#include <stdio.h>

#include <string.h>

#include <conio.h>

#include <stdlib.h>

#include <windows.h>

struct student{

char ID[15];

char name[20];

char add[20];

char parname[20];

int Class;

long unsigned int phone\_no;

};

struct student stu;

///This will set the forground color for printing in a console window.

void SetColor(int ForgC)

{

WORD wColor;

///We will need this handle to get the current background attribute

HANDLE hStdOut = GetStdHandle(STD\_OUTPUT\_HANDLE);

CONSOLE\_SCREEN\_BUFFER\_INFO csbi;

///We use csbi for the wAttributes word.

if(GetConsoleScreenBufferInfo(hStdOut, &csbi))

{

///Mask out all but the background attribute, and add in the forgournd color

wColor = (csbi.wAttributes & 0xF0) + (ForgC & 0x0F);

SetConsoleTextAttribute(hStdOut, wColor);

}

return;

}

void ClearConsoleToColors(int ForgC, int BackC)

{

WORD wColor = ((BackC & 0x0F) << 4) + (ForgC & 0x0F);

///Get the handle to the current output buffer...

HANDLE hStdOut = GetStdHandle(STD\_OUTPUT\_HANDLE);

///This is used to reset the carat/cursor to the top left.

COORD coord = {0, 0};

///A return value... indicating how many chars were written

/// not used but we need to capture this since it will be

/// written anyway (passing NULL causes an access violation).

DWORD count;

///This is a structure containing all of the console info

/// it is used here to find the size of the console.

CONSOLE\_SCREEN\_BUFFER\_INFO csbi;

///Here we will set the current color

SetConsoleTextAttribute(hStdOut, wColor);

if(GetConsoleScreenBufferInfo(hStdOut, &csbi))

{

///This fills the buffer with a given character (in this case 32=space).

FillConsoleOutputCharacter(hStdOut, (TCHAR) 32, csbi.dwSize.X \* csbi.dwSize.Y, coord, &count);

FillConsoleOutputAttribute(hStdOut, csbi.wAttributes, csbi.dwSize.X \* csbi.dwSize.Y, coord, &count );

///This will set our cursor position for the next print statement.

SetConsoleCursorPosition(hStdOut, coord);

}

return;

}

void SetColorAndBackground(int ForgC, int BackC)

{

WORD wColor = ((BackC & 0x0F) << 4) + (ForgC & 0x0F);;

SetConsoleTextAttribute(GetStdHandle(STD\_OUTPUT\_HANDLE), wColor);

return;

}

COORD coord = {0,0}; ///set the cordinate to 0, 0 (top-left corner of window);

void gotoxy(int x, int y){

coord.X = x; coord.Y = y; /// X and Y coordinates

SetConsoleCursorPosition(GetStdHandle(STD\_OUTPUT\_HANDLE), coord);

}

void drawRectangle(){

int i, j;

gotoxy(0,0);

printf("%c",201);

for(i = 1; i < 78; i++){

gotoxy(i, 0);

printf("%c",205);

}

gotoxy(78,0);

printf("%c",187);

for(i = 1; i < 25; i++){

gotoxy(78, i);

if(i == 6){

printf("%c",185);

}else{

printf("%c",186);

}

}

gotoxy(78, 25);

printf("%c",188);

for(i = 77; i > 0; i--){

gotoxy(i,25);

if(i == 35){

printf("%c",202);

}else{

printf("%c",205);

}

}

gotoxy(0,25);

printf("%c",200);

for(i = 24; i > 0; i--){

gotoxy(0,i);

if(i == 6){

printf("%c",204);

}else{

printf("%c",186);

}

}

for(i = 1; i < 78; i++){

gotoxy(i,6);

if(i == 35){

printf("%c",203);

}else{

printf("%c",205);

}

}

for(i = 7; i < 25; i++){

gotoxy(35,i);

printf("%c",186);

}

}

void clearWindow(){

int i,j;

for(i = 37; i < 78; i++){

for(j = 7; j < 25; j++){

gotoxy(i,j);printf(" ");

}

}

return;

}

void window(){

drawRectangle();

gotoxy(28,2);

SetColor(35);

printf("STUDENT RECORD SYSTEM");

gotoxy(20,3);

printf("Tribhuvan University, Kathmandu, Nepal");

gotoxy(31,4);

printf("Estd.: 2016 B.S.");

gotoxy(25,24);

SetColor(17);

}

void get\_password(char\* pass)

{

char temp\_passP[25];

int i=0;

while(1)

{

temp\_passP[i]=getch();

if(temp\_passP[i]==13){break;}

else if(temp\_passP[i]==8)

{

if(i!=0) {

printf("\b \b");

i--;

} else {printf("\a");}

}

else

{

printf("\*");

\*(pass+i) = temp\_passP[i];

i++;

}

\*(pass+i)='\0';

}

}

void use\_pass\_field(){

int x = 15, y = 16;

int use;

char pass[10];

SetColor(10);

gotoxy(15,12);printf("The database is password protected.");

gotoxy(15,13);printf(" Enter Valid username and password");

SetColor(17);

gotoxy(20,x);printf("USERNAME:- ");

gotoxy(20,y);printf("PASSWORD:- ");

gotoxy(34,x);scanf("%d",use);

gotoxy(34,y);get\_password(pass);

}

void print\_heading(const char st[]){

SetColorAndBackground(31,28);

gotoxy(45,8);printf("SRS : %s",st);

SetColorAndBackground(17,15);

}

int conf\_record(char id[]){

// left for you

//it checks whether the entered id for

//new record is already in the database.

}

void add\_student(){

clearWindow();

print\_heading("Add Record");

int print = 37;

FILE \*fp;

fp = fopen("record.txt","ab+");

SetColor(45);

if(fp == NULL){

MessageBox(0,"Error in Opening file\nMake sure your file is not write protected","Warning",0);

}else{

fflush(stdin);

gotoxy(print,10);printf("ID: ");gets(stu.ID);

//here you can confirms the ID

gotoxy(print,12);printf("Name: ");gets(stu.name);

gotoxy(print,14);printf("Address: ");gets(stu.add);

gotoxy(print,16);printf("Parent's name: ");gets(stu.parname);

gotoxy(print,18);printf("Class: ");scanf("%d",&stu.Class);

gotoxy(print,20);printf("Phone Number: ");scanf("%ld",&stu.phone\_no);

fwrite(&stu, sizeof(stu), 1, fp);

gotoxy(40,22); printf("The record is sucessfully added");

}

SetColor(28);

fclose(fp);

return;

}

void search\_student(){

clearWindow();

print\_heading("Search Record");

SetColor(45);

char s\_id[15];

int isFound = 0;

gotoxy(37,10);printf("Enter ID to Search: ");fflush(stdin);

gets(s\_id);

FILE \*fp;

fp = fopen("record.txt","rb");

while(fread(&stu,sizeof(stu),1,fp) == 1){

if(strcmp(s\_id,stu.ID) == 0){

isFound = 1;

break;

}

}

if(isFound == 1){

gotoxy(37,12);printf("The record is Found");

gotoxy(37,14);printf("ID: %s",stu.ID);

gotoxy(37,15);printf("Name: %s",stu.name);

gotoxy(37,16);printf("Address: %s",stu.add);

gotoxy(37,17);printf("Parent's Name: %s",stu.parname);

gotoxy(37,18);printf("Class: %d",stu.Class);

gotoxy(37,19);printf("Phone No: %ld",stu.phone\_no);

}else{

gotoxy(37,12);printf("Sory, No record found in the database");

}

SetColor(28);

fclose(fp);

return;

}

void mod\_student(){

clearWindow();

print\_heading("Modify Record");

SetColor(45);

char s\_id[15];

int isFound = 0, print = 37;

gotoxy(37,10);printf("Enter ID to Modify: ");fflush(stdin);

gets(s\_id);

FILE \*fp;

fp = fopen("record.txt","rb+");

while(fread(&stu, sizeof(stu),1,fp) == 1){

if(strcmp(s\_id, stu.ID) == 0){

fflush(stdin);

gotoxy(print,12);printf("ID: ");gets(stu.ID);

gotoxy(print,13);printf("Name: ");gets(stu.name);

gotoxy(print,14);printf("Address: ");gets(stu.add);

gotoxy(print,15);printf("Parent's name: ");gets(stu.parname);

gotoxy(print,16);printf("Class: ");scanf("%d",&stu.Class);

gotoxy(print,17);printf("Phone Number: ");scanf("%ld",&stu.phone\_no);

fseek(fp,-sizeof(stu), SEEK\_CUR);

fwrite(&stu,sizeof(stu), 1, fp);

isFound = 1;

break;

}

}

if(!isFound){

gotoxy(print, 12);printf("No Record Found");

}

fclose(fp);

SetColor(28);

return;

}

void gen\_marksheet(){

//left for further enhancement

}

void delete\_student(){

clearWindow();

print\_heading("Delete Record");

SetColor(45);

char s\_id[15];

int isFound = 0, print = 37;

gotoxy(37,10);printf("Enter ID to Modify: ");fflush(stdin);

gets(s\_id);

FILE \*fp, \*temp;

fp = fopen("record.txt","rb");

temp = fopen("temp.txt", "wb");

while(fread(&stu, sizeof(stu),1,fp) == 1){

if(strcmp(s\_id, stu.ID) == 0){

fwrite(&stu,sizeof(stu),1,temp);

}

}

fclose(fp);

fclose(temp);

remove("record.txt");

rename("temp.txt","record.txt");

gotoxy(37,12);printf("The record is sucessfully deleted");

SetColor(28);

return;

}

void main\_window(){

int choice;

SetColor(28);

int x = 2;

while(1){

gotoxy(x,8);printf("1. Add Student");

gotoxy(x,10);printf("2. Search Student");

gotoxy(x,12);printf("3. Modify Student Record");

gotoxy(x,14);printf("4. Generate Marksheet");

gotoxy(x,16);printf("5. Delete Student Record");

gotoxy(x,18);printf("6. Change password");

gotoxy(x,20);printf("7. Exit");

gotoxy(x,22);printf("Enter your choice: ");

scanf("%d",&choice);

switch(choice){

case 1:

add\_student();

break;

case 2:

search\_student();

break;

case 3:

mod\_student();

break;

case 4:

break;

case 5:

delete\_student();

break;

case 6:

break;

case 7:

exit(0);

break;

default:

break;

}

}

}

int main(){

ClearConsoleToColors(17,15);

SetConsoleTitle("Programming-technique.blogspot.com - Student Record System");

window();

//use\_pass\_field();

main\_window();

return 0;

}