STUDENT RECORD SYSTEM

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#include <stdio.h>

#include <string.h>

#include <conio.h>

#include <stdlib.h>

#include <windows.h>

struct student{

char stud\_id[15];

char stud\_name[20];

char stud\_address[20];

char stud\_parentName[20];

int stud\_class;

int stud\_contact\_number;

};

struct student stu;

void SetColor(int ForgC)

{

WORD wordcolor;

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

CONSOLE\_SCREEN\_BUFFER\_INFO conscrbufinfo;

if(GetConsoleScreenBufferInfo(studentHandleOutput, &conscrbufinfo))

{

wordcolor = (conscrbufinfo.wAttributes & 0xF0) + (ForgC & 0x0F);

SetConsoleTextAttribute(studentHandleOutput, wordcolor);

}

return;

}

void ClearConsoleToColors(int ForgC, int BackC)

{

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

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

COORD coordinates = {0, 0};

DWORD counting;

CONSOLE\_SCREEN\_BUFFER\_INFO conscrbufinfo;

SetConsoleTextAttribute(studentHandleOutput, wordColor);

if(GetConsoleScreenBufferInfo(studentHandleOutput, &conscrbufinfo))

{

FillConsoleOutputCharacter(studentHandleOutput, (TCHAR) 32, conscrbufinfo.dwSize.X \* conscrbufinfo.dwSize.Y, coordinates, &counting);

FillConsoleOutputAttribute(studentHandleOutput, conscrbufinfo.wAttributes, conscrbufinfo.dwSize.X \* conscrbufinfo.dwSize.Y, coordinates, &counting );

SetConsoleCursorPosition(studentHandleOutput, coordinates);

}

return;

}

void Setting\_Color\_And\_Background(int ForgC, int BackC)

{

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

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

return;

}

COORD coordinates = {0,0};

void x\_and\_y\_coordinates(int x, int y){

coordinates.X = x; coordinates.Y = y;

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

}

void Drawing\_Rectangle(){

int a, b;

x\_and\_y\_coordinates(0,0);

printf("%c",201);

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

x\_and\_y\_coordinates(a, 0);

printf("%c",205);

}

x\_and\_y\_coordinates(78,0);

printf("%c",187);

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

x\_and\_y\_coordinates(78, a);

if(a == 6){

printf("%c",185);

}else{

printf("%c",186);

}

}

x\_and\_y\_coordinates(78, 25);

printf("%c",188);

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

x\_and\_y\_coordinates(a,25);

if(a == 35){

printf("%c",202);

}else{

printf("%c",205);

}

}

x\_and\_y\_coordinates(0,25);

printf("%c",200);

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

x\_and\_y\_coordinates(0,a);

if(a == 6){

printf("%c",204);

}else{

printf("%c",186);

}

}

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

x\_and\_y\_coordinates(a,6);

if(a == 35){

printf("%c",203);

}else{

printf("%c",205);

}

}

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

x\_and\_y\_coordinates(35,a);

printf("%c",186);

}

}

void Reset\_Window(){

int a,b;

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

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

x\_and\_y\_coordinates(a,b);printf(" ");

}

}

return;

}

void window(){

Drawing\_Rectangle();

x\_and\_y\_coordinates(28,2);

SetColor(35);

printf("STUDENT RECORD SYSTEM by kumar parth");

x\_and\_y\_coordinates(20,3);

printf("SRM INSTITUTE OF SCIENCE AND TECHNOLOGY");

x\_and\_y\_coordinates(31,4);

printf("KTR,CHENNAI");

x\_and\_y\_coordinates(25,24);

SetColor(17);

}

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

Setting\_Color\_And\_Background(31,28);

x\_and\_y\_coordinates(38,8);printf("STUDENT RECORD SYSTEM : %s",st);

Setting\_Color\_And\_Background(17,15);

}

int configuration\_record(char id[]){

}

void adding\_student(){

Reset\_Window();

print\_heading("Add New Student");

int print = 37;

FILE \*openfile;

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

SetColor(45);

if(openfile == NULL){

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

}else{

fflush(stdin);

x\_and\_y\_coordinates(print,10);printf("ID: ");gets(stu.stud\_id);

x\_and\_y\_coordinates(print,12);printf("Name: ");gets(stu.stud\_name);

x\_and\_y\_coordinates(print,14);printf("Address: ");gets(stu.stud\_address);

x\_and\_y\_coordinates(print,16);printf("Parent's name: ");gets(stu.stud\_parentName);

x\_and\_y\_coordinates(print,18);printf("Class: ");scanf("%d",&stu.stud\_class);

x\_and\_y\_coordinates(print,20);printf("Contact Number: ");scanf("%d",&stu.stud\_contact\_number);

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

x\_and\_y\_coordinates(40,22); printf("New Student is Added Successfully");

}

SetColor(28);

fclose(openfile);

return;

}

void search\_student(){

Reset\_Window();

print\_heading("Search Record");

SetColor(45);

char student\_id[15];

int isFound = 0;

x\_and\_y\_coordinates(37,10);printf("Enter ID to Search: ");fflush(stdin);

gets(student\_id);

FILE \*openfile;

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

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

if(strcmp(student\_id,stu.stud\_id) == 0){

isFound = 1;

break;

}

}

if(isFound == 1){

x\_and\_y\_coordinates(37,12);printf("The record is Found");

x\_and\_y\_coordinates(37,14);printf("ID: %s",stu.stud\_id);

x\_and\_y\_coordinates(37,15);printf("Name: %s",stu.stud\_name);

x\_and\_y\_coordinates(37,16);printf("Address: %s",stu.stud\_address);

x\_and\_y\_coordinates(37,17);printf("Parent's Name: %s",stu.stud\_parentName);

x\_and\_y\_coordinates(37,18);printf("Class: %d",stu.stud\_class);

x\_and\_y\_coordinates(37,19);printf("Contact Number: %ld",stu.stud\_contact\_number);

}else{

x\_and\_y\_coordinates(37,12);printf("No record found in the database");

}

SetColor(28);

fclose(openfile);

return;

}

void modify\_student(){

Reset\_Window();

print\_heading("Modify Record");

SetColor(45);

char student\_id[15];

int isFound = 0, print = 37;

x\_and\_y\_coordinates(37,10);printf("Enter ID to Modify: ");fflush(stdin);

gets(student\_id);

FILE \*openfile;

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

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

if(strcmp(student\_id, stu.stud\_id) == 0){

fflush(stdin);

x\_and\_y\_coordinates(print,12);printf("ID: ");gets(stu.stud\_id);

x\_and\_y\_coordinates(print,13);printf("Name: ");gets(stu.stud\_name);

x\_and\_y\_coordinates(print,14);printf("Address: ");gets(stu.stud\_address);

x\_and\_y\_coordinates(print,15);printf("Parent's name: ");gets(stu.stud\_parentName);

x\_and\_y\_coordinates(print,16);printf("Class: ");scanf("%d",&stu.stud\_class);

x\_and\_y\_coordinates(print,17);printf("Contact Number: ");scanf("%ld",&stu.stud\_contact\_number);

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

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

x\_and\_y\_coordinates(40,22); printf("New Student is Updated Successfully");

isFound = 1;

break;

}

}

if(!isFound){

x\_and\_y\_coordinates(print, 12);printf("No Record Found");

}

fclose(openfile);

SetColor(28);

return;

}

void delete\_student(){

Reset\_Window();

print\_heading("Delete Record");

SetColor(45);

char student\_id[15];

int isFound = 0, print = 37;

x\_and\_y\_coordinates(37,10);printf("Enter ID to Delete: ");fflush(stdin);

gets(student\_id);

FILE \*openfile, \*temporary;

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

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

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

if(strcmp(student\_id, stu.stud\_id) == 0){

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

}

}

fclose(openfile);

fclose(temporary);

remove("record.txt");

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

x\_and\_y\_coordinates(37,12);printf("The record is sucessfully deleted");

SetColor(28);

return;

}

void main\_window(){

int option;

SetColor(28);

int x = 2;

while(1){

x\_and\_y\_coordinates(x,8);printf("Choice 1. Add Student");

x\_and\_y\_coordinates(x,10);printf("Choice 2. Search Student");

x\_and\_y\_coordinates(x,12);printf("Choice 3. Modify Student Record");

x\_and\_y\_coordinates(x,14);printf("Choice 4. Delete Student Record");

x\_and\_y\_coordinates(x,16);printf("Choice 5. Exit");

x\_and\_y\_coordinates(x,18);printf("Enter your Choice: ");

scanf("%d",&option);

switch(option){

case 1:

adding\_student();

break;

case 2:

search\_student();

break;

case 3:

modify\_student();

break;

case 4:

delete\_student();

break;

case 5:

exit(0);

break;

default:

break;

}

}

}

int main(){

ClearConsoleToColors(17,15);

SetConsoleTitle("ITSOURCECODE.COM - STUDENT RECORD SYSTEM");

window();

main\_window();

return 0;

}