***Mini Project on***

***Student Record Manager***

*CS-401*

*Programming in C*



**JAwaharlal Nehru University**

**New Delhi-110067**

Name : Chetna Submitted to:

Enrolment No. : 21/10/JC/011 Dr. Piyush Pratap Singh

PROJECT CODE

Data.h

struct student

{

int enrolno;

char name[50];

char gender;

char email[50];

int date,month,year;

int sem;

char phone[50];

}s;

Search.h

void search\_enrolno()

{

FILE \*fp;

int n,found,i;

textcolor(11);

textbackground(BLACK);

clrscr();

printf("\t\t\tEnter Enrolment Number : ");

scanf("%d",&n);

for(i=1;i<=80;i++)

printf("-");

gotoxy(3,3);

printf("ENRNO");

gotoxy(11,3);

printf("NAME");

gotoxy(22,3);

printf("GENDER");

gotoxy(32,3);

printf("DOB");

gotoxy(43,3);

printf("EMAIL");

gotoxy(62,3);

printf("SEM");

gotoxy(69,3);

printf("PHONE NO");

printf("\n");

for(i=1;i<=80;i++)

printf("-");

fp=fopen("information.dat","rb"); //read data in binary form

found=0;

i=5;

while(fread(&s,sizeof(s),1,fp)!=NULL)

{

if(s.enrolno==n)

{

found=1;

gotoxy(3,i);

printf("%d",s.enrolno);

gotoxy(11,i);

printf("%s",s.name);

gotoxy(22,i);

printf("%c",s.gender);

gotoxy(32,i);

printf("%d/%d/%d",s.date,s.month,s.year);

gotoxy(43,i);

printf("%s",s.email);

gotoxy(62,i);

printf("%d",s.sem);

gotoxy(69,i);

printf("%s",s.phone);

i++; //row change

}

}

if(found==0)

{ textcolor(RED+BLINK);

printf("\n\t\t\t");

cprintf("Not found. Press any key...");

fclose(fp);

getch();

return;

}

fclose(fp);

textcolor(RED+BLINK);

printf("\n\n\t\t\t\t");

cprintf("PRESS ANY KEY...");

getch();

}

//Search by name

void search\_name()

{

FILE \*fp;

int i,found;

char n[50];

window(1,1,80,25);

textbackground(BLACK);

textcolor(11);

clrscr();

printf("\t\t\tEnter student name : ");

gets(n);

for(i=1;i<=80;i++)

printf("-");

gotoxy(3,3);

printf("ENRNO");

gotoxy(11,3);

printf("NAME");

gotoxy(22,3);

printf("GENDER");

gotoxy(32,3);

printf("DOB");

gotoxy(43,3);

printf("EMAIL");

gotoxy(62,3);

printf("SEM");

gotoxy(69,3);

printf("PHONE NO");

printf("\n");

for(i=1;i<=80;i++)

printf("-");

fp=fopen("information.dat","rb"); //read data in binary form

i=5;

found=0;

while(fread(&s,sizeof(s),1,fp)!=NULL)

{

if(strcmpi(n,s.name)==0)

{

found=1;

gotoxy(3,i);

printf("%d",s.enrolno);

gotoxy(11,i);

printf("%s",s.name);

gotoxy(22,i);

printf("%c",s.gender);

gotoxy(32,i);

printf("%d/%d/%d",s.date,s.month,s.year);

gotoxy(43,i);

printf("%s",s.email);

gotoxy(62,i);

printf("%d",s.sem);

gotoxy(69,i);

printf("%s",s.phone);

i++; //row change

}

}

if(found==0)

{ textcolor(RED+BLINK);

printf("\n\t\t\t");

cprintf("Not found. Press any key...");

fclose(fp);

getch();

return;

}

fclose(fp);

textcolor(RED+BLINK);

printf("\n\n\t\t\t\t");

cprintf("PRESS ANY KEY...");

getch();

}

//searh by semester

void search\_sem()

{

FILE \*fp;

int n,found,i;

textcolor(11);

textbackground(BLACK);

clrscr();

printf("\t\t\tEnter Semester : ");

scanf("%d",&n);

for(i=1;i<=80;i++)

printf("-");

gotoxy(3,3);

printf("ENRNO");

gotoxy(11,3);

printf("NAME");

gotoxy(22,3);

printf("GENDER");

gotoxy(32,3);

printf("DOB");

gotoxy(43,3);

printf("EMAIL");

gotoxy(62,3);

printf("SEM");

gotoxy(69,3);

printf("PHONE NO");

printf("\n");

for(i=1;i<=80;i++)

printf("-");

fp=fopen("information.dat","rb"); //read data in binary form

found=0;

i=5;

while(fread(&s,sizeof(s),1,fp)!=NULL)

{

if(s.sem==n)

{

found=1;

gotoxy(3,i);

printf("%d",s.enrolno);

gotoxy(11,i);

printf("%s",s.name);

gotoxy(22,i);

printf("%c",s.gender);

gotoxy(32,i);

printf("%d/%d/%d",s.date,s.month,s.year);

gotoxy(43,i);

printf("%s",s.email);

gotoxy(62,i);

printf("%d",s.sem);

gotoxy(69,i);

printf("%s",s.phone);

i++; //row change

}

}

if(found==0)

{ textcolor(RED+BLINK);

printf("\n\n\t\t\t");

cprintf("Not found. Press any key...");

fclose(fp);

getch();

return;

}

fclose(fp);

textcolor(RED+BLINK);

printf("\n\n\t\t\t\t");

cprintf("PRESS ANY KEY...");

getch();

}

Student.c

#include<conio.h>

#include<stdio.h>

#include<string.h>

#include<stdlib.h>

#include"data.h"

#include"search.h"

void main()

{

void add\_student();

void display\_student(); //declaration of function

void delete\_student();

void edit\_student();

void search\_student();

void change\_pwd();

char pass[30],ch,original[30];

int i,choice;

FILE \*fp;

window(1,1,80,25);

textbackground(WHITE);

clrscr();

window(10,10,70,20);

textbackground(BLACK);

clrscr();

textcolor(WHITE);

gotoxy(9,3);

cprintf("WELCOME TO SCHOOL OF COMPUTER AND SYSTEM SCIENCE");

gotoxy(16,5);

textcolor(11);

cprintf("MASTER OF COMPUTER APPLICATION");

gotoxy(9,8);

textcolor(WHITE);

cprintf("Enter the password:");

i=0;

while(1)

{

ch=getch();

if(ch==13) //ASCII code of ENTER key

{

pass[i]='\0';

break;

}

pass[i++]=ch;

cprintf("\*");

}

fp=fopen("pwd.dat","r"); //Reading data from the file

fgets(original,30,fp);

fclose(fp);

if(!strcmp(original,pass)==0)

{ gotoxy(13,10);

textcolor(RED+BLINK);

cprintf("Incorrect Password");

cprintf(" Enter any key...");

getch();

exit(0);

}

else

{

window(1,1,80,25);

textbackground(7); //7 represents grey color

clrscr();

gotoxy(27,3);

textcolor(BLUE);

cprintf("STUDENT REGISTRATION SYSTEM");

gotoxy(27,4);

cprintf("~~~~~~~~~~~~~~~~~~~~~~~~~~~");

gotoxy(30,8);

textcolor(BLACK);

cprintf("Developed by : Chetna");

gotoxy(30,9);

cprintf("~~~~~~~~~~~~~~~~~~~~~");

gotoxy(10,18);

cprintf("Please wait ");

for(i=1;i<=50;i++)

{

cprintf("%c", 220); //ASCII value of []

delay(100);

}

while(1)

{

textbackground(11);

clrscr();

window(15,6,65,21);

textbackground(BLACK);

clrscr();

textcolor(11);

gotoxy(22,2);

cprintf("MAIN MENU");

gotoxy(21,3);

cprintf("-----------");

textcolor(WHITE);

gotoxy(10,5);

cprintf("1. Add new student detail");

gotoxy(10,6);

cprintf("2. Delete student detail");

gotoxy(10,7);

cprintf("3. Edit student detail");

gotoxy(10,8);

cprintf("4. Search using student details");

gotoxy(10,9);

cprintf("5. Display list of all students");

gotoxy(10,10);

cprintf("6. Change password");

gotoxy(10,11);

cprintf("7. Exit");

gotoxy(10,13);

textcolor(11);

cprintf("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*");

gotoxy(12,15);

textcolor(11+BLINK);

cprintf("Enter your choice(1-7)?");

choice=getche();

switch(choice)

{

case '1': add\_student();

break;

case '2': delete\_student();

break;

case '3': edit\_student();

break;

case '4': search\_student();

break;

case '5': display\_student();

break;

case '6': change\_pwd();

break;

case '7':exit(0);

}

}

}

getch();

}

//Search students

void search\_student()

{

char ch;

window(1,1,80,25);

textbackground(BLACK);

textcolor(11);

clrscr();

gotoxy(35,2);

printf("SEARCH OPTIONS");

gotoxy(21,3);

printf("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*");

gotoxy(25,5);

printf("1. Search by Enrolment Number ");

gotoxy(25,6);

printf("2. Search by Name");

gotoxy(25,7);

printf("3. Search by Semester");

gotoxy(25,8);

printf("5. Back to main menu");

gotoxy(21,9);

printf("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*");

textcolor(11+BLINK);

gotoxy(22,10);

cprintf("\nEnter your choice ? ");

ch=getche();

switch(ch)

{

case '1':search\_enrolno();

break;

case '2':search\_name();

break;

case '3':search\_sem();

break;

case '4':return;

}

}

//change password

void change\_pwd()

{

FILE \*fp;

char current[30],original[30],newpass[30],confirm[30];

window(1,1,80,25);

textbackground(BLACK);

textcolor(11);

clrscr();

gotoxy(33,2);

printf("CHANGE PASSWORD");

gotoxy(20,3);

printf("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*");

gotoxy(21,5);

printf("Enter the current password : ");

gets(current);

//Reading password from pwd.dat file

fp=fopen("pwd.dat","r");

fgets(original,30,fp);

fclose(fp);

if(strcmp(current,original)!=0)

{

gotoxy(23,7);

textcolor(RED+BLINK);

cprintf("Incorrect password, Press any key...");

getch();

return;

}

gotoxy(21,7);

printf("Enter new password : ");

gets(newpass);

gotoxy(21,9);

printf("Re-enter password : ");

gets(confirm);

if(strcmp(confirm,newpass)!=0)

{

gotoxy(24,11);

textcolor(RED+BLINK);

cprintf("Not match, Press any key...");

getch();

return;

}

fp=fopen("pwd.dat","w");

fprintf(fp,"%s",newpass);

fclose(fp);

gotoxy(21,11);

textcolor(RED+BLINK);

cprintf("Successfully updated, Press any key.... ");

getch();

}

//Edit student detail

void edit\_student()

{

FILE \*fp;

int pos,n,found;

window(1,1,80,25);

textcolor(11);

textbackground(BLACK);

clrscr();

gotoxy(30,2);

printf("EDIT STUDENT DETAILS");

gotoxy(15,3);

printf("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*");

gotoxy(18,5);

printf("Enter the Enrolment number to be edited : ");

scanf("%d",&n);

fp=fopen("information.dat","r+b");

found=0;

while(fread(&s,sizeof(s),1,fp)!=NULL)

{

if(s.enrolno==n)

{

found=1;

gotoxy(20,7);

printf("Name of Student : %s",s.name);

gotoxy(20,8);

printf("Gender : %c",s.gender);

gotoxy(20,9);

printf("Date of Birth : %d/%d/%d",s.date,s.month,s.year);

gotoxy(20,10);

printf("E-mail address : %s",s.email);

gotoxy(20,11);

printf("Semester : %d",s.sem);

gotoxy(20,12);

printf("Phone Number : %s",s.phone);

break;

}

}

if(found==0)

{

textcolor(RED+BLINK);

gotoxy(20,7);

cprintf("Enrolment number not found, Press any key...");

fclose(fp);

getch();

return;

}

gotoxy(30,15);

printf("UPDATE STUDENT DETAIL");

pos=ftell(fp);

fseek(fp,pos-sizeof(s),SEEK\_SET);

gotoxy(20,17);

printf("Enter Name of Student :");

scanf("%s",&s.name); //string input

fflush(stdin);

gotoxy(20,18);

printf("Gender (M/F) :");

scanf("%c",&s.gender);

fflush(stdin);

gotoxy(20,19);

printf("Enter Date of Birth (DD/MM/YYYY) :");

scanf("%d/%d/%d",&s.date,&s.month,&s.year);

fflush(stdin);

gotoxy(20,20);

printf("Enter Email address :");

gets(s.email);

fflush(stdin);

gotoxy(20,21);

printf("Enter Semester (1/2/3/4) :");

scanf("%d",&s.sem);

fflush(stdin);

gotoxy(20,22);

printf("Enter Phone No. :");

gets(s.phone);

fflush(stdin);

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

fclose(fp);

textcolor(RED+BLINK);

gotoxy(22,24);

cprintf("Successfully Updated, Press any key... ");

getch();

}

//Delete student detail

void delete\_student()

{ int n,found;

char choice;

FILE \*fp1,\*fp2;

window(1,1,80,25);

textbackground(BLACK);

textcolor(11);

clrscr();

gotoxy(33,2);

printf("DELETE STUDENT DETAILS");

gotoxy(19,3);

printf("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*");

gotoxy(20,5);

printf("Enter Enrolment Number to be deleted : ");

scanf("%d",&n);

fp1=fopen("information.dat","rb");

found=0;

while(fread(&s,sizeof(s),1,fp1)!=NULL)

{

if(s.enrolno==n)

{ gotoxy(25,7);

printf("Enrolment Number : %d",s.enrolno);

gotoxy(25,8);

printf("Name of Student : %s",s.name);

gotoxy(25,9);

printf("Gender : %c",s.gender);

gotoxy(25,10);

printf("Date of Birth : %d/%d/%d",s.date,s.month,s.year);

gotoxy(25,11);

printf("E-mail address : %s",s.email);

gotoxy(25,12);

printf("Semester : %d",s.sem);

gotoxy(25,13);

printf("Phone Number : %s",s.phone);

gotoxy(19,14);

printf("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*");

found=1;

break;

}

}

if(found==0)

{

textcolor(RED+BLINK);

gotoxy(23,7);

cprintf("Enrolment Number not found,Press any key...");

getch();

fclose(fp1);

return;

}

gotoxy(20,17);

printf("Do you want to delete this student detail?(Y/N) : ");

choice=getche();

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

{

rewind(fp1); //cursor moves to the top of info file

fp2=fopen("temp.dat","wb"); //write in binary file

while(fread(&s,sizeof(s),1,fp1)!=NULL)

{

if(s.enrolno!=n)

fwrite(&s,sizeof(s),1,fp2);

}

fclose(fp1);

fclose(fp2);

remove("information.dat");

rename("temp.dat","information.dat");

textcolor(RED+BLINK);

gotoxy(25,19);

cprintf("Successfully deleted,Press any key....");

getch();

}

}

//insert student

void add\_student()

{

FILE \*fp;

int n,found;

window(1,1,80,25);

textbackground(BLACK);

textcolor(11);

clrscr();

gotoxy(32,2);

printf("ADD NEW STUDENT DETAIL\n");

gotoxy(21,3);

printf("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*");

gotoxy(25,5);

fflush(stdin);

textcolor(11);

printf("Enter Enrolment Number :");

scanf("%d",&s.enrolno);

gotoxy(25,6);

fflush(stdin);

printf("Enter Name of Student :");

gets(s.name);

gotoxy(25,7); //string input

fflush(stdin);

printf("Gender (M/F) :");

scanf("%c",&s.gender);

gotoxy(25,8);

fflush(stdin);

printf("Enter Date of Birth (DD/MM/YYYY) :");

scanf("%d/%d/%d",&s.date,&s.month,&s.year);

gotoxy(25,9);

fflush(stdin);

printf("Enter Email address :");

gets(s.email);

gotoxy(25,10);

fflush(stdin);

printf("Enter Semester (1/2/3/4) :");

scanf("%d",&s.sem);

gotoxy(25,11);

fflush(stdin);

printf("Enter Phone No. :");

gets(s.phone);

gotoxy(25,12);

fflush(stdin);

fp=fopen("information.dat","ab"); //append binary form

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

fclose(fp);

gotoxy(21,13);

printf("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*");

gotoxy(25,15);

textcolor(RED+BLINK);

cprintf("Successfully saved, Press any key...");

getch();

}

void display\_student()

{

FILE \*fp;

int i;

window(1,1,80,25);

textbackground(BLACK);

textcolor(11);

clrscr();

gotoxy(29,1);

printf("DISPLAY ALL STUDENT DETAILS\n");

for(i=1;i<=80;i++)

printf("-");

gotoxy(3,3);

printf("ENRNO");

gotoxy(11,3);

printf("NAME");

gotoxy(22,3);

printf("GENDER");

gotoxy(32,3);

printf("DOB");

gotoxy(43,3);

printf("EMAIL");

gotoxy(62,3);

printf("SEM");

gotoxy(69,3);

printf("PHONE NO");

printf("\n");

for(i=1;i<=80;i++)

printf("-");

fp=fopen("information.dat","rb"); //read data in binary form

i=5;

while(fread(&s,sizeof(s),1,fp)!=NULL)

{

gotoxy(3,i);

printf("%d",s.enrolno);

gotoxy(11,i);

printf("%s",s.name);

gotoxy(22,i);

printf("%c",s.gender);

gotoxy(32,i);

printf("%d/%d/%d",s.date,s.month,s.year);

gotoxy(43,i);

printf("%s",s.email);

gotoxy(62,i);

printf("%d",s.sem);

gotoxy(69,i);

printf("%s",s.phone);

i++; //row change

}

fclose(fp);

textcolor(RED+BLINK);

printf("\n\n");

printf("\t\t\t\t");

cprintf("PRESS ANY KEY...");

getch();

}

PROJECT OUTPUT



















