#include<iostream>

#include<fstream>

#include<string.h>

using namespace std;

class String

{

char str[100];

public:

String() {}

String(char \* p) {

strcpy(str, p);

}

void display() {

cout << "String: " << str;

}

String operator + (String s) {

String obj;

strcat(str, s.str);

strcpy(obj.str, str);

return obj;

}

char \* getstr() {

return str;

}

};

main() {

cout << "Welcome to the COVID-19 Ward Management System" << endl;

a:

string pass;

cout << "Enter password to continue: ";

cin >> pass;

if (pass == "pass") {

b: cout << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << "Access Granted!" << endl;

cout << "Press 1 to view the Staff information" << endl;

cout << "Press 2 to view the Patient Information" << endl;

cout << "Press 3 to Add a patient record" << endl;

cout << "Press 4 to access the equipment database" << endl << endl << endl << endl;

int x;

cin >> x;

if (x == 1) {

staff: fstream infile;

String pathstaff("staff\\"),

doc("doctors.txt"),

clean("cleaners.txt"),

nurse("nurses.txt"),

use;

int t;

cout << "Press 1 for Doctors' information" << endl << "Press 2 for Cleaners' information" << endl << "Press 3 for Nurses' information" << endl << "Press 4 to go to the main menu" << endl;

cin >> t;

if (t == 1) {

use = pathstaff + doc;

infile.open(use.getstr(), ios:: in );

cout << infile.rdbuf();

} else if (t == 2) {

use = pathstaff + clean;

infile.open(use.getstr(), ios:: in );

cout << infile.rdbuf();

} else if (t == 3) {

use = pathstaff + nurse;

infile.open(use.getstr(), ios:: in );

cout << infile.rdbuf();

} else if (t == 4) {

goto b;

} else {

cout << "invalid option";

cout << endl << "Do you want to go to the previous menu?Y/N: ";

char y;

cin >> y;

if (y == 'y' || y == 'Y')

goto staff;

}

cout << endl << "Do you want to go back to the main menu? Y/N: ";

char p;

cin >> p;

if (p == 'y' || p == 'Y') {

goto b;

}

}

else if (x == 2) {

ifstream dfile;

dfile.open("patients//admitted.txt");

cout<<"Names of admitted patients:"<<endl<<endl<<dfile.rdbuf();

char name[60];

cout << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl;

cout << "Enter the name of the patient: ";

cin.ignore();

gets(name);

fstream cfile;

String pathpat("patients//"),patname(name),txt(".txt"),use;

use=pathpat+patname;

use=pathpat+txt;

cfile.open(use.getstr());

cout << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl << endl;

cout << cfile.rdbuf();

cout << endl << "Do you want to go back to the main menu? Y/N: ";

char p;

cin >> p;

if (p == 'y' || p == 'Y') {

goto b;

}

} else if (x == 3) {

struct patient {

char name1[30];

int age;

char gender[7];

char doa[20];

char symptoms[200];

char bedno[10];

};

String pathpatients("patients\\"), txt(".txt"), joint;

patient p;

cout << "Enter Name: ";

char name1[30];

cin.ignore();

gets(p.name1);

String name(p.name1);

cout << endl;

cout << "Age: ";

cin >> p.age;

cout << endl;

cout << "Gender: ";

cin >> p.gender;

cout << endl;

cout << "Date Of Admission: ";

cin.ignore();

gets(p.doa);

cout << endl;

cout << "Symptoms: ";

fflush(stdin);

gets(p.symptoms);

cout << endl;

cout << "Bed Number: ";

cin >> p.bedno;

cout << endl;

joint = pathpatients + name;

joint = pathpatients + txt;

fstream dfile,admitted;

admitted.open("patients//admitted.txt",ios::app);

admitted<<endl<<p.name1;

dfile.open(joint.getstr(), ios::app);

dfile << "NAME: " << p.name1;

dfile << endl;

dfile << "AGE: " << p.age;

dfile << endl;

dfile << "GENDER: " << p.gender;

dfile << endl;

dfile << "Date Of Admission: " << p.doa;

dfile << endl;

dfile << "Symptoms: " << p.symptoms;

dfile << endl;

dfile << "Bed Number: " << p.bedno;

dfile << endl;

cout << endl << "Do you want to go back to the main menu? Y/N: ";

char q;

cin >> q;

if (q == 'y' || q == 'Y') {

goto b;

}

}

else if (x == 4) {

c:

cout<<endl<<endl<<endl;

cout << "Welcome to the Equipment database!" << endl;

cout << "Press 1 to check the beds and ventilators" << endl;

cout << "Press 2 to check the medicine stock" << endl;

cout << "Press 3 to check the PPE stock" << endl;

cout << "Press 4 to go to the main menu" << endl;

int y;

cin >> y;

if (y == 1) {

fstream pfile;

pfile.open("equipment//beds.txt", ios:: in );

cout << pfile.rdbuf();

cout << endl << "Do you want to go back to the main menu? Y/N: ";

char p;

cin >> p;

if (p == 'y' || p == 'Y') {

goto b;

}

}

else if (y == 2) {

fstream pfile;

pfile.open("equipment//medicines.txt", ios:: in );

cout << pfile.rdbuf();

cout << "Do you want to update the medicine stock? Y/N: ";

char p;

cin >> p;

if (p == 'y' || p == 'Y') {

int b, c, d;

ofstream ofs("equipment//medicines.txt", ios::trunc);

cout << "Enter the stock of hydrochloroquine:";

cin >> b;

cout << "Enter the stock of paracetamol:";

cin >> c;

cout << "Enter the stock of anti malarial drugs:";

cin >> d;

ofs << "Hydroxychloroquine: " << b << endl;

ofs << "Paracetamol: " << c << endl;

ofs << "Anti malarial drugs: " << d << endl;

cout << endl << "Medicine stock has been successfully updated";

cout<<endl<<endl<<"Do you want to go back to the previous menu?Y/N: ";

char z;

cin>>z;

if(z=='y'||z=='Y')

{

goto c;

}

}

}

else if (y == 3) {

fstream pfile;

pfile.open("equipment\\ppe.txt", ios:: in );

cout << pfile.rdbuf();

cout << endl << "Do you want to update the PPE stock? Y/N: ";

char p;

cin >> p;

if (p == 'y' || p == 'Y') {

int b, c, d;

ofstream ofs("equipment//ppe.txt", ios::trunc);

cout << "Enter the stock of masks:";

cin >> b;

cout << "Enter the stock of sanitizer:";

cin >> c;

cout << "Enter the stock of gloves:";

cin >> d;

ofs << "Masks: " << b << endl;

ofs << "Sanitizer:" << c << endl;

ofs << "Gloves: " << d;

cout << endl << "You have successfully updated the PPE stock!";

cout<<endl<<endl<<"Do you want to go back to the previous menu?Y/N: ";

char z;

cin>>z;

if(z=='y'||z=='Y')

{

goto c;

}

}

}

else if(y==4)

{

goto b;

}

else {

char waste;

cout << "Invalid Input";

cin >> waste;

goto c;

}

}

}

else {

cout << "Access Denied!";

cout << endl << "Do you want to try again?Y/N: ";

char p;

cin >> p;

if (p == 'y' || p == 'Y') {

goto a;

}

}

}