptom[500];

char diagnosis[500];

char medicine[500];

char addmission[30];

string ward;

int s;

char specialist[50];

};

app add;

struct patient\_info

{

char name[20];

char address[100];

char contact[10];

char age[5];

char sex[8];

char blood\_gp[5];

char disease\_past[50];

int id;

};

patient\_info ak;

int cost=0;

int main()

//NOTE: RUN THE PROGRAM IN FULL SCREEN ONLY

{

char fname[20];

time\_t rawtime;

struct tm \* timeinfo;

time ( &rawtime );

timeinfo = localtime ( &rawtime );

//printing the welcome note

re:

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

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";

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

system("pause");

system("cls");

int i;

int login();

login();

void doctor();

void bill();

stfmanage ob;

//giving option to the user for their choice

b:

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

cout<<"\n\n\t\t\t\t\t\tPlease, Choose from the following Options: \n\n";

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

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

cout<<"\t\t\t\t\t\t| 1 >> Add New Patient Record |\n";

cout<<"\t\t\t\t\t\t| 2 >> Add Diagnosis Information |\n";

cout<<"\t\t\t\t\t\t| 3 >> Full History of the Patient |\n";

cout<<"\t\t\t\t\t\t| 4 >> Information About the Hospital |\n";

cout<<"\t\t\t\t\t\t| 5 >> Doctor's appointment |\n";

cout<<"\t\t\t\t\t\t| 6 >> Staff information |\n";

cout<<"\t\t\t\t\t\t| 7 >> Room information |\n";

cout<<"\t\t\t\t\t\t| 8 >> Exit the Program |\n";

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

a:cout<<"\t\t\t\t\t\tEnter your choice: ";cin>>i;

if(i>8||i<1){cout<<"\n\n\t\t\t\t\t\tInvalid Choice\n";cout<<"\t\t\t\t\t\tTry again...........\n\n";goto a;} //if inputed choice is other than given choice

system("cls");

//displaying the information about the hospital........option 4

if(i==4)

{

ifstream file;

file.open("hos.txt");

if(!file)

{

cout<<"\nError while opening the file\n";goto b;

}

else

{

cout<<"\n\n\n\n\n\n\n\t\t\t\t\t ...........................Information about the Hospital.............................\n\n";

string line;

while(file.good())

{

getline(file,line);

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

}

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

system("pause");

system("cls");

goto b;

}

}

if(i==7)

{

ifstream file;

file.open("ot.txt");

if(!file)

{

cout<<"\nError while opening the file\n";goto b;

}

else

{

cout<<"\n\n\n\n\n\n\n\t\t\t\t\t ...........................Information about the rooms.............................\n\n";

string line;

while(file.good())

{

getline(file,line);

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

}

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

system("pause");

system("cls");

goto b;

}

}

//Adding the record of the new patient..................option 3

if(i==1)

{

time\_t rawtime;

struct tm \* timeinfo;

time ( &rawtime );

timeinfo = localtime ( &rawtime );

cout<<"\n\n\t\t\t\t\t\t\t\t"<< asctime (timeinfo);

ofstream pat\_file;

char fname[20];

cout<<"\n\n\n\nEnter the patient's file name : ";

cin.ignore();

gets(fname);

pat\_file.open(fname);

if(!fname)

{

cout<<"\nError while opening the file\n";goto b;

}

else

{

cout<<"\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n";pat\_file<<"\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n\n";//fn1353 st

ak.id=pid++;

cout<<"\nPatient ID : "<<ak.id;pat\_file<<"Patient ID : ";pat\_file<<ak.id<<"\n";

cout<<"\nName : ";pat\_file<<"Name : ";gets(ak.name);pat\_file<<ak.name<<"\n";

cout<<"\nAddress : ";pat\_file<<"Address : ";gets(ak.address);pat\_file<<ak.address<<"\n";

cout<<"\nContact Number : ";pat\_file<<"Contact Number : ";gets(ak.contact);pat\_file<<ak.contact<<"\n";

cout<<"\nAge : ";pat\_file<<"Age : ";gets(ak.age);pat\_file<<ak.age<<"\n";

cout<<"\nSex : ";pat\_file<<"Sex : ";gets(ak.sex);pat\_file<<ak.sex<<"\n";

cout<<"\nBlood Group : ";pat\_file<<"Blood Group : ";gets(ak.blood\_gp);pat\_file<<ak.blood\_gp<<"\n";

cout<<"\nAny Major disease suffered earlier : ";pat\_file<<"Any Major disease suffered earlier : ";gets(ak.disease\_past);pat\_file<<ak.disease\_past<<"\n";

cout<<"\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n";pat\_file<<"\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n\n";

cout<<"\nInformation Saved Successfully\n";

}

system("pause");

system("cls");

goto b;

}

//Appending diagnosis information of patient datewise.................option 2

if(i==2)

{

fstream pat\_file;

cout<<"\n\nEnter the patient's file name to be opened : ";

cin.ignore();

gets(fname);

system("cls");

pat\_file.open(fname, ios::in);

if(!pat\_file)

{

cout<<"\nError while opening the file\n";goto b;

}

else

{

cout<<"\n\n\n\n\t\t\t\t........................................ Information about "<<fname<<" ........................................\n\n\n\n";

string info;

while(pat\_file.good())

{

getline(pat\_file,info);

cout<<info<<"\n";

}

cout<<"\n";

pat\_file.close();

pat\_file.open(fname, ios::out | ios::app);

cout<<"\n";

cout<<"Adding more information in patient's file................on : "<<asctime (timeinfo);pat\_file<<"Description of "<<asctime (timeinfo)<<"\n";

int s;

cout<<"\nSymptoms : "; pat\_file<<"Symptoms : ";gets(add.symptom); pat\_file<<add.symptom<<"\n";

cout<<"\nDiagnosis : "; pat\_file<<"Diagnosis : ";gets(add.diagnosis); pat\_file<<add.diagnosis<<"\n";

cout<<"\nMedicines : "; pat\_file<<"Medicines : ";gets(add.medicine); pat\_file<<add.medicine<<"\n";

cout<<"\nSpecialist : ";pat\_file<<"Specialist : ";gets(add.specialist);pat\_file<<add.specialist<<"\n";

cout<<"\nAddmission Required? : "; pat\_file<<"Addmission Required? : ";gets(add.addmission); pat\_file<<add.addmission<<"\n";

cout<<"\nType of ward :\n 1.General:\n 2.Private\n ENTER YOUR CHOICE\n";

cin>>s;

switch(s)

{

case 1:

cout<<"General Ward";

add.ward="General";

pat\_file<<"Type of ward"; pat\_file<<add.ward<<"\n";pat\_file<<"\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n";

break;

case 2:

cout<<"Private ward";

add.ward="Private";

pat\_file<<"Type of ward"; pat\_file<<add.ward<<"\n";pat\_file<<"\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n";

break;

default :

cout<<"Sorry";

break;

}

cout<<"\n\n"<<add.ward<<" ward is alloted Successfully\n";

cout<<"\nTotal billing cost : ";bill();pat\_file<<"Total billing cost : ";pat\_file<<cost<<"\n";

pat\_file.close();

cout<<"\n\n";

system("pause");

system("cls");

goto b;

}

}

//For displaying the full medical history of patient in that hospital............option 3

if(i==3)

{

fstream pat\_file;

cout<<"\n\nEnter the patient's file name to be opened : ";

cin.ignore();

gets(fname);

system("cls");

pat\_file.open(fname, ios::in);

if(!pat\_file)

{

cout<<"\nError while opening the file\n";goto b;

}

else

{

cout<<"\n\n\n\n\t\t\t\t........................................ Full Medical History of "<<fname<<" ........................................\n\n\n\n";

string info;

while(pat\_file.good())

{

getline(pat\_file,info);

cout<<info<<"\n";

}

cout<<"\n";

}

system("pause");

system("cls");

goto b;

}

if(i==5)

{

doctor();

system("pause");

system("cls");

goto b;

}

if(i==6)

{

ob.getinfo();

system("pause");

system("cls");

goto b;

}

//Exiting Through the system with a Thank You note........................option 5

if(i==8)

{

system("cls");

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

cout<<"\t\t\t\t\t@@| THANK YOU FOR USING |@@\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\n\n\n\t\t\t\t\t";

}

cout<<"\n";

}

int login(){

string pass ="";

char ch;

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

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

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

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

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

ch = \_getch();

while(ch != 13)

{ //character 13 is enter

pass.push\_back(ch);

cout << '\*';

ch = \_getch();

}

if(pass == "pass"){

cout << "\n\n\t\t\t\t\t\t\t\tAccess Granted! \n";

system("PAUSE");

system ("CLS");

}else{

cout << "\n\n\t\t\t\t\t\t\t\tAccess Aborted...\n\t\t\t\t\t\t\t\tPlease Try Again\n\n";

system("PAUSE");

system("CLS");

login();

}

}

void doctor()

{

//doctor appointment module

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

cout<<"\n\n\t\t\t\t\t\tPlease, Choose from the following Options: \n\n";

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

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

cout<<"\t\t\t\t\t\t| 1 >> CARDIOLOGIST |\n";

cout<<"\t\t\t\t\t\t| 2 >> NEPHROLOGIST |\n";

cout<<"\t\t\t\t\t\t| 3 >> UROLOGISTS |\n";

cout<<"\t\t\t\t\t\t| 4 >> NEUROLOGIST |\n";

cout<<"\t\t\t\t\t\t| 5 >> ORTHOPEDIC |\n";

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

int i;

cin>>i;

switch (i)

{

case 1:

cout<<"DR. HARSHITA\n TIME :- 10 am TO 1 pm "<<endl;

break;

case 2:

cout<<"DR. RAM\n TIME :- 10 am TO 1 pm "<<endl;

break;

case 3:

cout<<"DR. VAISHNAVI\n TIME :- 10 am TO 1 pm "<<endl;

break;

case 4:

cout<<"DR. ANJALI SHARMA\n TIME :- 10 am TO 1 pm "<<endl;

break;

case 5:

cout<<"DR. NITIN \n TIME :- 10 am TO 1 pm "<<endl;

break;

default :

cout<<"THANK YOU"<<endl;

break;

}

cout<<"IF YOU WANT TO CANCEL YOUR APPOINMENT SAY YES OR NO "<<endl;

string s;

cin>>s;

if(s=="YES")

cout<<"YOUR APPOINMENT HAS BEEN CANCELLED"<<endl;

else

cout<<"THANK YOU"<<endl;

}

void bill()

{

cost=500; //admisiion fees(300)+medicine fees(200)

//ward cost

if(add.ward=="General")

cost+=2000; //general ward cost (2000)

else if(add.ward=="Private")

cost+=5000; //private ward cost (5000)

//Appointment Cost

if( strcmp( add.specialist,"CARDIOLOGIST" )==0)

cost+=2500;

else if(strcmpi(add.specialist,"NEPHROLOGIST")==0)

cost+=1500;

else if(strcmpi(add.specialist,"UROLOGISTS")==0)

cost+=1000;

else if(strcmpi(add.specialist,"NEUROLOGIST")==0)

cost+=3000;

else if(strcmpi(add.specialist,"ORTHOPEDIC")==0)

cost+=2000;

cout<<cost;

}