include<stdio.h>

#include<bios.h>

#include<conio.h>

#include<ctype.h>

#include<graphics.h>

#include<string.h>

#include<stdlib.h>

#include<dos.h>

enum TYPE {

PASSWORD,

INT,

FLOAT,

TEXT,

ALL,

};

union REGS i,o;

int buttonm,xm,ym,gd=9,gm=1,close=1,set=1,midx,midy;

//declearation function

void getmousepos(int \*buttonm,int \*xm, int \*ym);

void restrictmouse(int x1,int y1,int x2,int y2);

void showmouse();

int initmouse();

void setmousepos(int &xpos,int &ypos);

void hidemouse();

int menu(int);

int doctor();

void adddoc();

void deletedoc();

void searchdoc();

int patient();

void updatepat();

void searchpat();

void welgr();

void userl();

void notice();

void setusrl();

void changeusrl();

void removeusrl();

int dropmenu(char menu[7][20],int x1,int y1,int x2,int y2,int opt);

void button(char name[15],int x1,int y1,int x2,int y2,int c);

void clrwin(int opt);

void drawwindow(char head[30],int x1, int y1, int x2, int y2, int c);

int program();

void managetype();

int about();

int rooms();

void manageroom();

void input(int x,int y,char result[50],int limit ,int tc,int bkc,int type);

void inputbox(int x,int y,int limit,int bkc);

//end declearation

void main(){

\_setcursortype(0);

initgraph(&gd,&gm,"..\\BGI");

int menu1=-1;

midx=getmaxx()/2;

midy=getmaxy()/2;

clrscr();

welgr();

setfillstyle(1,BLUE);

bar(0,0,getmaxx(),getmaxy());

setcolor(3);

settextstyle(2,0,5);

settextjustify(CENTER\_TEXT, TOP\_TEXT);

outtextxy(midx,0,"==== Hospital Management System ====");

settextjustify(LEFT\_TEXT, TOP\_TEXT);

settextstyle(0,0,0);

clrwin(2);

restrictmouse(10,18,getmaxx()-10,getmaxy()-10);

setmousepos(midx,midy);

showmouse();

getmousepos(&buttonm,&xm,&ym);

menu(menu1);

while(1){

showmouse();

getmousepos(&buttonm,&xm,&ym);

if(buttonm==1){

if(xm>=10&&xm<=34&&ym>=18&&ym<=32){

menu1=0;

}else if(xm>=35&&xm<=94&&ym>=18&&ym<=32){

menu1=1;

}else if(xm>=95&&xm<=169&&ym>=18&&ym<=32){

menu1=2;

}else if(xm>=170&&xm<=219&&ym>=18&&ym<=32){

menu1=3;

}else if(xm>=220&&xm<=269&&ym>=18&&ym<=32){

menu1=4;

}else menu1=-1;

clrwin(1);

menu(menu1);

switch(menu1){

case 0:program();break;

case 1:doctor();break;

case 2:patient();break;

case 3:rooms();break;

case 4:about();break;

}

}

}

}

//mouse function

int initmouse(){

i.x.ax=0;//for initialising mouse.

int86(0x33,&i,&o);

return (o.x.ax);

}

void showmouse(){

i.x.ax=1; // for displaying mouse pointer.

int86(0x33,&i,&o);

}

void hidemouse(){

i.x.ax=2;

int86(0x33,&i,&o);

}

void setmousepos(int &xpos,int &ypos){

i.x.ax=4;

i.x.cx=xpos;

i.x.dx=ypos;

int86(0x33,&i,&o);

}

void restrictmouse(int x1,int y1,int x2,int y2){

i.x.ax=7; //to define the upper left boundry of mouse.

i.x.cx=x1;

i.x.dx=x2;

int86(0x33,&i,&o);

i.x.ax=8; //to define the bottom right boundry of mouse.

i.x.cx=y1;

i.x.dx=y2;

int86(0x33,&i,&o);

}

void getmousepos(int \*buttonm,int \*x, int \*y){

i.x.ax=3; //to move mouse.

int86(0x33,&i,&o);

\*buttonm=o.x.bx;

\*x=o.x.cx;

\*y=o.x.dx;

}

//end mouse function

int program(){

int opt=-1,j;

char menu[2][20]={"User Login >","Quit"};

close=1;

dropmenu(menu,10,33,131,76,opt);

do{

showmouse();

getmousepos(&buttonm,&xm,&ym);

if(xm>=10+10&&xm<=131-10&&ym>=33+8&&ym<=76-8&&buttonm==1){

for(j=0;j<(76-33-8)/14;j++)

if((ym-33-8)/14==j){

opt=j;

break;

}

dropmenu(menu,10,33,131,76,opt);

switch(opt){

case 0: userl();break;

case 1: delay(100);cleardevice();closegraph();exit(0);

}

}else if(xm>=10&&xm<=34&&ym>=18&&ym<=32&&buttonm==1){

dropmenu(menu,10,33,131,76,opt);

continue;

}else if(buttonm==1){

break;

}

}while(close);

return 0;

}

void userl(){

int opt=-1,j;

char menu[3][20]={"Set/Reset","Change","Remove"};

dropmenu(menu,132,41,229,98,opt);

do{

showmouse();

getmousepos(&buttonm,&xm,&ym);

if(xm>=132+10&&xm<=229-10&&ym>=41+8&&ym<=98-8&&buttonm==1){

for(j=0;j<(98-41-8)/14;j++)

if((ym-41-8)/14==j){

opt=j;

break;

}

dropmenu(menu,132,41,229,98,opt);

delay(200);

switch(opt){

case 0: setusrl();break;

case 1: changeusrl();break;

case 2: removeusrl();break;

}

}else if(buttonm==1){

break;

}

}while(close);

clrwin(1);

}

void setusrl(){

char head[30]="SET USER LOGIN";

char usr[30]="",pwd[30]="",code[30]="";

int a=midx/2+15+textwidth("Program Code : ");

set=1;

clrwin(2);

drawwindow(head, midx/2, midy/2, (getmaxx()\*3)/4, (getmaxy()\*3)/4,1 );

button("Set",midx+30,midy\*3/2-22,midx+90,midy\*3/2-8,7);

button("Cancel",midx-90,midy\*3/2-22,midx-30,midy\*3/2-8,7);

setcolor(15);moveto(midx/2+15,midy-26);

outtext("Program Code :");inputbox(a,midy-26,15,15);

setcolor(15);moveto(midx/2+15,midy-7);

outtext("Username :");inputbox(a,midy-7,15,15);

setcolor(15);moveto(midx/2+15,midy+12);

outtext("Password :");inputbox(a,midy+12,15,15);

do{

getmousepos(&buttonm,&xm,&ym);

if(buttonm==1){

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy-26-2&&ym<=midy-26+8){

set=1;

}

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy-7-2&&ym<=midy-7+8){

set=2;

}

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy+12-2&&ym<=midy+12+8){

set=3;

}

if(xm>=midx-90&&ym>=midy\*3/2-22&&xm<=midx-30&&ym<=midy\*3/2-8){

button("Cancel",midx-90,midy\*3/2-22,midx-30,midy\*3/2-8,3);

delay(100);close=0;set=0;

}

if(xm>=midx+30&&ym>=midy\*3/2-22&&xm<=midx+90&&ym<=midy\*3/2-8&&strlen(code)>0&&strlen(usr)>0&&strlen(pwd)>0){

button("Set",midx+30,midy\*3/2-22,midx+90,midy\*3/2-8,3);

delay(100);notice();close=0;set=0;

}

}

if(set==4)set=1;

if(set==1)

input(a,midy-26,code,15 ,0,15,INT);

if(set==2)

input(a,midy-7,usr,15 ,0,15,TEXT);

if(set==3)

input(a,midy+12,pwd,15 ,0,15,PASSWORD);

}while(close);

}

void changeusrl(){

char head[30]="CHANGE USER LOGIN";

char cusr[30]="",cpwd[30]="";

int a=midx/2+15+textwidth("Current Username : ");

set=1;

//display before input data

clrwin(2);

drawwindow(head, midx/2, midy/2, (getmaxx()\*3)/4, (getmaxy()\*3)/4,1 );

button("OK",midx+30,midy\*3/2-22,midx+90,midy\*3/2-8,7);

button("Cancel",midx-90,midy\*3/2-22,midx-30,midy\*3/2-8,7);

setcolor(15);moveto(midx/2+15,midy-26);

outtext("Current Username :");inputbox(a,midy-26,15,15);

setcolor(15);moveto(midx/2+15,midy+12);

outtext("Current Password :");inputbox(a,midy+12,15,15);

//start input data

do{

getmousepos(&buttonm,&xm,&ym);

if(buttonm==1){

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy-26-2&&ym<=midy-26+8){

set=1;

}

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy+12-2&&ym<=midy+12+8){

set=2;

}

if(xm>=midx-90&&ym>=midy\*3/2-22&&xm<=midx-30&&ym<=midy\*3/2-8){

button("Cancel",midx-90,midy\*3/2-22,midx-30,midy\*3/2-8,3);

delay(100);close=0;set=0;

}

if(xm>=midx+30&&ym>=midy\*3/2-22&&xm<=midx+90&&ym<=midy\*3/2-8&&strlen(cusr)>0&&strlen(cpwd)>0){

button("OK",midx+30,midy\*3/2-22,midx+90,midy\*3/2-8,3);

delay(100);notice();close=0;set=0;

}

}

if(set==3)set=1;

if(set==1)

input(a,midy-26,cusr,15 ,0,15,TEXT);

if(set==2)

input(a,midy+12,cpwd,15 ,0,15,PASSWORD);

}while(close);

}

void notice(){

char head[30]="Notification";

clrwin(2);

drawwindow(head, midx/2, midy/2, (getmaxx()\*3)/4, (getmaxy()\*3)/4,9);

button("OK",midx-30,midy\*3/2-22,midx+30,midy\*3/2-8,7);

settextstyle(7,0,4);

setcolor(15);

outtextxy(midx-((17/2)\*17),midy-25,"It Just Interface");

settextstyle(0,0,0);

do{

getmousepos(&buttonm,&xm,&ym);

if(buttonm==1){

if(xm>=midx-30&&ym>=midy\*3/2-22&&xm<=midx+30&&ym<=midy\*3/2-8){

button("OK",midx-30,midy\*3/2-22,midx+30,midy\*3/2-8,3);

delay(100);close=0;;

}

}

}while(close);

}

void removeusrl(){

char head[30]="REMOVE USER LOGIN";

char usr[30]="",pwd[30]="";

int a=midx/2+15+textwidth("Username : ");

set=1;

clrwin(2);

drawwindow(head, midx/2, midy/2, (getmaxx()\*3)/4, (getmaxy()\*3)/4,1 );

button("Remove",midx+30,midy\*3/2-22,midx+90,midy\*3/2-8,7);

button("Cancel",midx-90,midy\*3/2-22,midx-30,midy\*3/2-8,7);

setcolor(15);moveto(midx/2+15,midy-26);

outtext("Username :");inputbox(a,midy-26,15,15);

setcolor(15);moveto(midx/2+15,midy+12);

outtext("Password :");inputbox(a,midy+12,15,15);

do{

getmousepos(&buttonm,&xm,&ym);

if(buttonm==1){

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy-26-2&&ym<=midy-26+8){

set=1;

}

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy+12-2&&ym<=midy+12+8){

set=2;

}

if(xm>=midx-90&&ym>=midy\*3/2-22&&xm<=midx-30&&ym<=midy\*3/2-8){

button("Cancel",midx-90,midy\*3/2-22,midx-30,midy\*3/2-8,3);

delay(100);close=0;set=0;

}

if((xm>=midx+30&&ym>=midy\*3/2-22&&xm<=midx+90&&ym<=midy\*3/2-8)&&strlen(usr)>0&&strlen(pwd)>0){

button("Remove",midx+30,midy\*3/2-22,midx+90,midy\*3/2-8,3);

delay(100);notice();close=0;set=0;

}

}

if(set==3)set=1;

if(set==1)

input(a,midy-26,usr,15 ,0,15,TEXT);

if(set==2)

input(a,midy+12,pwd,15 ,0,15,PASSWORD);

}while(close);

}

void input(int x,int y,char result[50],int limit ,int tc,int bkc,int type){

char ch,text[2]="";

int i=0,f=-1,key,j;

close=1;

hidemouse();

setcolor(3);

rectangle(x-3,y-3,x+limit\*8+2,y+9);

setfillstyle(1,bkc);

bar(x-2,y-2,x+limit\*8+1,y+8);

showmouse();

settextstyle(0,0,1);

i=strlen(result);

moveto(x,y);

if(i>0){

setcolor(tc);

hidemouse();

if(type!=0)

outtext(result);

else

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

outtext("\*");

showmouse();

}

if(i>0&&strstr(result,".")!=0){

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

if(result[j]=='.')

break;

f=j;

}

while(kbhit()){

getch();

}

do{

do{ hidemouse();

setcolor(tc);

line(x+i\*8,y-1,x+i\*8,y+7);

showmouse();

getmousepos(&buttonm,&xm,&ym);

if(buttonm==1){

if(xm<x-2||xm>x+limit\*8+1||ym<y-2||ym>y+8){

close=0;

hidemouse();

setcolor(bkc);

line(x+i\*8,y-1,x+i\*8,y+7);

showmouse();

goto end;

}

}

if(kbhit()){

hidemouse();

setcolor(bkc);

line(x+i\*8,y-1,x+i\*8,y+7);

showmouse();

break;

}else

delay(100);

hidemouse();

setcolor(bkc);

line(x+i\*8,y-1,x+i\*8,y+7);

showmouse();

getmousepos(&buttonm,&xm,&ym);

if(buttonm==1){

if(xm<x-2||xm>x+limit\*8+1||ym<y-2||ym>y+8){

close=0;

hidemouse();

setcolor(bkc);

line(x+i\*8,y-1,x+i\*8,y+7);

showmouse();

goto end;

}

}

if(!kbhit())

delay(100);

}while(bioskey(1)==0);

key = bioskey(0);

ch = key & 0xFF;

hidemouse();

if(type==3&&(isalpha(ch)||ch == ' ')&&i<limit){

result[i++] = ch;

text[0] = ch;

text[1] = '\0';

setcolor(tc);

outtext(text);

}

if((type==1&&isdigit(ch)&&i<limit)||(((ch == '.'&&f==-1)||isdigit(ch))&&type==2&&i<limit)){

if(ch=='.')

f=i;

result[i++] = ch;

text[0] = ch;

text[1] = '\0';

setcolor(tc);

outtext(text);

}

if((type==0||type==4)&&(isalpha(ch)||(ch>='!'&&ch<='@')||ch==95||ch == ' ')&&i<limit){//ch=95=\_

result[i++] = ch;

text[0] = ch;

text[1] = '\0';

setcolor(tc);

if(type==4)

outtext(text);

else

outtext("\*");

}

if(ch == 8 && i > 0){

i--;

if(i==f)

f=-1;

text[0] = result[i];

text[1] = '\0';

result[i] = '\0';

setcolor(bkc);

moveto(x+(i)\*(textwidth(text)),y);

if(type!=0)

outtext(text);

else

outtext("\*");

moveto(x+textwidth(result),y);

}

if(type==0&&key==20992){//key=20992:insert key

moveto(x,y);

hidemouse();

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

setcolor(bkc);

outtext("\*");//delete by outtext in same color to bkc;

}

result[i]='\0';

moveto(x,y);

setcolor(tc);

outtext(result);

showmouse();

delay(70);

if(!kbhit())

delay(270);

moveto(x,y);

hidemouse();

setcolor(bkc);

outtext(result);

moveto(x,y);

setcolor(0);

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

outtext("\*");

showmouse();

}

end: showmouse();

}while(close==1);

result[i]='\0';

close=1;

hidemouse();

setfillstyle(1,bkc);

rectangle(x-3,y-3,x+limit\*8+2,y+9);

setcolor(0);

line(x-3,y-3,x-3,y+9);

line(x-3,y-3,x+limit\*8+2,y-3);

showmouse();

}

void inputbox(int x,int y,int limit,int bkc){

hidemouse();

setfillstyle(1,bkc);

bar(x-2,y-2,x+limit\*8+2,y+8);

setcolor(0);

line(x-3,y-3,x-3,y+9);

line(x-3,y-3,x+limit\*8+2,y-3);

showmouse();

}

int rooms(){

char menu[4][20]={"All rooms","Available","Manage room >","Manage type >"};

int opt=-1,j;

close=1;

dropmenu(menu,170,33,300,104,opt);

do{

showmouse();

getmousepos(&buttonm,&xm,&ym);

if(xm>=170+10&&xm<=300-10&&ym>=33+8&&ym<=104-8&&buttonm==1){

for(j=0;j<(104-33-8)/14;j++)

if((ym-33-8)/14==j){

opt=j;

break;

}

dropmenu(menu,170,33,300,104,opt);

switch(opt){

case 0:notice();break;

case 1:notice();break;

case 2:manageroom();break;

case 3:managetype();break;

}

}else if(xm>=170&&xm<=219&&ym>=18&&ym<=32&&buttonm==1){

dropmenu(menu,170,33,300,104,opt);

continue;

}else if(buttonm==1){

break;

}

}while(close);

return 3;

}

void manageroom(){

int opt=-1,j;

char menu[3][20]={"Add new","Delete","Update"};

dropmenu(menu,301,69,387,126,opt);

do{

getmousepos(&buttonm,&xm,&ym);

if(xm>=301+10&&xm<=387-10&&ym>=69+8&&ym<=126-8&&buttonm==1){

for(j=0;j<(126-69-8)/14;j++)

if((ym-69-8)/14==j){

opt=j;

break;

}

dropmenu(menu,301,69,387,126,opt);

delay(200);

switch(opt){

case 0: notice();break;

case 1: notice();break;

case 2: notice();break;

}

}else if(buttonm==1){

break;

}

}while(close);

clrwin(1);

}

void managetype(){

int opt=-1,j;

char menu[3][20]={"Add new","Delete","All types"};

dropmenu(menu,301,83,397,140,opt);

do{

getmousepos(&buttonm,&xm,&ym);

if(xm>=301+10&&xm<=397-10&&ym>=83+8&&ym<=140-8&&buttonm==1){

for(j=0;j<(140-83-8)/14;j++)

if((ym-83-8)/14==j){

opt=j;

break;

}

dropmenu(menu,301,83,397,140,opt);

delay(200);

switch(opt){

case 0: notice();break;

case 1: notice();break;

case 2: notice();break;

}

}else if(buttonm==1){

break;

}

}while(close);

clrwin(1);

}

int about(){

char str[3][35]={"Project : HMS Interface","Created by : VITOU SRUN"};

close=1;

drawwindow("About me", midx/2, midy/2, (getmaxx()\*3)/4, (getmaxy()\*3)/4,1 );

settextstyle(0,0,1);

setcolor(15);

for(int i=0;i<2;i++)

outtextxy(midx/2+15,midy-50+(i\*20),str[i]);

outtextxy(midx/2+15,midy-10,"Detail : This project I just want to");

outtextxy(midx/2+15,midy+10," show you a partof C that it");

outtextxy(midx/2+15,midy+30," can make our project better.");

button("OK",midx-30,midy\*3/2-22,midx+30,midy\*3/2-8,7);

do{

getmousepos(&buttonm,&xm,&ym);

if(buttonm==1){

if(xm>=midx-30&&ym>=midy\*3/2-22&&xm<=midx+30&&ym<=midy\*3/2-8){

button("OK",midx-30,midy\*3/2-22,midx+30,midy\*3/2-8,3);

delay(100);close=0;;

}

}

}while(close);

return 4;

}

int doctor(){

char menu[5][20]={"Add","Update","Delete >","Search >","View"};

int opt=-1,j;

close=1;

dropmenu(menu,35,33,150,118,opt);

do{

showmouse();

getmousepos(&buttonm,&xm,&ym);

if(xm>=35+10&&xm<=150-10&&ym>=33+8&&ym<=118-8&&buttonm==1){

for(j=0;j<(118-33-8)/14;j++)

if((ym-33-8)/14==j){

opt=j;

break;

}

dropmenu(menu,35,33,150,118,opt);

switch(opt){

case 0:adddoc();break;

case 1:notice();break;

case 2:deletedoc();break;

case 3:searchdoc();break;

case 4:notice();break;

}

}else if(xm>=35&&xm<=94&&ym>=18&&ym<=32&&buttonm==1){

dropmenu(menu,35,33,150,118,opt);

continue;

}else if(buttonm==1){

break;

}

}while(close);

clrwin(1);

return 1;

}

void adddoc(){

char head[30]="SET USER LOGIN";

char usr[30]="",pwd[30]="",code[30]="";

int a=midx/8+15+textwidth("Program Code : ");

set=1;

clrwin(2);

drawwindow(head, midx/8, midy/4+16, (getmaxx()\*15)/16, (getmaxy()\*7)/8+16,1 );

button("Set",midx+30,midy\*3/2-22,midx+90,midy\*3/2-8,7);

button("Cancel",midx-90,midy\*3/2-22,midx-30,midy\*3/2-8,7);

setcolor(15);moveto(a-textwidth("Program Code : "),midy-26);

outtext("Program Code :");inputbox(a,midy-26,15,15);

setcolor(15);moveto(a-textwidth("Program Code : "),midy-7);

outtext("Username :");inputbox(a,midy-7,15,15);

setcolor(15);moveto(a-textwidth("Program Code : "),midy+12);

outtext("Password :");inputbox(a,midy+12,15,15);

do{

getmousepos(&buttonm,&xm,&ym);

if(buttonm==1){

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy-26-2&&ym<=midy-26+8){

set=1;

}

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy-7-2&&ym<=midy-7+8){

set=2;

}

if(xm>=a-2&&xm<=a+15\*8+1&&ym>=midy+12-2&&ym<=midy+12+8){

set=3;

}

if(xm>=midx-90&&ym>=midy\*3/2-22&&xm<=midx-30&&ym<=midy\*3/2-8){

button("Cancel",midx-90,midy\*3/2-22,midx-30,midy\*3/2-8,3);

delay(100);close=0;set=0;

}

if(xm>=midx+30&&ym>=midy\*3/2-22&&xm<=midx+90&&ym<=midy\*3/2-8&&strlen(code)>0&&strlen(usr)>0&&strlen(pwd)>0){

button("Set",midx+30,midy\*3/2-22,midx+90,midy\*3/2-8,3);

delay(100);close=0;set=0;

}

}

if(set==4)set=1;

if(set==1)

//inputdat(a,midy-26,day,mon,year ,0,15);

input(a,midy-26,code,15 ,0,15,INT);

if(set==2)

input(a,midy-7,usr,15 ,0,15,TEXT);

if(set==3)

input(a,midy+12,pwd,15 ,0,15,PASSWORD);

}while(close);

}

void deletedoc(){

int opt=-1,j;

char menu[3][20]={"By ID","By Name"};

dropmenu(menu,151,69,237,112,opt);

do{

getmousepos(&buttonm,&xm,&ym);

if(xm>=151+10&&xm<=237-10&&ym>=69+8&&ym<=112-8&&buttonm==1){

for(j=0;j<(112-69-8)/14;j++)

if((ym-69-8)/14==j){

opt=j;

break;

}

dropmenu(menu,151,69,237,112,opt);

delay(200);

switch(opt){

case 0: notice();break;

case 1: notice();break;

}

}else if(buttonm==1){

break;

}

}while(close);

clrwin(1);

}

void searchdoc(){

int opt=-1,j;

char menu[4][20]={"By ID","By Last Name","By First Name","By Specialty"};

dropmenu(menu,151,83,285,154,opt);

do{

getmousepos(&buttonm,&xm,&ym);

if(xm>=151+10&&xm<=285-10&&ym>=83+8&&ym<=154-8&&buttonm==1){

for(j=0;j<(154-83-8)/14;j++)

if((ym-83-8)/14==j){

opt=j;

break;

}

dropmenu(menu,151,83,285,154,opt);

delay(200);

switch(opt){

case 0: notice();break;

case 1: notice();break;

case 2: notice();break;

case 3: notice();break;

}

}else if(buttonm==1){

break;

}

}while(close);

clrwin(1);

}

int patient(){

char menu[5][20]={"Check in","Check out","Update >","Search >","View"};

int opt=-1,j;

close=1;

dropmenu(menu,95,33,210,118,opt);

do{ showmouse();

getmousepos(&buttonm,&xm,&ym);

if(xm>=95+10&&xm<=210-10&&ym>=33+8&&ym<=118-8&&buttonm==1){

for(j=0;j<(118-33-8)/14;j++)

if((ym-33-8)/14==j){

opt=j;

break;

}

dropmenu(menu,95,33,210,118,opt);

switch(opt){

case 0:notice();break;

case 1:notice();break;

case 2:updatepat();break;

case 3: searchpat();break;

case 4:notice();break;

}

}else if(xm>=95&&xm<=169&&ym>=18&&ym<=32&&buttonm==1){

dropmenu(menu,95,33,210,118,opt);

continue;

}else if(buttonm==1){

break;

}

}while(close);

return 2;

}

void updatepat(){

int opt=-1,j;

char menu[3][20]={"All","Name","Room"};

dropmenu(menu,211,69,273,126,opt);

do{

getmousepos(&buttonm,&xm,&ym);

if(xm>=211+10&&xm<=273-10&&ym>=69+8&&ym<=126-8&&buttonm==1){

for(j=0;j<(126-69-8)/14;j++)

if((ym-69-8)/14==j){

opt=j;

break;

}

dropmenu(menu,211,69,273,126,opt);

delay(200);

switch(opt){

case 0: notice();break;

case 1: notice();break;

}

}else if(buttonm==1){

break;

}

}while(close);

clrwin(1);

}

void searchpat(){

int opt=-1,j;

char menu[5][20]={"By ID","By Room","By Last Name","By First Name","By Chickin Date"};

dropmenu(menu,211,83,361,168,opt);

do{

getmousepos(&buttonm,&xm,&ym);

if(xm>=211+10&&xm<=361-10&&ym>=83+8&&ym<=168-8&&buttonm==1){

for(j=0;j<(168-83-8)/14;j++)

if((ym-83-8)/14==j){

opt=j;

break;

}

dropmenu(menu,211,83,361,168,opt);

delay(200);

switch(opt){

case 0: notice();break;

case 1: notice();break;

case 2: notice();break;

case 3: notice();break;

case 4: notice();break;

}

}else if(buttonm==1){

break;

}

}while(close);

clrwin(1);

}

int dropmenu(char menu[7][20],int x1,int y1,int x2,int y2,int opt){

int i;

char ch;

setfillstyle(1,14);

setcolor(15);

hidemouse();

line(x1,y1,x2,y1);

line(x1,y1,x1,y2);

setcolor(0);

line(x2,y1,x2,y2);

line(x1,y2,x2,y2);

bar(x1+1,y1+1,x2-1,y2-1);

rectangle(x1+5,y1+5,x2-5,y2-5);

for(i=0;i<(y2-y1-15)/14;i++){

if(i==opt){

setcolor(15);

setfillstyle(1,3);

bar(x1+10,y1+8+(i\*14),x2-10,y1+20+(i\*14));

outtextxy(x1+15,y1+10+(i\*14),menu[i]);

}else{

setcolor(0);

outtextxy(x1+15,y1+10+(i\*14),menu[i]);

}

}

showmouse();

delay(100);

return opt;

}

void button(char name[15],int x1,int y1,int x2 ,int y2,int c){

setfillstyle(1,c);

setcolor(15);

hidemouse();

line(x1,y1,x2,y1);

line(x1,y1,x1,y2);

setcolor(0);

line(x2,y1,x2,y2);

line(x1,y2,x2,y2);

bar(x1+1,y1+1,x2-1,y2-1);

outtextxy((x2+x1-textwidth(name))/2,(y2+y1-textheight(name))/2,name);

showmouse();

}

void drawwindow(char head[30],int x1, int y1, int x2, int y2, int c){

hidemouse();

setfillstyle(1,7);

bar(x1,y1-14,x2,y1-2);

setfillstyle(1,c);

bar(x1,y1,x2,y2);

setcolor(15);

line(x1-1,y1-15,x2+1,y1-15);

line(x1-1,y1-15,x1-1,y2+1);

setcolor(0);

line(x2+1,y1-14,x2+1,y2+1);

line(x1-1,y2+1,x2+1,y2+1);

line(x1,y1-1,x2,y1-1);

setcolor(15);

rectangle(x1+5,y1+5,x2-5,y2-5);

setcolor(0);

settextstyle(0,0,1);

outtextxy((x2+x1-textwidth(head))/2,y1-12,head);

showmouse();

}

int menu(int select){

char ch, menu[5][20]={"\360","Doctor","Patient","Room","About"};

char date[11];

struct date da;

hidemouse();

setfillstyle(1,3);

setcolor(15);

line(9,17,631,17);

line(9,17,9,32);

setcolor(0);

line(631,18,631,32);

bar(10,18,630,32);

getdate(&da);

setcolor(0);

outtextxy(20,21,menu[0]);

outtextxy(40,21,menu[1]);

outtextxy(105,21,menu[2]);

outtextxy(180,21,menu[3]);

outtextxy(230,21,menu[4]);

showmouse();

switch(select){

case 0: hidemouse();

setfillstyle(9,9);

setcolor(0);

line(10,18,34,18);

line(10,18,10,31);

setcolor(15);

line(35,18,35,32);

line(10,32,35,32);

bar(11,19,34,31);

outtextxy(20,21,menu[0]);

break;

case 1: hidemouse();

setfillstyle(9,9);

setcolor(0);

line(35,18,35,31);

line(35,18,95,18);

setcolor(15);

line(95,18,95,32);

line(35,32,95,32);

bar(36,19,94,31);

outtextxy(40,21,menu[1]);

break;

case 2: hidemouse();

setfillstyle(9,9);

setcolor(0);

line(95,18,169,18);

line(95,18,95,32);

setcolor(15);

line(170,18,170,31);

line(95,32,170,32);

bar(96,19,169,31);

outtextxy(105,21,menu[2]);

break;

case 3: hidemouse();

setfillstyle(9,9);

setcolor(0);

line(170,18,219,18);

line(170,18,170,32);

setcolor(15);

line(220,18,220,31);

line(170,32,220,32);

bar(171,19,219,31);

outtextxy(180,21,menu[3]);

break;

case 4: hidemouse();

setfillstyle(9,9);

setcolor(0);

line(220,18,279,18);

line(220,18,220,32);

setcolor(15);

line(221,32,279,32);

line(280,18,280,32);

bar(221,19,279,31);

outtextxy(230,21,menu[4]);

break;

}

sprintf(date,"%02d/%02d/%d",da.da\_day,da.da\_mon,da.da\_year);

setcolor(0);

outtextxy(550,21,date);

showmouse();

return select;

}

void welgr(){

clrscr();

int i, a=(getmaxx()-textwidth("<<< >>>"))/2;

setfillstyle(1,BLUE);

bar(0,0,getmaxx(),getmaxy());

setcolor(15);

settextstyle(4, 0, 9);

outtextxy((getmaxx()-textwidth("Hospital"))/2,1,"Hospital");

outtextxy((getmaxx()-textwidth("Management"))/2,100,"Management");

outtextxy((getmaxx()-textwidth("System"))/2,200,"System");

setfillstyle(1,15);

bar(50,20,80,110);

bar(20,50,110,80);

bar(getmaxx()-50,20,getmaxx()-80,110);

bar(getmaxx()-20,50,getmaxx()-110,80);

setcolor(9);

line(18,48,48,48);

line(82,48,112,48);

line(18,82,48,82);

line(82,82,112,82);

line(48,18,82,18);

line(48,112,82,112);

line(18,48,18,82);

line(112,48,112,82);

line(48,18,48,48);

line(82,18,82,48);

line(48,82,48,112);

line(82,82,82,112);

line(getmaxx()-18,48,getmaxx()-48,48);

line(getmaxx()-82,48,getmaxx()-112,48);

line(getmaxx()-18,82,getmaxx()-48,82);

line(getmaxx()-82,82,getmaxx()-112,82);

line(getmaxx()-48,18,getmaxx()-82,18);

line(getmaxx()-48,112,getmaxx()-82,112);

line(getmaxx()-18,48,getmaxx()-18,82);

line(getmaxx()-112,48,getmaxx()-112,82);

line(getmaxx()-48,18,getmaxx()-48,48);

line(getmaxx()-82,18,getmaxx()-82,48);

line(getmaxx()-48,82,getmaxx()-48,112);

line(getmaxx()-82,82,getmaxx()-82,112);

do{

settextstyle(0, 0, 1);

setcolor(BLUE);

outtextxy(a,getmaxy()-15,"<<< >>>");

setcolor(2);

outtextxy(a,getmaxy()-15," PRESS ANY KEY ");

delay(250);if(kbhit()){getch();break;}

setcolor(BLUE);

outtextxy(a,getmaxy()-15,"<<< >>>");

setcolor(2);

outtextxy(a,getmaxy()-15," < PRESS ANY KEY > ");

delay(250);if(kbhit()){getch();break;}

setcolor(BLUE);

outtextxy(a,getmaxy()-15,"<<< >>>");

setcolor(2);

outtextxy(a,getmaxy()-15," << PRESS ANY KEY >> ");

delay(250);if(kbhit()){getch();break;}

setcolor(BLUE);

outtextxy(a,getmaxy()-15,"<<< >>>");

setcolor(2);

outtextxy(a,getmaxy()-15,"<<< PRESS ANY KEY >>>");

delay(250);if(kbhit()){getch();break;}

}while(1);

setcolor(0);

for(i=0;i<getmaxy()/4;i++){

delay(20);

rectangle(midy-i,midy-i,getmaxx()+i-midy,midy+i);

rectangle(i,i,getmaxx()-i,getmaxy()-i);

}

}

void clrwin(int opt){

if(opt==2)

menu(-1);

hidemouse();

setcolor(0);

line(9,33,631,33);

line(9,34,9,340);

setcolor(15);

line(631,34,631,339);

line(10,340,631,340);

setfillstyle(1,11);

bar(10,34,630,339);

showmouse();

}

**V**

///////////////////

include<stdio.h>

#include<conio.h>

#include<ctype.h>

#include<string.h>

#include<stdlib.h>

#include<dos.h>

#include<time.h>

#define PASSWORD 0

#define NUMBER 1

#define LETTER 2

#define ALLINPUT 3

#define \_pwd "PWD.BIN"

#define \_room "ROOM.BIN"

#define \_doct "DOCTOR.BIN"

#define \_pati "PATIENT.BIN"

#define \_type "TYPE.BIN"

#define EMPTY 'n'

#define STAY 'y' FILE \*f\_ro;

FILE \*f\_doc;

FILE \*f\_pat; FILE \*f\_ty;

FILE \*f\_pwd;

struct Login{ char pwd[15];

char usr[15]; };

struct Types{ int co;

char na[10]; float pri;

};

struct Room{ int no;

struct Types type;

char sta;

};

time\_t current;

struct tm \*gt;

struct DateTime {

int day; int mon;

int year;

int hour;

int min;

int sec; };

struct Doctor{ char id[10];

char fname[15]; char lname[15];

char sex; char blo[5];

struct date birth; char nat[20];

char spec[20]; struct DateTime join;

char tel[20]; char email[35];

char addr[40];

};

struct Patient

{

char id[10];

char fname[15];

char lname[15]; char sex; char blo[5]; struct date birth; char prob[35]; char nat[20]; char tel[20]; char addr[40]; struct DateTime regi; int ro;

};

/\*Function Declaration\*/

void help();

int login(int);

int resetpwd(int);

int changepwd();

void box(int,int,int,int,int);

void updatedoc(int);

void sortroom(Room \*ro,int n);

int blockey();

void sortpat(Patient \*pat,int n);

void sortpatname(Patient \*pat,int n);

void sortdoc(Doctor \*doc,int n);

void sorttype(Types \*type,int n);

int getFileElement(const char \*name, int size);

int checkf\_pwd();

void drawbox(int left, int top, int right, int bottom);

void notice(char text[30],int x1,int y1,int x2,int y2);

void notice(char text[2][30],int x1,int y1,int x2,int y2);

void drawwindow(char head[30],int x1, int y1, int x2, int y2, int c);

int confirm(char str[15]);

void updatepat(int);

void welc();

void inputdat(int &day,int &mon,int &year,int c);

void createfile();

void addtype();

void checkoutinput(int opt);

int checkout(int id);

int selecttype();

char selectsex();

int selectblood();

int findroom(int no);

int finddocid(char id[10])

; int findpatid(char id[10]);

void addroom();

int addpatient(int);

void setroomEMPTY(int);

void setroomSTAY(int);

void patidetail(char id[10]);

void docdetail(char id[10]);

void adddoc();

void deletetype(int);

void deletetypeinput();

void deleteroom();

void deletepat(char id[10]);

int deletedoc(char id[10]);

void deletedocinput(int opt);

int viewpat(char head[30],Patient \*source,int n,int opt);

int viewdoc(char head[30],Doctor \*source,int n,int opt);

void findpat(int opt);

void finddoc(int opt);

void updateroom();

int viewroom(char head[30],Room \*source,int n);

void allroom();

void allpat();

void alldoc(); void

indviewroom();

void availroom();

void alltype();

int menu(int);

int doctor();

int patient(); int dropmenu(char menu[7][20],int x1,int y1,int x2,int y2,int opt); void box(int x1,int y1,int x2,int y2,int c); void clrwin(); int program(); int about(); int room(); char \*input(int,int,int); float inputf(int,int); /\*end Function Declaration\*/ void main(){ createfile(); \_setcursortype(0); int opt=0; if(login(3)==1) goto start; exit(0); start: welc(); textbackground(14); clrscr(); gotoxy(22,1);textcolor(9);cprintf("==== Hospital Management System ===="); do{ switch(menu(opt)){ case 0:opt=program();break; case 1:opt=doctor();break; case 2:opt=patient();break; case 3:opt=room();break; case 4:opt=about();break; } }while(1); } int resetpwd(int opt){ struct Login log; int s,sh=0,h=0; char usr[20],pwd[20],ch; char code[8]; char head[2][30]={"SET USER","RESET USER"}; int t=0; do{ h=checkf\_pwd(); if(opt==1){ clrwin(); }else{ textbackground(9); window(1,1,80,25); clrscr(); gotoxy(22,4);textcolor(9);cprintf("==== Hospital Management System ===="); box(2,2,79,24,15); } drawwindow(head[h],20,7,60,19,12); textcolor(15); gotoxy(1,4); cprintf("Enter Code of program:"); gotoxy(1,6); cprintf("Enter New Username:"); gotoxy(1,8); cprintf("Enter New Password:"); if(sh==1){ textcolor(3); gotoxy(24,4);cprintf("%s",code); gotoxy(21,6);cprintf("%s",usr); }else{ gotoxy(24,4); strcpy(code,input(1,10,3)); if(strcmp(code,"00")==0) {s=0;break;} gotoxy(21,6); strcpy(usr,input(2,14,3)); if(strcmp(usr,"00")==0) {s=0;break;} } gotoxy(21,8); strcpy(pwd,input(3,14,3)); if(strcmp(pwd,"00")==0) {s=0;break;} else if(strlen(pwd)<8){sh=1;notice(">Password too short<",24,10,55,15);blockey();continue;} if(atol(code)!=111110){ sound(888);delay(33);nosound(); textbackground(0); window(19,11,63,17); clrscr(); textbackground(3); textcolor(15); window(18,10,62,16); clrscr(); drawbox(1,1,45,7); gotoxy(5,2); textcolor(15);cprintf(">PLEASE ENTER CORRECT CODE OF PROGRAM<"); gotoxy(3,3);printf("<You have %02d more time to set User Login>",2-t); gotoxy(22,6);textbackground(2);cprintf(" OK "); sh=0; t++; if(t>=3) {s=0;break;} ch=blockey(); if(ch==13) {continue;} else if(ch==27) {s=0;break;} }else{ s=1; strcpy(log.usr,usr); strcpy(log.pwd,pwd); f\_pwd=fopen(\_pwd,"wb"); fwrite(&log,sizeof(Login),1,f\_pwd); fclose(f\_pwd); notice("<Completely Successful>",24,10,55,15); blockey(); break; } }while(1); return s; } int changepwd(){ struct Login log; int s,sh; char ousr[20],opwd[20],ch,nusr[20],npwd[20]; char head[30]="CHANGE USER LOGIN"; int t=0; do{ f\_pwd=fopen(\_pwd,"rb"); if(f\_pwd==NULL) { notice("<User Login hasn't set yet>",24,10,55,15); fclose(f\_pwd); blockey(); break; } rewind(f\_pwd); fread(&log,sizeof(Login),1,f\_pwd); fclose(f\_pwd); clrwin(); drawwindow(head,20,7,60,19,12); textcolor(15); gotoxy(1,4); cprintf("Enter Old Username:"); gotoxy(1,6); cprintf("Enter Old Password:"); gotoxy(21,4); strcpy(ousr,input(2,30,3)); if(strcmp(ousr,"00")==0) {s=0;break;} gotoxy(4,12),textcolor(15),cprintf("<<Press Shift+6 To Show PASSWORD>>"); gotoxy(21,6); strcpy(opwd,input(0,15,3)); if(strcmp(opwd,"00")==0) {s=0;break;} if(strcmp(log.usr,ousr)!=0||strcmp(log.pwd,opwd)!=0){ sound(888);delay(33);nosound(); textbackground(0); window(19,11,63,16); clrscr(); textbackground(3); textcolor(15); window(18,10,62,16); clrscr(); drawbox(1,1,45,7); gotoxy(8,2);printf(">Incorrect Username or Password<"); gotoxy(2,3);printf("<You have %d more time to reset User Login>",2-t); gotoxy(22,6);textbackground(2);cprintf(" OK "); t++; if(t>=3) {s=0;break;} ch=blockey(); if(ch==13) {continue;} else if(ch==27) {s=0;break;} }else{ re: clrwin(); drawwindow(head,22,7,57,17,12); textcolor(15); gotoxy(1,4); cprintf("Enter New Username:"); gotoxy(1,6); cprintf("Enter New Password:"); if(sh==1){ gotoxy(21,4);textcolor(3);cprintf("%s",nusr); }else{ gotoxy(21,4); strcpy(nusr,input(2,30,3)); if(strcmp(nusr,"00")==0) {s=0;break;} } gotoxy(21,6); strcpy(npwd,input(3,15,3)); if(strcmp(npwd,"00")==0) {s=0;break;} else if(strlen(npwd)<8){sh=1;notice(">Password too short<",24,10,55,15);blockey();goto re;} s=1; strcpy(log.usr,nusr); strcpy(log.pwd,npwd); f\_pwd=fopen(\_pwd,"wb"); fwrite(&log,sizeof(Login),1,f\_pwd); fclose(f\_pwd); notice("<Completely Successful>",24,10,55,15); blockey(); break; } }while(1); return s; } int blockey(){ char ch; ch: ch=getch(); if(ch!=13&&ch!=27)goto ch; return ch; } void box(int x1,int y1,int x2,int y2,int c){ int y,x,i; gotoxy(x1,y1);textcolor(c);cprintf("%c",201); for(x=x1+1;x<x2;x++){ gotoxy(x,y1);textcolor(c);cprintf("%c",205); } gotoxy(x2,y1);textcolor(c);cprintf("%c",187); for(y=y1+1;y<y2;y++){ gotoxy(x1,y);textcolor(c);cprintf("%c",186); gotoxy(x2,y);textcolor(c);cprintf("%c",186); } gotoxy(x1,y2);textcolor(c);cprintf("%c",200); for(i=x1+1;i<x2;i++){ gotoxy(i,y2);textcolor(c);cprintf("%c",205); } gotoxy(x2,y2);textcolor(c);cprintf("%c",188); } int checkf\_pwd(){ int f=1; f\_pwd=fopen(\_pwd,"rb"); if(f\_pwd==NULL) { f=0; } return f; } int login(int n){ struct Login log; char usr[15],pwd[15],usri[15],pwdi[15],ch; int s=0,i=0; do{ f\_pwd=fopen(\_pwd,"rb"); if(f\_pwd==NULL) { s=1; fclose(f\_pwd); break; } rewind(f\_pwd); fread(&log,sizeof(Login),1,f\_pwd); textcolor(9); textbackground(9); window(1,1,80,25); clrscr(); gotoxy(30,4);printf("===== User Login ====="); gotoxy(22,7);printf("Welcome to Hospital Management System"); gotoxy(21,8);printf("Please Enter Login Information to Start"); box(2,2,79,24,15); gotoxy(30,12); textcolor(15);cprintf("Username:"); gotoxy(30,13); textcolor(15);cprintf("Password:"); gotoxy(40,12); strcpy(usri,input(2,30,3)); if(strcmp(usri,"00")==0) {fclose(f\_pwd);exit(0);} gotoxy(23,18),textcolor(15),cprintf("<<Press Shift+6 To Show PASSWORD>>"); gotoxy(40,13); strcpy(pwdi,input(0,15,3)); if(strcmp(pwdi,"00")==0) {fclose(f\_pwd);exit(0);} if(strcmp(log.usr,usri)!=0||strcmp(log.pwd,pwdi)!=0){ gotoxy(25,16); textcolor(15);cprintf(">Incorrect Username or Password<"); gotoxy(27,17); textcolor(15);cprintf("<You have %d more attempt(s)>",n-i-1); gotoxy(15,18); textcolor(15);cprintf("<<Press R to reset User Login or Enter to try again>>"); i++; if(i>=n) {fclose(f\_pwd);exit(0);} a: ch=toupper(getch()); if(ch=='R') { if(confirm("Reset PWD")==1){ s=resetpwd(0); if(s==0) {fclose(f\_pwd);continue;} else {fclose(f\_pwd);break;} }else {fclose(f\_pwd);continue;}} else if(ch==13){fclose(f\_pwd);continue;} else if(ch==27) {fclose(f\_pwd);exit(0);} else goto a; }else {s=1;fclose(f\_pwd);break; } }while(1); return s; } void removeusr(){ struct Login log; char head[30]="REMOVE USER LOGIN"; char usr[15],pwd[15],usri[15],pwdi[15],ch; int i=0; do{ f\_pwd=fopen(\_pwd,"rb"); if(f\_pwd==NULL) { notice("<User Login hasn't set yet>",24,10,55,15); blockey(); break; } rewind(f\_pwd); fread(&log,sizeof(Login),1,f\_pwd); clrwin(); drawwindow(head,20,7,60,19,12); gotoxy(9,5); textcolor(15);cprintf("Username:"); gotoxy(9,7); textcolor(15);cprintf("Password:"); gotoxy(19,5); strcpy(usri,input(2,30,3)); if(strcmp(usri,"00")==0) {fclose(f\_pwd);break;} gotoxy(4,12),textcolor(15),cprintf("<<Press Shift+6 To Show PASSWORD>>"); gotoxy(19,7); strcpy(pwdi,input(0,15,3)); if(strcmp(pwdi,"00")==0) {fclose(f\_pwd);break;;} if(strcmp(log.usr,usri)!=0||strcmp(log.pwd,pwdi)!=0){ textbackground(0); window(17,11,65,17); clrscr(); textbackground(3); textcolor(15); window(16,10,64,16); clrscr(); drawbox(1,1,49,7); gotoxy(9,2); textcolor(15);cprintf(">Incorrect Username or Password<"); gotoxy(4,3);printf("<You have %d more time to remove User Login>",2-i); gotoxy(24,6);textbackground(2);cprintf(" OK "); i++; if(i>=3) {fclose(f\_pwd);break;} ch=blockey(); if(ch==13){fclose(f\_pwd);continue;} else if(ch==27) {fclose(f\_pwd);break;} }else{ fclose(f\_pwd); remove(\_pwd); notice("User Login Removed",24,10,55,15); blockey(); break; } }while(1); } int program(){ int opt=0,close=1; char menu[2][20]={"User Login >","Quit"}; char menu1[3][20]={"Reset","Remove","Change"}; do{ clrwin(); if(checkf\_pwd()==0){ strcpy(menu1[0],"Set"); }else{ strcpy(menu1[0],"Reset"); } switch(dropmenu(menu,2,3,18,6,opt)){ case -2:close=0;break; case -1:close=0;break; case 0: switch(dropmenu(menu1,19,4,32,8,0)){ case -2:close=0;opt=0;break; case -1:clrwin(); opt=0; break; case 0: resetpwd(1);opt=0;break; case 1: removeusr();opt=0;break; case 2: changepwd();opt=0;break; } break; case 1: if(confirm("Quit")==1) exit(0); else {opt=1;break;} } }while(close); return 0; } int room(){ char menu[4][20]={"All rooms","Available","Manage room >","Manage type >"}; char menu1[4][20]={"Add new","Delete","Search","Update"}; char menu2[3][20]={"Add new","Delete","All types"}; int opt=0,close=1; do{ clrwin(); switch(dropmenu(menu,22,3,39,8,opt)){ case -2:close=0;break; case -1:close=0;break; case 0:allroom();opt=0;break; case 1:availroom();opt=1;break; case 2: switch(dropmenu(menu1,40,6,52,11,0)){ case -2:close=0;opt=0;break; case -1:clrwin(); opt=2; break; case 0: clrwin();addroom();opt=2;break; case 1: clrwin();deleteroom();opt=2;break; case 2: clrwin();findviewroom();opt=2;break; case 3: clrwin();updateroom();opt=2;break; }break; case 3: switch(dropmenu(menu2,40,7,54,11,0)){ case -2:close=0;opt=0;break; case -1:clrwin(); opt=3; break; case 0: clrwin();addtype();opt=3;break; case 1: clrwin();deletetypeinput();opt=3;break; case 2: clrwin();alltype();opt=3;break; }break; } }while(close); return 3; } int menu(int select){ char ch, menu[5][20]={"\360","Doctor","Patient","Room","About"}; int i; struct date da; textbackground(9); window(2,2,79,24); clrscr(); getdate(&da); do{ textbackground(11); textcolor(0); window(2,2,79,2); clrscr(); for(i=0;i<5;i++) if(i==select){ textbackground(2); textcolor(15); cprintf(" %s ",menu[i]); }else printf(" %s ",menu[i]); gotoxy(68,1);printf("%02d/%02d/%d",da.da\_day,da.da\_mon,da.da\_year); ch=getch(); switch(ch){ case 75:select--; if(select==-1) select=4; break; case 77:select++; if(select==5) select=0; break; case 80:if(select<4) ch=13; break; case 27:select=0;break; } }while(ch!=13); return select; } int doctor(){ char menu[5][20]={"Add","Delete >","Update >","Search >","View All"}; char menu1[3][20]={"By ID","By First Name","By Last Name"}; char menu2[3][20]={"All","Name","Specialty"}; char menu3[4][20]={"By ID","By First Name","By Last Name","By Specialty"}; int opt=0,close=1; do{ clrwin(); switch(dropmenu(menu,5,3,20,9,opt)){ case -2:close=0;break; case -1:close=0;break; case 0:adddoc();opt=0;break; case 1: switch(dropmenu(menu1,21,5,39,9,0)){ case -2:close=0;opt=0;break; case -1:clrwin(); opt=1; break; case 0: clrwin();deletedocinput(1);opt=1;break; case 1: clrwin();deletedocinput(2);opt=1;break; case 2: clrwin();deletedocinput(3);opt=1;break; }break; case 2:switch(dropmenu(menu2,21,6,39,10,0)){ case -2:close=0;opt=0;break; case -1:clrwin(); opt=2; break; case 0: clrwin();updatedoc(1);opt=2;break; case 1: clrwin();updatedoc(2);opt=2;break; case 2: clrwin();updatedoc(3);opt=2;break; }break; case 3: switch(dropmenu(menu3,21,7,38,12,0)){ case -2:close=0;opt=0;break; case -1:clrwin(); opt=3; break; case 0: clrwin();finddoc(1);opt=3;break; case 1: clrwin();finddoc(2);opt=3;break; case 2: clrwin();finddoc(3);opt=3;break; case 3: clrwin();finddoc(4);opt=3;break; }break; case 4:alldoc();opt=4;break; } }while(close); return 1; } int patient(){ char menu[5][20]={"Check in","Check out by >","Update >","Search by >","View All"}; char menu1[4][20]={"ID","First Name","Last Name","Room No."}; char menu2[3][20]={"All","Name","Room No."}; char menu3[4][20]={"ID","Name","Room No.","Check in Date"}; int opt=0,close=1; do{ clrwin(); switch(dropmenu(menu,13,3,31,9,opt)){ case -2:close=0;break; case -1:close=0;break; case 0:addpatient(0);opt=0;break; case 1: switch(dropmenu(menu1,32,5,47,10,0)){ case -2:close=0;opt=0;break; case -1:clrwin(); opt=1; break; case 0: clrwin();checkoutinput(1);opt=1;break; case 1: clrwin();checkoutinput(2);opt=1;break; case 2: clrwin();checkoutinput(3);opt=1;break; case 3: clrwin();checkoutinput(4);opt=1;break; }break; case 2: switch(dropmenu(menu2,32,6,45,10,0)){ case -2:close=0;opt=0;break; case -1:clrwin(); opt=2; break; case 0: clrwin();updatepat(1);opt=2;break; case 1: clrwin();updatepat(2);opt=2;break; case 2: clrwin();updatepat(3);opt=2;break; }break; case 3: switch(dropmenu(menu3,32,7,50,12,0)){ case -2:close=0;opt=0;break; case -1:clrwin(); opt=3; break; case 0: clrwin();findpat(1);opt=3;break; case 1: clrwin();findpat(2);opt=3;break; case 2: clrwin();findpat(3);opt=3;break; case 3: clrwin();findpat(4);opt=3;break; }break; case 4:clrwin();allpat();opt=4;break; } }while(close); return 2; } int dropmenu(char menu[7][20],int x1,int y1,int x2,int y2,int opt){ int i,select; char ch; select=opt; if(opt==-1) goto end; do{ textbackground(7); textcolor(0); window(x1,y1,x2,y2); clrscr(); drawbox(1,1,x2-x1+1,y2-y1+1); gotoxy(3,2+select); textbackground(2); for(i=0; i<x2-x1-3; i++) { cprintf(" "); } for(i=0;i<y2-y1-1;i++){ gotoxy(4,2+i); if(i==select){ textcolor(15); cprintf("%s",menu[i]); }else printf("%s",menu[i]); } ch=getch(); switch(ch){ case 72:select--; if(select==-1) select=y2-y1-2; break; case 80:select++; if(select==y2-y1-1) select=0; break; case 8: ch=13;opt=-1; break; case 75:ch=13;opt=-1; break; case 13:opt=select; break; case 77:if(strstr(menu[select],">")!=0) opt=select,ch=13; break; case 27:ch=13;opt=-2; break; } }while(ch!=13); end: return opt; } void clrwin(){ textbackground(9); textcolor(WHITE); window(2,3,79,24); clrscr(); } void sortroom(Room \*ro,int n){ int i,j; Room temp; for(i=0;i<n-1;i++) for(j=i+1;j<n;j++) if(ro[i].no>ro[j].no){ temp=ro[i]; ro[i]=ro[j]; ro[j]=temp; } } void sortpat(Patient \*pat,int n){ int i,j; Patient temp; for(i=0;i<n-1;i++) for(j=i+1;j<n;j++) if(pat[i].ro>pat[j].ro){ temp=pat[i]; pat[i]=pat[j]; pat[j]=temp; } } void sortpatname(Patient \*pat,int n){ int i,j; char \*fullname[40]; Patient temp; for(i=0;i<n-1;i++) for(j=i+1;j<n;j++){ strcpy(fullname[i],pat[i].fname); strcat(fullname[i]," "); strcat(fullname[i],pat[i].lname); strcpy(fullname[j],pat[j].fname); strcat(fullname[j]," "); strcat(fullname[j],pat[j].lname); if(stricmp(fullname[i],fullname[j])>1){ temp=pat[i]; pat[i]=pat[j]; pat[j]=temp; } } } void sortdoc(Doctor \*doc,int n){ int i,j; Doctor temp; for(i=0;i<n-1;i++) for(j=i+1;j<n;j++) if(stricmp(doc[i].id,doc[j].id)>1){ temp=doc[i]; doc[i]=doc[j]; doc[j]=temp; } } void sorttype(Types \*type,int n){ int i,j; Types temp; for(i=0;i<n-1;i++) for(j=i+1;j<n;j++) if(type[i].co>type[j].co){ temp=type[i]; type[i]=type[j]; type[j]=temp; } } int getFileElement(const char \*name, int size) { FILE \*source = fopen(name,"rb+"); fseek(source,0,SEEK\_END); size = ftell(source)/size; fclose(source); return size; } void drawbox(int left, int top, int right, int bottom) { int i; for(i=0; i<right-left-1; i++) { if(i==0) { printf(" \332"); } else if(i==right-left-2) printf("\277"); else printf("\304"); } for(i=0; i<bottom-top-1; i++) { gotoxy(2,i+2); printf("\263"); gotoxy(right-left,i+2); printf("\263"); } gotoxy(1,bottom-top+1); for(i=0; i<right-left-1; i++) { if(i==0) { printf(" \300"); } else if(i==right-left-2) printf("\331"); else printf("\304"); } } void notice(char text[30],int x1,int y1,int x2,int y2){ textbackground(0); window(x1+1,y1+1,x2+1,y2+1); clrscr(); textbackground(3); textcolor(15); window(x1,y1,x2,y2); clrscr(); drawbox(1,1,x2-x1+1,y2-y1+1); gotoxy((x2-x1+3)/2-strlen(text)/2,2);printf("%s",text); gotoxy((x2-x1+2)/2,5);textbackground(2);cprintf(" OK "); } void notice(char text[2][30],int x1,int y1,int x2,int y2){ textbackground(0); window(x1+1,y1+1,x2+1,y2+1); clrscr(); textbackground(3); textcolor(15); window(x1,y1,x2,y2); clrscr(); drawbox(1,1,x2-x1+1,y2-y1+1); gotoxy((x2-x1+3)/2-strlen(text[0])/2,2);printf("%s",text[0]); gotoxy((x2-x1+3)/2-strlen(text[1])/2,3);printf("%s",text[1]); gotoxy((x2-x1+2)/2,5);textbackground(2);cprintf(" OK "); } void drawwindow(char head[30],int x1, int y1, int x2, int y2, int c) { textbackground(7); textcolor(0); window(x1-3,y1-2,x2+3,y1-2); clrscr(); gotoxy(((x2+3)-(x1-3)+3-strlen(head))/2,1);printf("%s",head); textbackground(c); textcolor(WHITE); window(x1-3,y1-1,x2+3,y2+1); clrscr(); drawbox(x1-3, y1-1, x2+3, y2+1); window(x1,y1,x2+1,y2); } int confirm(char str[15]){ char conf[2][5]={"No","Yes"}; int i,ch,select=0; textbackground(9); window(2,24,79,24); clrscr(); textbackground(0); window(24,10,57,18); clrscr(); textbackground(14); window(23,9,56,17); clrscr(); drawbox(2,1,35,9); gotoxy((33-(11+strlen(str)))/2,3);textcolor(15); cprintf("<Confirm Your %s>",str); do{ for(i=0;i<=1;i++){ if(i==select) textbackground(2); else textbackground(14); textcolor(15); gotoxy(8+i\*16,7); cprintf(" %s ",conf[i]); } ch=getch(); switch(ch){ case 75:select--; if(select==-1) select=1;break; case 77:select++; if(select==2) select=0; break; } }while(ch!=13); return select; } void inputdat(int &day,int &mon,int &year,int c){ char ch,reday[3]="",remon[3]="",reyear[5]=""; int d=0,m=0,y=0,i=0; \_setcursortype(2); do{ ch=getch(); if(isdigit(ch)&&i<8){ if(i<2){ reday[d++]=ch; textcolor(c);cprintf("%c",ch); }else if(i<4){ remon[m++]=ch; textcolor(c);cprintf("%c",ch); }else if(i<8){ reyear[y++]=ch; textcolor(c);cprintf("%c",ch); } if(i==1||i==3){textcolor(c);cprintf("/");} i++; } if(ch == 8) { if(i != 0) { i--; if(i<2){ reday[d--]=NULL; textcolor(c);cprintf("\b \b"); }else if(i<4){ remon[m--]=NULL; textcolor(c);cprintf("\b \b"); }else if(i<8){ reyear[y--]=NULL; textcolor(c);cprintf("\b \b"); } if(i==1||i==3){ printf("\b \b"); } } } }while((ch != 13||i<8)&&ch!=27); if(ch==13){ day=atoi(reday); mon=atoi(remon); year=atoi(reyear); } \_setcursortype(0); } char \*input(int type,int limit,int c){ char result[50]=""; char ch; int index = 0; \_setcursortype(2); do { ch=getch(); if((type==3||type==0)&&index<limit){ if(isalpha(ch)||(ch>='!'&&ch<='@')||ch==95) { result[index++]=ch; if(type==0){ textcolor(c);cprintf("\*"); }else{ textcolor(c);cprintf("%c",ch); } } } if(type==1&&index<limit){ if(ch>=40&&ch<=57) { result[index++] = ch; textcolor(c);cprintf("%c",ch); } } if(type==2&&index<limit) if(isalpha(ch)||ch==' ') { result[index++]=ch; textcolor(c);cprintf("%c",ch); } if(ch==8&&index>0) { result[index--]=NULL; printf("\b \b"); } if(ch==94&&type==0&&index>0){ \_setcursortype(0); result[index]=0; for(int i=0;i<index;i++) printf("\b"); textcolor(c);cprintf("%s",result); for(i=0;i<index;i++) printf("\b"); delay(100); for(i=0;i<index;i++) textcolor(c),cprintf("\*"); \_setcursortype(2); } } while((ch != 13||index<1)&&ch!=27); result[index] =0; \_setcursortype(0); return ch==27?"00":result; } float inputf(int limit,int c){ int i=0,f=-1; char result[50]="",ch; \_setcursortype(2); do{ ch=getch(); if((ch>='0'&&ch<='9')||(ch=='.'&&f==-1)&&i<limit){ if(ch=='.') f=i; result[i++]=ch; textcolor(c);cprintf("%c",ch); } if(ch==8&&i>0){ result[--i]='\0'; if(i==f) f=-1; printf("\b \b"); } }while((ch!=13||i==0)&&ch!=27); result[i]='\0'; \_setcursortype(0); return ch==27?0.0:atof(result); } void createfile(){ f\_doc=fopen(\_doct,"rb"); if(f\_doc==NULL) f\_doc=fopen(\_doct,"wb"); f\_pat=fopen(\_pati,"rb"); if(f\_pat==NULL) f\_pat=fopen(\_pati,"wb"); f\_ty=fopen(\_type,"rb"); if(f\_ty==NULL) f\_ty=fopen(\_type,"wb"); f\_ro=fopen(\_room,"rb"); if(f\_ro==NULL) f\_ro=fopen(\_room,"wb"); fclose(f\_doc); fclose(f\_pat); fclose(f\_ty); fclose(f\_ro); } void addtype(){ struct Types type; char ty[10]; int code,i,n; float pri; char ch; char text[2][30]={"<Type added>","<<Enter to add another>>"}; char head[30]="NEW TYPE"; do{ s: clrwin(); help(); drawwindow(head,22,7,57,17,12); gotoxy(10,3);textcolor(15);cprintf("Code: ");code=atoi(input(1,5,15)); if(code==0) break; n=getFileElement(\_type,sizeof(Types)); f\_ty=fopen(\_type,"rb"); rewind(f\_ty); for(i=0;i<n;i++){ fread(&type,sizeof(Types),1,f\_ty); if(code==type.co){ notice(">This code of type is exist<",24,10,55,15); blockey(); fclose(f\_ty); goto s; } } fclose(f\_ty); gotoxy(10,5);textcolor(15);cprintf("Type: ");strcpy(ty,input(2,15,15)); if(strcmp(ty,"00")==0) break; f\_ty=fopen(\_type,"rb"); rewind(f\_ty); for(i=0;i<n;i++){ fread(&type,sizeof(Types),1,f\_ty); if(stricmp(type.na,ty)==0){ notice(">This name of type is exist<",24,10,55,15); blockey(); fclose(f\_ty); goto s; } } fclose(f\_ty); gotoxy(10,7);textcolor(15);cprintf("Price: "); pri=inputf(10,15); //problem with float if(pri==0.0) break; type.co=code; strcpy(type.na,ty); type.pri=pri; f\_ty=fopen(\_type,"ab"); fwrite(&type,sizeof(Types),1,f\_ty); fclose(f\_ty); notice(text,24,10,55,15); ch=blockey(); if(ch==27) break; }while(1); } int selecttype(){ char ch; int n,i,index=0,result=-1; n=getFileElement(\_type,sizeof(Types)); f\_ty=fopen(\_type,"rb"); struct Types \*type=(Types\*) calloc(n,sizeof(Types)); for(i=0;i<n;i++){ fread(&type[i],sizeof(Types),1,f\_ty); } do {clrscr(); textcolor(2); cprintf("%c %s %c",174,type[index].na,175); do{ ch = getch(); } while(ch!=75 && ch!=77 && ch!=13 && ch!=27); if(ch==77) {index++;if(index>n-1) index=0;} else if(ch==75){ index--;if(index<0) index=n-1;} } while(ch!=13 && ch!=27); if(ch==13) { result=type[index].co; } fclose(f\_ty); return result; } char selectsex(){ char sex[3]="FM"; char ch,result='n'; int n,i=0; do {clrscr(); textcolor(2); cprintf("%c %c %c",174,sex[i],175); do{ ch = getch(); } while(ch!=75&&ch!=77&&ch!=13&&ch!=27); if(ch==77) {i++;if(i>=2) i=0;} else if(ch==75){ i--;if(i<=-1) i=1;} } while(ch!=13&&ch!=27); if(ch==13) { result=sex[i]; } return result; } int selectblood(){ char blood[8][4]={"O+","O-","A+","A-","B+","B-","AB+","AB-"}; char ch; int result; int n,i=0; do {clrscr(); textcolor(2); cprintf("%c %s %c",174,blood[i],175); do{ ch=getch(); }while(ch!=75&&ch!=77&&ch!=13&&ch!=27); if(ch==77) {i++;if(i>=8) i=0;} else if(ch==75){ i--;if(i<=-1) i=7;} } while(ch!=13&&ch!=27); if(ch==13) { result=i+1; }else{ result=0; } return result; } int findroom(int no){ struct Room ro; int i,n,f=0; n=getFileElement(\_room,sizeof(Room)); f\_ro=fopen(\_room,"rb+"); rewind(f\_ro); for(i=0;i<n;i++){ fread(&ro,sizeof(Room),1,f\_ro); if(no==ro.no){ if(ro.sta==STAY){ f=2; }else{ f=1; } } }fclose(f\_ro); return f; } int findpatid(char id[10]){ struct Patient pat; int i,n,f=0; n=getFileElement(\_pati,sizeof(Patient)); f\_pat=fopen(\_pati,"rb+"); rewind(f\_pat); for(i=0;i<n;i++){ fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(id,pat.id)==0){ f=1; break; } }fclose(f\_pat); return f; } int finddocid(char id[10]){ struct Doctor doc; int i,n,f=0; n=getFileElement(\_doct,sizeof(Doctor)); f\_doc=fopen(\_doct,"rb+"); rewind(f\_doc); for(i=0;i<n;i++){ fread(&doc,sizeof(Doctor),1,f\_doc); if(strcmp(id,doc.id)==0){ f=1; break; } }fclose(f\_doc); return f; } void addroom(){ struct Room ro; struct Types type; int no,i,n,nt,ty; char ch; char text[2][30]={"<Room added>","<<Enter to add another>>"}; char textt[2][30]={"<Do not have type of room>","<<Enter to add type>>"}; char head[30]="NEW ROOM"; do{ s: clrwin(); help(); drawwindow(head,22,7,57,17,12); n=getFileElement(\_type,sizeof(Types)); if(n==0){ notice(textt,24,10,55,15); if(getch()!=13) break; addtype(); clrwin(); drawwindow(head,22,7,57,17,12); } gotoxy(12,4);textcolor(15);cprintf("Room No.: ");no=atoi(input(1,5,15)); if(no==0) break; if(findroom(no)!=0){ notice(">This room is exist<",24,10,55,15); blockey(); fclose(f\_ro); goto s; } gotoxy(12,6);textcolor(15);cprintf("Type: "); window(39,12,51,12); ty=selecttype(); if(ty==-1) break; else { nt=getFileElement(\_type,sizeof(Types)); f\_ty=fopen(\_type,"rb+"); rewind(f\_ty); for(i=0;i<nt;i++){ fread(&type,sizeof(Types),1,f\_ty); if(type.co==ty){ ro.type.co=type.co; stpcpy(ro.type.na,type.na); ro.type.pri=type.pri; } } fclose(f\_ty); } ro.no=no; ro.sta=EMPTY; f\_ro=fopen(\_room,"ab"); fwrite(&ro,sizeof(Room),1,f\_ro); fclose(f\_ro); notice(text,24,10,55,15); ch=blockey(); if(ch==27) break; }while(1); } void checkoutinput(int opt){ struct Patient pat; char fname[20],lname[20]; char id[10],ch,c; int i,n,f=0,nf=0,no; char head[30]="CHECKOUT PATIENT"; do{ n=getFileElement(\_pati,sizeof(Patient)); f=0;nf=0; Patient \*source =(Patient\*) calloc(n,sizeof(Patient)); clrwin(); help(); drawwindow("SEARCH PATIENT TO CHECKOUT",22,7,57,17,12); if(n==0){ gotoxy(3,5);textcolor(15); cprintf("<There are no Patient to Checkout>"); blockey(); break; } if(opt==1){ gotoxy(14,5);textcolor(15);cprintf("ID: "); strcpy(id,input(3,9,15)); if(strcmp(id,"00")==0) break; f\_pat=fopen(\_pati,"rb"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(id,pat.id)==0){ fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fread(&source[nf],sizeof(Patient),1,f\_pat); nf++; f=1; } }fclose(f\_pat); } if(opt==2){ gotoxy(10,5);textcolor(15);cprintf("First Name: "); strcpy(fname,input(2,14,15)); if(strcmp(fname,"00")==0) break; else strupr(fname); f\_pat=fopen(\_pati,"rb"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(strstr(pat.fname,fname)!=0||stricmp(pat.fname,fname)==0){ fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fread(&source[nf],sizeof(Patient),1,f\_pat); nf++; f=1; } }fclose(f\_pat); sortpatname(source,nf); } if(opt==3){ gotoxy(10,5);textcolor(15);cprintf("Last Name: "); strcpy(lname,input(2,14,15)); if(strcmp(lname,"00")==0) break; else strupr(fname); f\_pat=fopen(\_pati,"rb"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(strstr(pat.lname,lname)!=0||stricmp(pat.lname,lname)==0){ fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fread(&source[nf],sizeof(Patient),1,f\_pat); nf++; f=1; } }fclose(f\_pat); sortpatname(source,nf); } if(opt==4){ gotoxy(12,5);textcolor(15);cprintf("Room No.: "); no=atoi(input(1,5,15)); if(no==0) break; f\_pat=fopen(\_pati,"rb"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(pat.ro==no){ fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fread(&source[nf],sizeof(Patient),1,f\_pat); nf++; f=1; } }fclose(f\_pat); sortpat(source,nf); } if(f==1){ if(viewpat(head,source,nf,0)==13) continue; else break; } if(f==0){ notice("<Patient not found>",24,10,55,15); blockey(); continue; } if(ch==27) break; }while(1); } int checkout(char id[10]){ struct Room ro; struct Patient pat; struct date da; int n,i,j,nr; char ch; char head[30]="CHECKOUT PATIENT"; char text[2][30]={"<Patient checked out>","<<Enter to checkout another>>"}; float paid=0,pay=0; //Get period of staying. double second; int tperiod; time(&current); struct tm period; gt = localtime(&current); n=getFileElement(\_pati,sizeof(Patient)); f\_pat=fopen(\_pati,"rb+"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(id,pat.id)==0) break; }fclose(f\_pat); nr=getFileElement(\_room,sizeof(Room)); f\_ro=fopen(\_room,"rb"); rewind(f\_ro); for(j=0;j<nr;j++){ fread(&ro,sizeof(Room),1,f\_ro); if(ro.no==pat.ro) break; }fclose(f\_ro); period.tm\_hour = pat.regi.hour; period.tm\_min = pat.regi.min; period.tm\_sec = 0; period.tm\_year = pat.regi.year-1900; period.tm\_mon = pat.regi.mon-1; period.tm\_mday = pat.regi.day; second = difftime(current,mktime(&period)); time(&current); gt = localtime(&current); if(pat.regi.day==gt->tm\_mday || (gt->tm\_mday - pat.regi.day==1 && gt->tm\_hour <= 12)){ tperiod=1; } else tperiod = 1+((second/60)/60)/24; paid=(tperiod\*ro.type.pri); clrwin(); help(); drawwindow(head,12,7,69,20,5); getdate(&da); textcolor(14); gotoxy(1,1);printf("Name : ");cprintf("%s %s",pat.fname,pat.lname); gotoxy(1,3);printf("Sex : ");cprintf("%c",pat.sex); gotoxy(1,5);printf("Room No. : ");cprintf("%03d",ro.no); gotoxy(1,7);printf("Type : ");cprintf("%s",ro.type.na); gotoxy(1,9);printf("Price : ");cprintf("$%.2f/day",ro.type.pri); gotoxy(1,11);printf("Date in : ");cprintf("%02d/%02d/%d",pat.regi.day,pat.regi.mon,pat.regi.year); gotoxy(1,13);printf("Date Out : ");cprintf("%02d/%02d/%d",gt->tm\_mday,gt->tm\_mon+1,gt->tm\_year+1900); drawwindow("PAYMENT",45,11,64,16,3); gotoxy(1,2);printf("Other pay = $ "); pay=inputf(10,15); //problem with float if(pay==0.0){ goto end;} gotoxy(1,4);printf("Total pay = ");printf("$%.2f",paid+pay); deletepat(id); setroomEMPTY(pat.ro); blockey(); notice(text,20,10,60,15); ch=blockey(); end: return ch; } int addpatient(int no){ struct Room ro; struct Patient pat; struct date dai; int i,n,nav=0,nr,opt,s=0; int day=0,mon=0,year=0; char ch; char id[10],fname[15],lname[15],sex,blo[5],prob[20],nat[20],tel[20],addr[40]; char text[2][30]={"<Patient added>","<<Enter to add another>>"}; char blood[9][4]={"00","O+","O-","A+","A-","B+","B-","AB+","AB-"}; char head[30]="NEW PATIENT"; opt=no; do{ getdate(&dai); clrwin(); help(); drawwindow(head,12,7,69,20,12); nr=getFileElement(\_room,sizeof(Room)); f\_ro=fopen(\_room,"rb"); rewind(f\_ro); for(i=0; i<nr; i++) { fread(&ro,sizeof(Room),1,f\_ro); if(ro.sta==EMPTY){ nav++; } }fclose(f\_ro); if(nav==0){ gotoxy(14,7);textcolor(15);cprintf("<There are no available rooms>"); blockey(); s=0; break; } if(no==0){ gotoxy(1,1);textcolor(15);cprintf("Room No.: ");no=atoi(input(1,5,15)); if(no==0) {s=0;break;} if(findroom(no)!=1){ notice("<Unavailable Room>",24,10,55,15); blockey(); no=0; continue; } }else{ gotoxy(1,1);textcolor(15);cprintf("Room No.: %03d",no); } gotoxy(1,3);textcolor(15);cprintf("ID: "); strcpy(id,input(3,9,15)); if(strcmp(id,"00")==0) {s=0;break;} if(finddocid(id)==1||findpatid(id)==1){ notice("<This ID is exist>",24,10,55,15); ch=blockey(); if(ch==27){s=0;break;} else continue; } gotoxy(1,5);textcolor(15);cprintf("First Name: "); strcpy(fname,input(2,14,15)); if(strcmp(fname,"00")==0) {s=0;break;} else strupr(fname); gotoxy(1,7);textcolor(15);cprintf("Last Name: "); strcpy(lname,input(2,14,15)); if(strcmp(lname,"00")==0) {s=0;break;} else strupr(lname); gotoxy(1,9);textcolor(15);cprintf("Sex: "); window(17,15,23,15);sex=selectsex(); if(sex=='n'){s=0;break;} window(12,7,69,20); date: gotoxy(1,11);textcolor(15);cprintf("Date of Birth: "); gotoxy(16,11);inputdat(day,mon,year,15); if(day==0||mon==0||year==0) {s=0;break;} else if(day>31||mon>12||year<1900||year>dai.da\_year||(mon>dai.da\_mon&&year>=dai.da\_year)||(day>dai.da\_day&&mon>=dai.da\_mon&&year>=dai.da\_year)){ gotoxy(16,11);printf("DD/MM/YYYY"); day=0;mon=0;year=0; goto date; } gotoxy(1,13);textcolor(15);cprintf("Address: "); strcpy(addr,input(3,39,15)); if(strcmp(addr,"00")==0) {s=0;break;} gotoxy(30,1);textcolor(15);cprintf("Blood Group: ");window(54,7,61,7); strcpy(blo,blood[selectblood()]); if(strcmp(blo,"00")==0) {s=0;break;} window(12,7,69,20); gotoxy(30,3);textcolor(15);cprintf("Problem: ");strcpy(prob,input(2,19,15)); if(strcmp(prob,"00")==0) {s=0;break;} gotoxy(30,5);textcolor(15);cprintf("Tel: "); strcpy(tel,input(1,19,15)); if(strcmp(tel,"00")==0) {s=0;break;} gotoxy(30,7);textcolor(15);cprintf("Nationality: "); strcpy(nat,input(2,19,15)); if(strcmp(nat,"00")==0) {s=0;break;} f\_ro=fopen(\_room,"rb+"); rewind(f\_ro); for(i=0; i<nr; i++) { fread(&ro,sizeof(Room),1,f\_ro); if(ro.no==no){ ro.sta=STAY; fseek(f\_ro,-(int)sizeof(Room),SEEK\_CUR); fwrite(&ro,sizeof(Room),1,f\_ro); } }fclose(f\_ro); time(&current); gt = localtime(&current); pat.ro=no; strcpy(pat.id,id); strcpy(pat.fname,fname); strcpy(pat.lname,lname); pat.sex=sex; pat.birth.da\_day=day; pat.birth.da\_mon=mon; pat.birth.da\_year=year; strcpy(pat.addr,addr); strcpy(pat.blo,blo); strcpy(pat.prob,prob); strcpy(pat.nat,nat); strcpy(pat.tel,tel); pat.regi.sec = gt->tm\_sec; pat.regi.min = gt->tm\_min; pat.regi.hour = gt->tm\_hour; pat.regi.day=gt->tm\_mday; pat.regi.mon=gt->tm\_mon+1; pat.regi.year=gt->tm\_year+1900; f\_pat=fopen(\_pati,"ab"); fwrite(&pat,sizeof(Patient),1,f\_pat); fclose(f\_pat); s=1; if(opt!=0){ notice("<Patient added>",24,10,55,15); blockey(); break; } notice(text,24,10,55,15); ch=blockey(); if(ch==13)no=0; if(ch==27)break; }while(1); return s; } void welc(){ textcolor(11); textbackground(BLUE); window(1,1,80,25); clrscr(); gotoxy(23,3);printf("\x20\x5f\x20\x20\x20\x5f\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x5f\x20\x5f\x20\x20\x20\x20\x20\x20\x20\x20\x5f\x20"); gotoxy(23,22);printf("\x20\x20\x20\x20\x20\x20\x20\x7c\x5f\x5f\x5f\x2f");delay(100); gotoxy(23,4);printf("\x7c\x20\x7c\x20\x7c\x20\x7c\x20\x5f\x5f\x5f\x20\x20\x5f\x5f\x5f\x5f\x20\x5f\x20\x5f\x5f\x20\x7c\x5f\x7c\x20\x7c\x5f\x20\x5f\x5f\x20\x5f\x7c\x20\x7c"); gotoxy(23,21);printf("\x7c\x5f\x5f\x5f\x5f\x2f\x20\x5c\x5f\x5f\x2c\x20\x7c\x5f\x5f\x5f\x5f\x2f\x5c\x5f\x5f\x5c\x5f\x5f\x5f\x5f\x7c\x5f\x7c\x20\x7c\x5f\x7c\x20\x7c\x5f\x7c");delay(100); gotoxy(23,5);printf("\x7c\x20\x7c\x5f\x7c\x20\x7c\x2f\x20\x5f\x20\x5c\x2f\x20\x5f\x5f\x5f\x7c\x20\x27\x5f\x20\x5c\x7c\x20\x7c\x20\x5f\x5f\x2f\x20\x5f\x60\x20\x7c\x20\x7c"); gotoxy(23,20);printf("\x20\x5f\x5f\x5f\x29\x20\x7c\x20\x7c\x5f\x7c\x20\x5c\x5f\x5f\x5f\x20\x5c\x20\x7c\x7c\x20\x20\x5f\x5f\x5f\x2f\x20\x7c\x20\x7c\x20\x7c\x20\x7c\x20\x7c");delay(100); gotoxy(23,6);printf("\x7c\x20\x20\x5f\x20\x20\x7c\x20\x28\x5f\x29\x20\x5c\x5f\x5f\x5f\x20\x5c\x20\x7c\x5f\x29\x20\x7c\x20\x7c\x20\x7c\x7c\x20\x28\x5f\x29\x20\x7c\x20\x7c"); gotoxy(23,19);printf("\x5c\x5f\x5f\x5f\x20\x5c\x7c\x20\x7c\x20\x7c\x20\x2f\x20\x5f\x5f\x5f\x7c\x20\x5f\x5f\x2f\x20\x5f\x5f\x20\x5c\x20\x27\x5f\x20\x60\x20\x5f\x20\x5c\x20");delay(100); gotoxy(23,7);printf("\x7c\x5f\x7c\x20\x7c\x5f\x7c\x5c\x5f\x5f\x5f\x2f\x7c\x5f\x5f\x5f\x5f\x2f\x20\x20\x5f\x5f\x2f\x7c\x5f\x7c\x5c\x5f\x5f\x5c\x5f\x5f\x2c\x5f\x7c\x5f\x7c"); gotoxy(23,18);printf("\x2f\x20\x5f\x5f\x5f\x7c\x20\x5f\x20\x20\x20\x5f\x20\x5f\x5f\x5f\x5f\x7c\x20\x7c\x5f\x20\x5f\x5f\x5f\x5f\x20\x5f\x20\x5f\x5f\x20\x5f\x5f\x5f\x20\x20");delay(100); gotoxy(23,8);printf("\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x7c\x5f\x7c"); gotoxy(23,17);printf("\x20\x5f\x5f\x5f\x5f\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x5f\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20");delay(100); gotoxy(9,10);printf("\x20\x5f\x5f\x20\x20\x5f\x5f\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x5f\x20\x20\x20"); gotoxy(9,15);printf("\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x7c\x5f\x5f\x5f\x2f");delay(100); gotoxy(9,11);printf("\x7c\x20\x20\x5c\x2f\x20\x20\x7c\x20\x5f\x5f\x20\x5f\x20\x5f\x20\x5f\x5f\x20\x20\x20\x5f\x5f\x20\x5f\x20\x20\x5f\x5f\x20\x5f\x20\x20\x5f\x5f\x5f\x5f\x20\x5f\x20\x5f\x5f\x20\x5f\x5f\x5f\x20\x20\x20\x5f\x5f\x5f\x5f\x20\x5f\x20\x5f\x5f\x20\x7c\x20\x7c\x5f\x20"); gotoxy(9,14);printf("\x7c\x5f\x7c\x20\x20\x7c\x5f\x7c\x5c\x5f\x5f\x2c\x5f\x7c\x5f\x7c\x20\x7c\x5f\x7c\x5c\x5f\x5f\x2c\x5f\x7c\x5c\x5f\x5f\x2c\x20\x7c\x5c\x5f\x5f\x5f\x5f\x7c\x5f\x7c\x20\x7c\x5f\x7c\x20\x7c\x5f\x7c\x5c\x5f\x5f\x5f\x5f\x7c\x5f\x7c\x20\x7c\x5f\x7c\x5c\x5f\x5f\x7c");delay(100); gotoxy(9,12);printf("\x7c\x20\x7c\x5c\x2f\x7c\x20\x7c\x2f\x20\x5f\x60\x20\x7c\x20\x27\x5f\x20\x5c\x20\x2f\x20\x5f\x60\x20\x7c\x2f\x20\x5f\x60\x20\x7c\x2f\x20\x5f\x5f\x20\x5c\x20\x27\x5f\x20\x60\x20\x5f\x20\x5c\x20\x2f\x20\x5f\x5f\x20\x5c\x20\x27\x5f\x20\x5c\x7c\x20\x5f\x5f\x7c"); gotoxy(9,13);printf("\x7c\x20\x7c\x20\x20\x7c\x20\x7c\x20\x28\x5f\x7c\x20\x7c\x20\x7c\x20\x7c\x20\x7c\x20\x28\x5f\x7c\x20\x7c\x20\x28\x5f\x7c\x20\x7c\x20\x20\x5f\x5f\x5f\x2f\x20\x7c\x20\x7c\x20\x7c\x20\x7c\x20\x7c\x20\x20\x5f\x5f\x5f\x2f\x20\x7c\x20\x7c\x20\x7c\x20\x7c\x5f\x20");delay(100); textbackground(15); window(7,3,10,8); clrscr(); window(4,5,13,6); clrscr(); window(71,3,74,8); clrscr(); window(68,5,77,6); clrscr(); window(1,1,80,25); do{ gotoxy(30,24); printf(" < Press any key > "); delay(500);if(kbhit()){getch();break;} gotoxy(30,24); printf(" << Press any key >> "); delay(500);if(kbhit()){getch();break;} gotoxy(30,24); printf("<<< Press any key >>>"); delay(500);if(kbhit()){getch();break;} }while(1); } void setroomEMPTY(int no){ int n,i; struct Room ro; n=getFileElement(\_room,sizeof(Room)); f\_ro=fopen(\_room,"rb+"); rewind(f\_ro); for(i=0; i<n; i++) { fread(&ro,sizeof(Room),1,f\_ro); if(ro.no==no){ ro.sta=EMPTY; fseek(f\_ro,-(int)sizeof(Room),SEEK\_CUR); fwrite(&ro,sizeof(Room),1,f\_ro); } }fclose(f\_ro); } void setroomSTAY(int no){ int n,i; struct Room ro; n=getFileElement(\_room,sizeof(Room)); f\_ro=fopen(\_room,"rb+"); rewind(f\_ro); for(i=0; i<n; i++) { fread(&ro,sizeof(Room),1,f\_ro); if(ro.no==no){ ro.sta=STAY; fseek(f\_ro,-(int)sizeof(Room),SEEK\_CUR); fwrite(&ro,sizeof(Room),1,f\_ro); } }fclose(f\_ro); } void patidetail(char id[10]){ struct Room ro; struct Patient pat; struct date da; int n,i; char head[30]="PATIENT DETAIL"; clrwin(); help(); drawwindow(head,12,7,69,20,12); getdate(&da); n=getFileElement(\_pati,sizeof(Patient)); f\_pat=fopen(\_pati,"rb+"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(id,pat.id)==0){ textcolor(14); gotoxy(1,1);printf("Room No.: ");cprintf("%03d",pat.ro); gotoxy(1,3);printf("ID: ");cprintf("%s",pat.id); gotoxy(1,5);printf("First Name: ");cprintf("%s",pat.fname); gotoxy(1,7);printf("Last Name: ");cprintf("%s",pat.lname); gotoxy(1,9);printf("Sex: ");cprintf("%c",pat.sex); gotoxy(1,11);printf("Date of Birth: ");cprintf("%02d/%02d/%d",pat.birth.da\_day,pat.birth.da\_mon,pat.birth.da\_year); gotoxy(1,13);printf("Address: ");cprintf("%s",pat.addr); gotoxy(30,2);printf("Age: ");cprintf("%d",(da.da\_mon>=pat.birth.da\_mon&&da.da\_day>=pat.birth.da\_day)?(da.da\_year-pat.birth.da\_year):(da.da\_year-pat.birth.da\_year-1)); gotoxy(30,4);printf("Blood Group: ");cprintf("%s",pat.blo); gotoxy(30,6);printf("Problem: ");cprintf("%s",pat.prob); gotoxy(30,8);printf("Tel: ");cprintf("%s",pat.tel); gotoxy(30,10);printf("Nationality: ");cprintf("%s",pat.nat); gotoxy(30,12);printf("Date register :");cprintf("%02d/%02d/%d",pat.regi.day,pat.regi.mon,pat.regi.year); break; } }fclose(f\_pat); } void help(){ textcolor(0); textbackground(7); window(2,24,79,24); clrscr(); printf(" ESC TO GO BACK."); } int about() { char ch; clrwin(); help(); drawwindow("ABOUT PROGRAM",13,7,67,20,RED); gotoxy(15,1); printf("HOSPITAL MANAGEMENT SYSTEM"); gotoxy(15,2);printf("=========================="); gotoxy(13,4);textcolor(YELLOW); cprintf("Lecturer : Heng Soman"); gotoxy(13,7);textcolor(9); cprintf("Created by : SRUN VITOU"); gotoxy(13,9);textcolor(9); cprintf("Started : Friday,3,April,2015"); gotoxy(13,11);textcolor(9); cprintf("Finished : Monday,13,April,2015"); gotoxy(13,13);textcolor(9); cprintf("Version : 1.0"); while(blockey()==13); return 4; } void docdetail(char id[10]){ struct Doctor doc; struct date da; int n,i; char head[30]="DOCTOR DETAIL"; clrwin(); help(); drawwindow(head,12,7,69,20,12); getdate(&da); n=getFileElement(\_doct,sizeof(Doctor)); f\_doc=fopen(\_doct,"rb+"); rewind(f\_doc); for(i=0; i<n; i++) { fread(&doc,sizeof(Doctor),1,f\_doc); if(strcmp(id,doc.id)==0){ gotoxy(1,1);textcolor(14);printf("ID: ");cprintf("%s",doc.id); gotoxy(1,3);textcolor(14);printf("First Name: ");cprintf("%s",doc.fname); gotoxy(1,5);textcolor(14);printf("Last Name: ");cprintf("%s",doc.lname); gotoxy(1,7);textcolor(14);printf("Sex: ");cprintf("%c",doc.sex); gotoxy(1,9);textcolor(14);printf("Date of Birth: ");cprintf("%02d/%02d/%d",doc.birth.da\_day,doc.birth.da\_mon,doc.birth.da\_year); gotoxy(1,11);textcolor(14);printf("E-mail: ");cprintf("%s",doc.email); gotoxy(1,13);textcolor(14);printf("Address: ");cprintf("%s",doc.addr); gotoxy(30,2);textcolor(14);printf("Age: ");cprintf("%d",(da.da\_mon>=doc.birth.da\_mon&&da.da\_day>=doc.birth.da\_day)?(da.da\_year-doc.birth.da\_year):(da.da\_year-doc.birth.da\_year-1)); gotoxy(30,4);textcolor(14);printf("Blood Group: ");cprintf("%s",doc.blo); gotoxy(30,6);textcolor(14);printf("Tel: ");cprintf("%s",doc.tel); gotoxy(30,8);textcolor(14);printf("Specialty: ");cprintf("%s",doc.spec); gotoxy(30,10);textcolor(14);printf("Nationality: ");cprintf("%s",doc.nat); gotoxy(30,12);textcolor(14);printf("Date of joining: ");cprintf("%02d/%02d/%d",doc.join.day,doc.join.mon,doc.join.year); break; } }fclose(f\_pat); } void adddoc(){ struct Doctor doc; struct date dai; int day=0,mon=0,year=0; char ch; char id[10],fname[15],lname[15],sex,blo[5],spec[20],nat[20],tel[20],email[35],addr[40]; char text[2][30]={"<Doctor added>","<<Enter to add another>>"}; char blood[9][4]={"00","O+","O-","A+","A-","B+","B-","AB+","AB-"}; char head[30]="NEW DOCTOR"; do{ getdate(&dai); clrwin(); help(); drawwindow(head,12,7,69,20,12); gotoxy(1,1);textcolor(15);cprintf("ID: "); strcpy(id,input(3,9,15)); if(strcmp(id,"00")==0) break; if(finddocid(id)==1||findpatid(id)==1){ notice("<This ID is exist>",24,10,55,15); blockey(); continue; } gotoxy(1,3);textcolor(15);cprintf("First Name: "); strcpy(fname,input(2,14,15)); if(strcmp(fname,"00")==0) break; else strupr(fname); gotoxy(1,5);textcolor(15);cprintf("Last Name: "); strcpy(lname,input(2,14,15)); if(strcmp(lname,"00")==0) break; else strupr(lname); gotoxy(1,7);textcolor(15);cprintf("Sex: "); window(17,13,23,13);sex=selectsex(); if(sex=='n')break; window(12,7,69,20); date: gotoxy(1,9);textcolor(15);cprintf("Date of Birth: "); gotoxy(16,9);inputdat(day,mon,year,15); if(day==0||mon==0||year==0) break; else if(day>31||mon>12||year<1900||year>dai.da\_year||(mon>dai.da\_mon&&year>=dai.da\_year)||(day>dai.da\_day&&mon>=dai.da\_mon&&year>=dai.da\_year)){ gotoxy(16,9);printf("DD/MM/YYYY"); day=0;mon=0;year=0; goto date; } gotoxy(1,11);textcolor(15);cprintf("E-mail: "); strcpy(email,input(3,34,15)); if(strcmp(email,"00")==0) break; gotoxy(1,13);textcolor(15);cprintf("Address: "); strcpy(addr,input(3,39,15)); if(strcmp(addr,"00")==0) break; gotoxy(30,1);textcolor(15);cprintf("Blood Group: ");window(54,7,61,7); strcpy(blo,blood[selectblood()]); if(strcmp(blo,"00")==0) break; window(12,7,69,20); gotoxy(30,3);textcolor(15);cprintf("Tel: "); strcpy(tel,input(1,19,15)); if(strcmp(tel,"00")==0) break; gotoxy(30,5);textcolor(15);cprintf("Specialty: ");strcpy(spec,input(2,17,15)); if(strcmp(spec,"00")==0) break; else strupr(spec); gotoxy(30,7);textcolor(15);cprintf("Nationality: "); strcpy(nat,input(2,15,15)); if(strcmp(nat,"00")==0) break; time(&current); gt = localtime(&current); strcpy(doc.id,id); strcpy(doc.fname,fname); strcpy(doc.lname,lname); doc.sex=sex; doc.birth.da\_day=day; doc.birth.da\_mon=mon; doc.birth.da\_year=year; strcpy(doc.blo,blo); strcpy(doc.addr,addr); strcpy(doc.nat,nat); strcpy(doc.tel,tel); strcpy(doc.email,email); strcpy(doc.spec,spec); doc.join.sec = gt->tm\_sec; doc.join.min = gt->tm\_min; doc.join.hour = gt->tm\_hour; doc.join.day=gt->tm\_mday; doc.join.mon=gt->tm\_mon+1; doc.join.year=gt->tm\_year+1900; f\_doc=fopen(\_doct,"ab"); fwrite(&doc,sizeof(Doctor),1,f\_doc); fclose(f\_doc); notice(text,24,10,55,15); ch=blockey(); if(ch==27) break; }while(1); } void deletetypeinput(){ struct Types type; char t[20],ty[10],ch; int code,i,n,f; float pri; char text[2][30]={"<Type Deleted>","<<Enter to Delete another>>"}; char head[30]="DELETE TYPE"; do{ s: clrwin(); help(); drawwindow(head,22,7,57,17,12); n=getFileElement(\_type,sizeof(Types)); if(n==0){ gotoxy(5,5);textcolor(15); cprintf("<There are no type to delete>"); blockey(); break; } gotoxy(10,5);textcolor(15);cprintf("Code: ");code=atoi(input(1,5,15)); if(code==0) break; f\_ty=fopen(\_type,"rb+"); rewind(f\_ty); for(i=0;i<n;i++){ fread(&type,sizeof(Types),1,f\_ty); if(code==type.co){ f=1; break; }else{ f=0; } }fclose(f\_ty); if(f==0){ notice("<Type not found>",24,10,55,15); blockey(); goto s; } if(f==1) { if(confirm("Delete Type")==0) continue; else{ deletetype(code); notice(text,24,10,55,15); } } ch=blockey(); if(ch==27) break; }while(1); } void deletetype(int code){ int i,n; struct Types type; n=getFileElement(\_type,sizeof(Types)); f\_ty=fopen(\_type,"rb+"); rewind(f\_ty); //Temporary file. FILE \*temp = fopen("TEMP","wb+"); for(i=0; i<n; i++) { fread(&type,sizeof(Types),1,f\_ty); if(type.co!=code) { fwrite(&type,sizeof(Types),1,temp); } } fclose(temp); fclose(f\_ty); remove(\_type); rename("TEMP",\_type); } void deleteroom(){ struct Room ro; char t[20],ty[10],ch; int no,i,n,f; float pri; char text[2][30]={"<Room Deleted>","<<Enter to Delete another>>"}; char head[30]="DELETE ROOM"; do{ clrwin(); help(); drawwindow(head,22,7,57,17,12); n=getFileElement(\_room,sizeof(Room)); if(n==0){ gotoxy(5,5);textcolor(15); cprintf("<There are no room to delete>"); blockey(); break; } gotoxy(12,5);textcolor(15);cprintf("Room No.: ");no=atoi(input(1,5,15)); if(no==0) break; f=findroom(no); if(f==1) { f\_ro=fopen(\_room,"rb+"); rewind(f\_ro); if(confirm("Deleting")==0){ fclose(f\_ro);continue;} else{ FILE \*temp = fopen("TEMP","wb+"); for(i=0; i<n; i++) { fread(&ro,sizeof(Room),1,f\_ro); if(ro.no!=no) { fwrite(&ro,sizeof(Room),1,temp); } } fclose(temp); } fclose(f\_ro); remove(\_room); rename("TEMP",\_room); notice(text,24,10,55,15); } if(f==2){ notice("<This room has Patient>",24,10,55,15); } if(f==0){ notice("<Room not found>",24,10,55,15); } ch=blockey(); if(ch==27) break; }while(1); } int deletedoc(char id[10]){ struct Doctor doc; int n,i,y; n=getFileElement(\_doct,sizeof(Doctor)); f\_doc=fopen(\_doct,"rb+"); rewind(f\_doc); FILE \*temp = fopen("TEMP","wb+"); for(i=0; i<n; i++) { fread(&doc,sizeof(Doctor),1,f\_doc); if(strcmp(doc.id,id)!=0) { fwrite(&doc,sizeof(Doctor),1,temp); } } fclose(temp); fclose(f\_doc); remove(\_doct); rename("TEMP",\_doct); y=1; end: return y; } void deletepat(char id[10]){ struct Patient pat; int n,i; n=getFileElement(\_pati,sizeof(Patient)); f\_pat=fopen(\_pati,"rb+"); rewind(f\_pat); FILE \*temp = fopen("TEMP","wb+"); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(pat.id,id)!=0) { fwrite(&pat,sizeof(Patient),1,temp); } } fclose(temp); fclose(f\_pat); remove(\_pati); rename("TEMP",\_pati); } void deletedocinput(int opt){ struct Doctor doc; char fname[20],lname[20]; char id[10],ch; int i,n,f,nf; char head[30]="DELETE DOCTOR"; do{ f=0;nf=0; n=getFileElement(\_doct,sizeof(Doctor)); Doctor \*source =(Doctor\*) calloc(n,sizeof(Doctor)); clrwin(); help(); drawwindow("SEARCH DOCTOR TO DELETE",22,7,57,17,12); if(n==0){ gotoxy(4,5);textcolor(15); cprintf("<There are no Doctor to delete>"); blockey(); break; } if(opt==1){ gotoxy(14,5);textcolor(15);cprintf("ID: "); strcpy(id,input(3,9,15)); if(strcmp(id,"00")==0) break; f\_doc=fopen(\_doct,"rb"); for(i=0;i<n;i++){ fread(&doc,sizeof(Doctor),1,f\_doc); if(strcmp(doc.id,id)==0){ fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fread(&source[nf],sizeof(Doctor),1,f\_doc); nf++; f=1; } } fclose(f\_doc); } if(opt==2){ gotoxy(10,5);textcolor(15);cprintf("First Name: "); strcpy(fname,input(2,14,15)); if(strcmp(fname,"00")==0) break; else strupr(fname); f\_doc=fopen(\_doct,"rb"); for(i=0;i<n;i++){ fread(&doc,sizeof(Doctor),1,f\_doc); if(strstr(doc.fname,fname)!=0||strcmp(doc.fname,fname)==0){ fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fread(&source[nf],sizeof(Doctor),1,f\_doc); nf++; f=1; } } fclose(f\_doc); } if(opt==3){ gotoxy(10,5);textcolor(15);cprintf("Last Name: "); strcpy(lname,input(2,14,15)); if(strcmp(lname,"00")==0) break; else strupr(lname); f\_doc=fopen(\_doct,"rb"); for(i=0;i<n;i++){ fread(&doc,sizeof(Doctor),1,f\_doc); if(strstr(doc.lname,lname)!=0||strcmp(doc.lname,lname)==0){ fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fread(&source[nf],sizeof(Doctor),1,f\_doc); nf++; f=1; } } fclose(f\_doc); } if(f==1) { if(viewdoc(head,source,nf,0)==27)break; else continue; } if(f==0){ notice("<Doctor not found>",24,10,55,15); } ch=blockey(); if(ch==27) break; }while(1); } int viewpat(char head[30],Patient \*source,int n,int opt){ int i,temp=0,s=0,back=1,j=0; char ch,c; do{ clrwin(); help(); drawwindow(head,20,7,60,20,12); gotoxy(1,1);printf("Room");gotoxy(11,1);printf("Name"); gotoxy(24,1);printf("Sex");gotoxy(31,1);printf("Tel"); if(n>13)temp=13; else temp =n; gotoxy(1,back+1); textbackground(2); for(j=0;j<41;j++) cprintf(" "); for(i=0;i<temp;i++){ gotoxy(1,i+2);printf("%03d",source[i+s].ro);gotoxy(9,i+2);printf("%s %s",source[i+s].fname,source[i+s].lname); gotoxy(25,i+2);printf("%c",source[i+s].sex);gotoxy(31,i+2);printf("%s",source[i+s].tel); } ch: ch=getch(); switch(ch){ case 72:back--;if(back<1){back=1;s--;if(s<0){back=temp;s=n-temp;}}break; case 80:back++;if(back>=temp+1){back=temp;s++;if(s>n-temp){back=1;s=0;}}break; case 27:break; case 13:break; default:goto ch; } if(ch==13){ if(opt==1)patidetail(source[back-1+s].id); else if(confirm("Checkout")==1){ ch=checkout(source[back-1+s].id); if(ch==13||ch==27){ break; }else continue; }else continue; blockey(); continue; } if(ch==27)break; }while(1); return ch; } int viewdoc(char head[30],Doctor \*source,int n,int opt){ char text[2][30]={"<Doctor Deleted>","<<Enter to Delete another>>"}; int i,temp=0,s=0,back=1,j=0; char ch,c; do{ clrwin(); help(); drawwindow(head,20,7,60,20,12); gotoxy(1,1);printf("ID");gotoxy(12,1);printf("Name"); gotoxy(24,1);printf("Sex");gotoxy(30,1);printf("Specialty"); if(n>13)temp=13; else temp =n; gotoxy(1,back+1); textbackground(2); for(j=0;j<41;j++) cprintf(" "); for(i=0;i<temp;i++){ gotoxy(1,i+2);printf("%s",source[i+s].id);gotoxy(9,i+2);printf("%s %s",source[i+s].fname,source[i+s].lname); gotoxy(25,i+2);printf("%c",source[i+s].sex);gotoxy(31,i+2);printf("%s",source[i+s].spec); } ch: ch=getch(); switch(ch){ case 72:back--;if(back<1){back=1;s--;if(s<0){back=temp;s=n-temp;}}break; case 80:back++;if(back>=temp+1){back=temp;s++;if(s>n-temp){back=1;s=0;}}break; case 27:break; case 13:break; default:goto ch; } if(ch==13){ if(opt==1){ docdetail(source[back-1+s].id); blockey(); continue; }else if(confirm("Deleting")==1) if(deletedoc(source[back-1+s].id)==1){ notice(text,24,10,55,15); ch=blockey(); if(ch==27||ch==13)break; }else continue; } if(ch==27)break; }while(1); return ch; } void findpat(int opt){ struct Patient pat; char fullname1[40],fullname2[40],namef[40]; char id[10],ch,c; int i,n,f=0,nf=0,no,day=0,mon=0,year=0; char head[30]="SEARCH PATIENT"; do{ n=getFileElement(\_pati,sizeof(Patient)); f=0;nf=0;day=0;mon=0;year=0; Patient \*source =(Patient\*) calloc(n,sizeof(Patient)); clrwin(); help(); drawwindow(head,22,7,57,17,12); if(n==0){ gotoxy(3,5);textcolor(15); cprintf("<There are no Patient to search>"); blockey(); break; } if(opt==1){ gotoxy(14,5);textcolor(15);cprintf("ID: "); strcpy(id,input(3,9,15)); if(strcmp(id,"00")==0) break; f\_pat=fopen(\_pati,"rb"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(id,pat.id)==0){ fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fread(&source[nf],sizeof(Patient),1,f\_pat); nf++; f=1; } }fclose(f\_pat); } if(opt==2){ gotoxy(10,5);textcolor(15);cprintf("Name: "); strcpy(namef,input(2,35,15)); if(strcmp(namef,"00")==0) break; else strupr(namef); f\_pat=fopen(\_pati,"rb"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); strcpy(fullname1,pat.fname); strcat(fullname1," "); strcat(fullname1,pat.lname); strcpy(fullname2,pat.lname); strcat(fullname2," "); strcat(fullname2,pat.fname); if(strstr(fullname1,namef)!=0||strstr(fullname2,namef)!=0){ fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fread(&source[nf],sizeof(Patient),1,f\_pat); nf++; f=1; } }fclose(f\_pat); sortpatname(source,nf); } if(opt==4){ gotoxy(5,5);textcolor(15);cprintf("Date of Check in: ");inputdat(day,mon,year,15); if(day==0||mon==0||year==0) break; f\_pat=fopen(\_pati,"rb"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(pat.regi.day==day&&pat.regi.mon==mon&&pat.regi.year==year){ fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fread(&source[nf],sizeof(Patient),1,f\_pat); nf++; f=1; } }fclose(f\_pat); sortpat(source,nf); } if(opt==3){ gotoxy(12,5);textcolor(15);cprintf("Room No.: "); no=atoi(input(1,5,15)); if(no==0) break; f\_pat=fopen(\_pati,"rb"); rewind(f\_pat); for(i=0; i<n; i++) { fread(&pat,sizeof(Patient),1,f\_pat); if(pat.ro==no){ fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fread(&source[nf],sizeof(Patient),1,f\_pat); nf++; f=1; } }fclose(f\_pat); sortpat(source,nf); } if(f==1){ viewpat(head,source,nf,1); continue; } if(f==0){ notice("<Patient not found>",24,10,55,15); ch=blockey(); if(ch==13) continue; } if(ch==27) break; }while(1); } void finddoc(int opt){ struct Doctor doc; char fname[20],lname[20],spec[20]; char id[10],ch,c; int i,n,f=0,nf=0; char head[30]="SEARCH DOCTOR"; do{ n=getFileElement(\_doct,sizeof(Doctor)); f=0;nf=0; Doctor \*source =(Doctor\*) calloc(n,sizeof(Doctor)); clrwin(); help(); drawwindow(head,22,7,57,17,12); if(n==0){ gotoxy(4,5);textcolor(15); cprintf("<There are no Doctor to search>"); blockey(); break; } if(opt==1){ gotoxy(14,5);textcolor(15);cprintf("ID: "); strcpy(id,input(3,9,15)); if(strcmp(id,"00")==0) break; f\_doc=fopen(\_doct,"rb"); rewind(f\_doc); for(i=0; i<n; i++) { fread(&doc,sizeof(Doctor),1,f\_doc); if(strcmp(id,doc.id)==0){ fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fread(&source[nf],sizeof(Doctor),1,f\_doc); nf++; f=1; } }fclose(f\_doc); } if(opt==2){ gotoxy(10,5);textcolor(15);cprintf("First Name: "); strcpy(fname,input(2,14,15)); if(strcmp(fname,"00")==0) break; else strupr(fname); f\_doc=fopen(\_doct,"rb"); rewind(f\_doc); for(i=0; i<n; i++) { fread(&doc,sizeof(Doctor),1,f\_doc); if(strstr(doc.fname,fname)!=0||stricmp(doc.fname,fname)==0){ fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fread(&source[nf],sizeof(Doctor),1,f\_doc); nf++; f=1; } }fclose(f\_doc); } if(opt==3){ gotoxy(10,5);textcolor(15);cprintf("Last Name: "); strcpy(lname,input(2,14,15)); if(strcmp(lname,"00")==0) break; else strupr(lname); f\_doc=fopen(\_doct,"rb"); rewind(f\_doc); for(i=0; i<n; i++) { fread(&doc,sizeof(Doctor),1,f\_doc); if(strstr(doc.lname,lname)!=0||stricmp(doc.lname,lname)==0){ fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fread(&source[nf],sizeof(Doctor),1,f\_doc); nf++; f=1; } }fclose(f\_doc); } if(opt==4){ gotoxy(11,5);textcolor(15);cprintf("Specialty: "); strcpy(spec,input(2,19,15)); if(strcmp(spec,"00")==0) break; else strupr(spec); f\_doc=fopen(\_doct,"rb"); rewind(f\_doc); for(i=0; i<n; i++) { fread(&doc,sizeof(Doctor),1,f\_doc); if(strstr(doc.spec,spec)!=0||stricmp(doc.spec,spec)==0){ fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fread(&source[nf],sizeof(Doctor),1,f\_doc); nf++; f=1; } }fclose(f\_doc); } if(f==1){ sortdoc(source,nf); viewdoc(head,source,nf,1); continue; } if(f==0){ notice("<Doctor not found>",24,10,55,15); blockey(); continue; } if(ch==27) break; }while(1); } void updatedoc(int opt){ struct Doctor doc; struct date dai; int day=0,mon=0,year=0,i,n,f; char ch,c; char id[10],idf[10],fname[15],lname[15],sex,blo[5],spec[20],nat[20],tel[20],email[35],addr[40]; char text[2][30]={"<Doctor updated>","<<Enter to update another>>"}; char blood[9][4]={"00","O+","O-","A+","A-","B+","B-","AB+","AB-"}; char head[30]="UPDATE DOCTOR"; do{ getdate(&dai); f=0; clrwin(); drawwindow("SEARCH DOCTOR TO UPDATE",22,7,57,17,12); n=getFileElement(\_doct,sizeof(Doctor)); if(n==0){ gotoxy(4,5);textcolor(15); cprintf("<There are no Doctor to update>"); blockey(); break; } gotoxy(14,5);textcolor(15);cprintf("ID: "); strcpy(idf,input(3,9,15)); if(strcmp(idf,"00")==0) break; f=finddocid(idf); if(f==0) notice("<Doctor not found>",24,10,55,15); if(f==1){ clrwin(); drawwindow(head,12,7,69,20,12); if(opt==1){ gotoxy(1,1);textcolor(15);cprintf("ID: "); strcpy(id,input(3,9,15)); if(strcmp(id,"00")==0) break; if((finddocid(id)==1||findpatid(id)==1)&&strcmp(idf,id)!=0){ notice("<This ID is exist>",24,10,55,15); blockey(); continue; } gotoxy(1,3);textcolor(15);cprintf("First Name: "); strcpy(fname,input(2,14,15)); if(strcmp(fname,"00")==0) break; else strupr(fname); gotoxy(1,5);textcolor(15);cprintf("Last Name: "); strcpy(lname,input(2,14,15)); if(strcmp(lname,"00")==0) break; else strupr(lname); gotoxy(1,7);textcolor(15);cprintf("Sex: "); window(17,13,23,13);sex=selectsex(); if(sex=='n')break; window(12,7,69,20); date: gotoxy(1,9);textcolor(15);cprintf("Date of Birth: "); gotoxy(16,9);inputdat(day,mon,year,15); if(day==0||mon==0||year==0) break; else if(day>31||mon>12||year<1900||year>dai.da\_year||(mon>dai.da\_mon&&year>=dai.da\_year)||(day>dai.da\_day&&mon>=dai.da\_mon&&year>=dai.da\_year)){ gotoxy(16,9);printf("DD/MM/YYYY"); day=0;mon=0;year=0; goto date; } gotoxy(1,11);textcolor(15);cprintf("E-mail: "); strcpy(email,input(3,34,15)); if(strcmp(email,"00")==0) break; gotoxy(1,13);textcolor(15);cprintf("Address: "); strcpy(addr,input(3,39,15)); if(strcmp(addr,"00")==0) break; gotoxy(30,1);textcolor(15);cprintf("Blood Group: ");window(54,7,61,7); strcpy(blo,blood[selectblood()]); if(strcmp(blo,"00")==0) break; window(12,7,69,20); gotoxy(30,3);textcolor(15);cprintf("Tel: "); strcpy(tel,input(1,19,15)); if(strcmp(tel,"00")==0) break; gotoxy(30,5);textcolor(15);cprintf("Specialty: ");strcpy(spec,input(2,17,15)); if(strcmp(spec,"00")==0) break; else strupr(spec); gotoxy(30,7);textcolor(15);cprintf("Nationality: "); strcpy(nat,input(2,15,15)); if(strcmp(nat,"00")==0) break; f\_doc=fopen(\_doct,"rb+"); rewind(f\_doc); for(i=0;i<n;i++){ fread(&doc,sizeof(Doctor),1,f\_doc); if(strcmp(idf,doc.id)==0){ time(&current); gt = localtime(&current); strcpy(doc.id,id); strcpy(doc.fname,fname); strcpy(doc.lname,lname); doc.sex=sex; doc.birth.da\_day=day; doc.birth.da\_mon=mon; doc.birth.da\_year=year; strcpy(doc.blo,blo); strcpy(doc.addr,addr); strcpy(doc.nat,nat); strcpy(doc.tel,tel); strcpy(doc.email,email); strcpy(doc.spec,spec); doc.join.sec = gt->tm\_sec; doc.join.min = gt->tm\_min; doc.join.hour = gt->tm\_hour; doc.join.day=gt->tm\_mday; doc.join.mon=gt->tm\_mon+1; doc.join.year=gt->tm\_year+1900; fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fwrite(&doc,sizeof(Doctor),1,f\_doc); } }fclose(f\_doc); notice(text,24,10,55,15); } if(opt==2){ gotoxy(10,6);textcolor(15);cprintf("First Name: "); strcpy(fname,input(2,14,15)); if(strcmp(fname,"00")==0) break; else strupr(fname); gotoxy(10,8);textcolor(15);cprintf("Last Name: "); strcpy(lname,input(2,14,15)); if(strcmp(lname,"00")==0) break; else strupr(lname); f\_doc=fopen(\_doct,"rb+"); rewind(f\_doc); for(i=0;i<n;i++){ fread(&doc,sizeof(Doctor),1,f\_doc); if(strcmp(idf,doc.id)==0){ strcpy(doc.fname,fname); strcpy(doc.lname,lname); fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fwrite(&doc,sizeof(Doctor),1,f\_doc); notice(text,24,10,55,15); } }fclose(f\_doc); } if(opt==3){ gotoxy(11,7);textcolor(15);cprintf("Specialty: ");strcpy(spec,input(2,17,15)); if(strcmp(spec,"00")==0) break; else strupr(spec); f\_doc=fopen(\_doct,"rb+"); rewind(f\_doc); for(i=0;i<n;i++){ fread(&doc,sizeof(Doctor),1,f\_doc); if(strcmp(doc.id,idf)==0){ strcpy(doc.spec,spec); fseek(f\_doc,-(int)sizeof(Doctor),SEEK\_CUR); fwrite(&doc,sizeof(Doctor),1,f\_doc); notice(text,24,10,55,15); } } fclose(f\_doc); } } ch=blockey(); if(ch==27) break; }while(1); } void updatepat(int opt){ struct Patient pat; struct Room ro; struct date dai; int day=0,mon=0,year=0,i,n,f,no,nr,nav=0; char ch; char idf[10],id[10],fname[15],lname[15],sex,blo[5],prob[20],nat[20],tel[20],addr[40]; char text[2][30]={"<Patient updated>","<<Enter to update another>>"}; char blood[9][4]={"00","O+","O-","A+","A-","B+","B-","AB+","AB-"}; char head[30]="UPDATE PATIENT"; do{ getdate(&dai); f=0; clrwin(); drawwindow("SEARCH PATIENT TO UPDATE",22,7,57,17,12); n=getFileElement(\_pati,sizeof(Patient)); if(n==0){ gotoxy(4,5);textcolor(15); cprintf("<There are no Patient to update>"); blockey(); break; } if(opt==3){ nr=getFileElement(\_room,sizeof(Room)); f\_ro=fopen(\_room,"rb"); rewind(f\_ro); for(i=0; i<nr; i++) { fread(&ro,sizeof(Room),1,f\_ro); if(ro.sta==EMPTY){ nav++; } }fclose(f\_ro); if(nav==0){ gotoxy(5,5);textcolor(15); cprintf("<There are no available rooms>"); blockey(); break; } } gotoxy(14,5);textcolor(15);cprintf("ID: "); strcpy(idf,input(3,9,15)); if(strcmp(idf,"00")==0) break; f=findpatid(idf); if(f==0) notice("<Patient not found>",24,10,55,15); if(f==1){ f1: f\_pat=fopen(\_pati,"rb+"); rewind(f\_pat); for(i=0;i<n;i++){ fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(id,pat.id)==0){ break; } }fclose(f\_pat); clrwin(); drawwindow(head,12,7,69,20,12); if(opt==1){ gotoxy(1,1);textcolor(15);cprintf("Room No.: ");no=atoi(input(1,5,15)); if(no==0) break; if(findroom(no)!=1&&no!=pat.ro){ notice("<Unavailable Room>",24,10,55,15); blockey(); continue; } gotoxy(1,3);textcolor(15);cprintf("ID: "); strcpy(id,input(3,9,15)); if(strcmp(id,"00")==0) break; if((finddocid(id)==1||findpatid(id)==1)&&strcmp(id,pat.id)!=0){ notice("<This ID is exist>",24,10,55,15); ch=blockey(); if(ch==27)break; else continue; } gotoxy(1,5);textcolor(15);cprintf("First Name: "); strcpy(fname,input(2,14,15)); if(strcmp(fname,"00")==0) break; else strupr(fname); gotoxy(1,7);textcolor(15);cprintf("Last Name: "); strcpy(lname,input(2,14,15)); if(strcmp(lname,"00")==0) break; else strupr(lname); gotoxy(1,9);textcolor(15);cprintf("Sex: "); window(17,15,23,15);sex=selectsex(); if(sex=='n')break; window(12,7,69,20); date: gotoxy(1,11);textcolor(15);cprintf("Date of Birth: "); gotoxy(16,11);inputdat(day,mon,year,15); if(day==0||mon==0||year==0) break; else if(day>31||mon>12||year<1900||year>dai.da\_year||(mon>dai.da\_mon&&year>=dai.da\_year)||(day>dai.da\_day&&mon>=dai.da\_mon&&year>=dai.da\_year)){ gotoxy(16,11);printf("DD/MM/YYYY"); day=0;mon=0;year=0; goto date; } gotoxy(1,13);textcolor(15);cprintf("Address: "); strcpy(addr,input(3,39,15)); if(strcmp(addr,"00")==0) break; gotoxy(30,1);textcolor(15);cprintf("Blood Group: ");window(54,7,61,7); strcpy(blo,blood[selectblood()]); if(strcmp(blo,"00")==0) break; window(12,7,69,20); gotoxy(30,3);textcolor(15);cprintf("Problem: ");strcpy(prob,input(2,19,15)); if(strcmp(prob,"00")==0) break; gotoxy(30,5);textcolor(15);cprintf("Tel: "); strcpy(tel,input(1,19,15)); if(strcmp(tel,"00")==0) break; gotoxy(30,7);textcolor(15);cprintf("Nationality: "); strcpy(nat,input(2,19,15)); if(strcmp(nat,"00")==0) break; setroomEMPTY(pat.ro); setroomSTAY(no); f\_pat=fopen(\_pati,"rb+"); rewind(f\_pat); for(i=0;i<n;i++){ fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(idf,pat.id)==0){ pat.ro=no; strcpy(pat.id,id); strcpy(pat.fname,fname); strcpy(pat.lname,lname); pat.sex=sex; pat.birth.da\_day=day; pat.birth.da\_mon=mon; pat.birth.da\_year=year; strcpy(pat.addr,addr); strcpy(pat.blo,blo); strcpy(pat.prob,prob); strcpy(pat.nat,nat); strcpy(pat.tel,tel); fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fwrite(&pat,sizeof(Patient),1,f\_pat); } }fclose(f\_pat); notice(text,24,10,55,15); } if(opt==2){ gotoxy(10,4);textcolor(15);cprintf("First Name: "); strcpy(fname,input(2,14,15)); if(strcmp(fname,"00")==0) break; else strupr(fname); gotoxy(10,6);textcolor(15);cprintf("Last Name: "); strcpy(lname,input(2,14,15)); if(strcmp(lname,"00")==0) break; else strupr(lname); f\_pat=fopen(\_pati,"rb+"); rewind(f\_pat); for(i=0;i<n;i++){ fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(idf,pat.id)==0){ strcpy(pat.fname,fname); strcpy(pat.lname,lname); fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fwrite(&pat,sizeof(Patient),1,f\_pat); notice(text,24,10,55,15); } }fclose(f\_pat); } if(opt==3){ gotoxy(11,7);textcolor(15);cprintf("Room No.: ");no=atoi(input(1,5,15)); if(no==0) break; if(findroom(no)!=1){ notice("<Unavailable Room>",24,10,55,15); blockey(); goto f1; } setroomEMPTY(pat.ro); setroomSTAY(no); f\_pat=fopen(\_pati,"rb+"); rewind(f\_pat); for(i=0;i<n;i++){ fread(&pat,sizeof(Patient),1,f\_pat); if(strcmp(pat.id,idf)==0){ pat.ro=no; fseek(f\_pat,-(int)sizeof(Patient),SEEK\_CUR); fwrite(&pat,sizeof(Patient),1,f\_pat); notice(text,24,10,55,15); } } fclose(f\_pat); } } ch=blockey(); if(ch==27) break; }while(1); } void updateroom(){ struct Room ro; struct Types type; char ch,c; int no,nof,i,n,f,ty,it,nt; char text[2][30]={"<Room Updated>","<<Enter to Update another>>"}; char head[30]="UPDATE ROOM"; do{ f=0; clrwin(); help(); drawwindow("SEARCH ROOM TO UPDATE",22,7,57,17,12); n=getFileElement(\_room,sizeof(Room)); if(n==0){ gotoxy(5,5);textcolor(15); cprintf("<There are no room to update>"); blockey(); break; } gotoxy(12,5);textcolor(15);cprintf("Room No.: ");nof=atoi(input(1,5,15)); if(nof==0) break; f=findroom(nof); if(f==0) notice("<Room not found>",24,10,55,15); if(f==2) notice("<This room has Patient>",24,10,55,15); if(f==1) { if(confirm("Updating")==0){ fclose(f\_ro);continue;} else{ s: clrwin(); drawwindow(head,22,7,57,17,12); gotoxy(12,4);textcolor(15);cprintf("Room No.: ");no=atoi(input(1,5,15)); if(no==0) break; f\_ro=fopen(\_room,"rb+"); rewind(f\_ro); for(i=0;i<n;i++){ fread(&ro,sizeof(Room),1,f\_ro); if(no==ro.no&&no!=nof){ notice(">This room is exist<",24,10,55,15); blockey(); fclose(f\_ro); goto s; } } fclose(f\_ro); gotoxy(12,6);textcolor(15);cprintf("Type: "); window(39,12,51,12); ty=selecttype(); if(ty==-1) break; f\_ro=fopen(\_room,"rb+"); rewind(f\_ro); for(i=0; i<n; i++) { fread(&ro,sizeof(Room),1,f\_ro); if(ro.no==nof) { fseek(f\_ro,-(int)sizeof(Room),SEEK\_CUR); nt=getFileElement(\_type,sizeof(Types)); f\_ty=fopen(\_type,"rb+"); rewind(f\_ty); for(it=0;it<nt;it++){ fread(&type,sizeof(Types),1,f\_ty); if(type.co==ty){ ro.type.co=type.co; stpcpy(ro.type.na,type.na); ro.type.pri=type.pri; } } fclose(f\_ty); ro.no=no; ro.sta=EMPTY; fwrite(&ro,sizeof(Room),1,f\_ro); } } fclose(f\_ro); notice(text,24,10,55,15); } } ch=blockey(); if(ch==27) break; }while(1); } int viewroom(char head[30],Room \*source,int n){ struct Patient pat; int i,temp=0,s=0,back=1,j=0,nl,l,f=0,index=0; char ch; do{ clrwin(); help(); drawwindow(head,20,7,60,20,12); gotoxy(1,1);printf("No.");gotoxy(8,1);printf("Type"); gotoxy(18,1);printf("Price");gotoxy(30,1);printf("Status"); if(n>13)temp=13; else temp =n; gotoxy(1,back+1); textbackground(2); for(j=0;j<41;j++) cprintf(" "); for(i=0;i<temp;i++){ gotoxy(1,i+2);printf("%03d",source[i+s].no);gotoxy(8,i+2);printf("%s",source[i+s].type.na); gotoxy(18,i+2);printf("%.2f",source[i+s].type.pri);gotoxy(30,i+2);printf("%s",source[i+s].sta=='n'?"Available":"Unavailable"); } ch: ch=getch(); switch(ch){ case 72:back--;if(back<1){back=1;s--;if(s<0){back=temp;s=n-temp;}}break; case 80:back++;if(back>=temp+1){back=temp;s++;if(s>n-temp){back=1;s=0;}}break; case 27:break; case 13:break; default:goto ch; } if(ch==13){ if(source[back-1+s].sta==EMPTY) if(confirm("Add Patient")==1){ if(addpatient(source[back-1+s].no)==1){ if(strstr(head,"ALL")!=0) source[back-1+s].sta=STAY; else{ index=back-1+s; n--; while(index<n){ source[index]=source[index+1]; index++; } s=0;back=1; } } }else continue; else if(confirm("Checkout")==1){ nl=getFileElement(\_pati,sizeof(Patient)); f\_pat=fopen(\_pati,"rb"); for(l=0;l<nl;l++){ fread(&pat,sizeof(Patient),1,f\_pat); if(source[back-1+s].no==pat.ro){ f=1; break; } }fclose(f\_pat); if(f==1){ ch=checkout(pat.id); if(ch==27||ch==13) break; else {f=0;continue;} } }else continue; } if(ch==27)break; }while(1); return ch; } void allroom(){ int i,n; char head[30]="ALL ROOM"; char ch; start: n=getFileElement(\_room,sizeof(Room)); Room \*source =(Room\*) calloc(n,sizeof(Room)); f\_ro=fopen(\_room,"rb"); rewind(f\_ro); for(i=0; i<n; i++) { fread(&source[i],sizeof(Room),1,f\_ro); }fclose(f\_ro); clrwin(); help(); drawwindow(head,20,7,60,20,12); if(n==0){ gotoxy(12,7);textcolor(15); cprintf("<There are no room>"); blockey(); goto end; } sortroom(source,n); if(viewroom(head,source,n)==13) goto start; end: } void allpat(){ int i,n; char head[30]="ALL PATIENT"; char ch; n=getFileElement(\_pati,sizeof(Patient)); Patient \*source =(Patient\*) calloc(n,sizeof(Patient)); f\_pat=fopen(\_pati,"rb"); rewind(f\_ro); for(i=0; i<n; i++) { fread(&source[i],sizeof(Patient),1,f\_pat); }fclose(f\_pat); clrwin(); help(); drawwindow(head,20,7,60,20,12); if(n==0){ gotoxy(12,7);textcolor(15); cprintf("<There are no Patient>"); blockey(); goto end; } sortpat(source,n); viewpat(head,source,n,1); end: } void alldoc(){ int i,n; char ch; char head[30]="ALL DOCTOR"; n=getFileElement(\_doct,sizeof(Doctor)); Doctor \*source =(Doctor\*) calloc(n,sizeof(Doctor)); f\_doc=fopen(\_doct,"rb"); rewind(f\_doc); for(i=0; i<n; i++) { fread(&source[i],sizeof(Doctor),1,f\_doc); }fclose(f\_doc); clrwin(); help(); drawwindow(head,20,7,60,20,12); if(n==0){ gotoxy(12,7);textcolor(15); cprintf("<There are no Doctor>"); blockey(); goto end; } sortdoc(source,n); viewdoc(head,source,n,1); end: } void findviewroom(){ struct Room ro; int i,n,nf,no; char head[30]="SEARCH ROOM"; char ch,c; do{ n=getFileElement(\_room,sizeof(Room)); nf=0; Room \*source =(Room\*) calloc(n,sizeof(Room)); clrwin(); help(); drawwindow(head,22,7,57,17,12); clrscr(); if(n==0){ gotoxy(5,5);textcolor(15);cprintf("<There are no rooms to search>"); blockey(); break; } gotoxy(12,5);textcolor(15);cprintf("Room No.: ");no=atoi(input(1,5,15)); if(no==0) break; if(findroom(no)!=0){ f\_ro=fopen(\_room,"rb"); rewind(f\_ro); for(i=0; i<n; i++) { fread(&ro,sizeof(Room),1,f\_ro); if(ro.no==no){ fseek(f\_ro,-(int)sizeof(Room),SEEK\_CUR); fread(&source[nf],sizeof(Room),1,f\_ro); nf++; } }fclose(f\_ro); } if(nf==0){ notice("<Room not found>",24,10,55,15); blockey(); continue; } sortroom(source,nf); ch=viewroom(head,source,nf); if(ch==27) break; else continue; }while(1); } void availroom(){ struct Room ro; char ch; int i,n,nav=0; char head[30]="AVAILABLE ROOM"; n=getFileElement(\_room,sizeof(Room)); Room \*source =(Room\*) calloc(n,sizeof(Room)); f\_ro=fopen(\_room,"rb"); rewind(f\_ro); for(i=0; i<n; i++) { fread(&ro,sizeof(Room),1,f\_ro); if(ro.sta==EMPTY){ fseek(f\_ro,-(int)sizeof(Room),SEEK\_CUR); fread(&source[nav],sizeof(Room),1,f\_ro); nav++; } }fclose(f\_ro); clrwin(); help(); drawwindow(head,20,7,60,20,12); if(nav==0){ gotoxy(6,7);textcolor(15); cprintf("<There are no available rooms>"); blockey(); goto end; } sortroom(source,nav); viewroom(head,source,nav); end: } void alltype(){ struct Types type; char ch,c; int i,n,temp,s,back,j; char head[30]="ALL TYPE"; start: temp=0;s=0;back=1;j=0; n=getFileElement(\_type,sizeof(Types)); Types \*source =(Types\*) calloc(n,sizeof(Types)); f\_ty=fopen(\_type,"rb"); rewind(f\_ty); for(i=0; i<n; i++) { fread(&source[i],sizeof(Types),1,f\_ty); }fclose(f\_ty); sorttype(source,n); do{ clrwin(); help(); drawwindow(head,20,7,60,20,12); if(n==0){ gotoxy(12,7);textcolor(15); cprintf("<There are no type>"); blockey(); break; } gotoxy(1,1);printf("Code");gotoxy(19,1);printf("Type"); gotoxy(33,1);printf("Price"); if(n>13)temp=13; else temp=n; gotoxy(1,back+1); textbackground(2); for(j=0;j<41;j++) cprintf(" "); for(i=0;i<temp;i++){ gotoxy(1,i+2);printf("%03d",source[i+s].co);gotoxy(19,i+2);printf("%s",source[i+s].na); gotoxy(33,i+2);printf("%.2f",source[i+s].pri); } ch: ch=getch(); switch(ch){ case 72:back--;if(back<1){back=1;s--;if(s<0){back=temp;s=n-temp;}}break; case 80:back++;if(back>=temp+1){back=temp;s++;if(s>n-temp){back=1;s=0;}}break; case 27:break; case 13:break; sdefault:goto ch; }

if(ch==13){

if(confirm("Delete Type")==1)

{

deletetype(source[back-1+s].co);

notice("<Type Deleted>",24,10,55,15);

blockey();

goto start;

}

else continue; }

if(ch==27)break;

}

while(1);

}