//STUDENT MANAGEMENT SYSTEM

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//WELCOME

#include<iostream.h>

#include<conio.h>

#include<string.h>

#include<stdio.h>

int g=0;

class student

{

char Sname[25];

int Srno;

char SFname[25];

char Sdob[25];

char Semail[25];

char Snumber[15]; //giving error with any integer or float datatype

char Saddress[30];

public: void inputdata();

void adddata(int &n);

void deletedata(int a,int &b);

void modifydata(int e);

void searchdata(int &x,int y);

void sortdata(int t,int ch=0);

void displaysorteddata();

void displaydata(int f)

{

cout<<"\nThe details of student "<<f<<" :";

cout<<"\nName: "<<Sname<<"\nFather's name: "<<SFname;

cout<<"\nRoll Number: "<<Srno<<"\nDate of Birth: "<<Sdob;

cout<<"\nEmail Address: "<<Semail<<"\nMobile Number: "<<Snumber;

cout<<"\nAddress: "<<Saddress;

cout<<endl;

}

student()

{

strcpy(Sname," ");

strcpy(SFname," ");

Srno=0;

strcpy(Sdob,"00 00 0000");

strcpy(Semail,"xyz@abc.com");

strcpy(Snumber,"8888888888");

strcpy(Saddress," ");

}

}stud[100],temp;

void student::inputdata()

{ cout<<"\nPlease fill the following details ";

cout<<"for registration of student "<<(::g+1)<<" :";

cout<<endl;

cout<<"Enter name: ";

gets(Sname);

cout<<"\nEnter Father's name: ";

gets(SFname);

cout<<"\nEnter Roll number: ";

cin>>Srno;

cout<<"\nEnter Date of Birth(DD\_MM\_YYYY): ";

gets(Sdob);

cout<<"\nEnter Email-Address: ";

gets(Semail);

cout<<"\nEnter Mobile number: ";

cin>>Snumber;

cout<<"\nEnter address: ";

gets(Saddress);clrscr();

cout<<"\nThank you.You have been registered in our database.\n";

++::g;

}

void student::adddata(int &n)

{

int n1;

char choi;

enter:cout<<"\nEnter the number of students to be added?\n";

cin>>n1;

if(n+n1>100)

{cout<<"\nThe total students in your group cannot be more than 100. Enter again.\n";

goto enter;}

int j=::g+n1;

for(int i=::g;i<j;i++)

stud[i].inputdata();

cout<<"\nExtra students added";

if(n1>0)

{

n+=n1;

main4:cout<<"\nDo you want your data to be sorted(Roll No. wise)? Enter Y for YES and N for NO.";

cin>>choi;

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

{

cout<<"\nAye Aye! Your data is sorted. As quick as it can get!\n";

stud[0].sortdata(n);

}

else if(choi=='N'||choi=='n')

cout<<"\nNo problem. Ahead you go.\n";

else if(choi!='y'||choi!='Y'||choi!='N'||choi!='n')

{cout<<"\nInvalid choice.";

goto main4;

}

}

}

void student::modifydata(int e)

{ cout<<"\nEnter the details of student with Roll number "<<e<<" to be updated:";

cout<<"\nEnter name: ";

gets(Sname);

cout<<"\nEnter Father's name: ";

gets(SFname);

cout<<"\nEnter Roll number: ";

cin>>Srno;

cout<<"\nEnter Date of Birth(DD MM YYYY): ";

gets(Sdob);

cout<<"\nEnter Email-Address: ";

gets(Semail);

cout<<"\nEnter Mobile number: ";

cin>>Snumber;

cout<<"\nEnter address: ";

gets(Saddress);clrscr();

cout<<"\nThank you. The detils of Roll number "<<e<<" have been updated.\n ";

}

void student::deletedata(int a,int &b)

{

int p;

for(p=a;p<b;p++)

{stud[p]=stud[p+1];}

cout<<"\nThe desired record has been deleted.";

b--;

}

void student::sortdata(int t,int ch)

{

int v=t;

int j=1;

int w,a,u,s,y;

char choi,choic,choice;

if(ch==5)

{choic='Y';

goto main9;}

for(u=0;u<t;u++)

{

for(s=j;s<t;s++)

{

if(stud[s].Srno<stud[u].Srno)

{

temp=stud[s];

stud[s]=stud[u];

stud[u]=temp;

}

}

j++;

}

cout<<"\nDo you wish to see the sorted data?\n";

main3:cout<<"Enter Y for YES and N for NO.\n";

cin>>choic;

main9:if(choic=='Y'||choic=='y')

{ clrscr();

for(w=0;w<v;w++)

{

stud[w].displaysorteddata();

if(w%21==0&&w!=0)

{

int x=(w+1);

if((v-w)>21)

y=20+x;

else if((v-w)<21)

y=v;

main10:cout<<"\nLoad more? Enter Y for yes and No for no.\n";

char choice;

cin>>choice;

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

{

clrscr();

for(int u=x;u<y;u++)

{stud[u].displaysorteddata();

w++;}

}

else if(choice=='N'||choice=='n')

{cout<<"\nThank you for being satisfied by our work.";

break;}

else

{cout<<"\nInvalid choice";

goto main10;}

}

}

}

else if(choic=='n'||choic=='N');

else if(choic!='Y'||choic!='y'||choic!='N'||choic!='n')

{cout<<"\nInvalid choice\n";

goto main3;}

else;

getch();

clrscr();

}

void student::displaysorteddata()

{

cout<<"\nROLL NUMBER: "<<Srno<<" NAME: "<<Sname;

}

void student::searchdata(int &x,int y) //using & because calling delete func

{ //which will decrease length of object array

long rno;

int m=x;

int flag=0;

int q;

main2:cout<<"\nEnter the Roll Number to be searched for:\n";

cin>>rno;

switch(y)

{

case 1:

for(q=0;q<m;q++)

{

if(stud[q].Srno==rno)

{

stud[q].displaydata(stud[q].Srno);

flag=1;

break;

}

}

if(flag==0)

{

cout<<endl<<"Invalid Roll number.";

goto main2;

}

break;

case 2:

for(q=0;q<m;q++)

{

if(stud[q].Srno==rno)

{

stud[q].modifydata(stud[q].Srno);

flag=1;

break;

}

}

if(flag==0)

{

cout<<endl<<"Invalid Roll number.";

goto main2;

}

break;

case 3:

for(q=0;q<m;q++)

{

if(stud[q].Srno==rno)

{

stud[q].deletedata(q,x);

flag=1;

break;

}

}

if(flag==0)

{

cout<<endl<<"Invalid Roll number.";

goto main2;

}

break;

}

}

void main()

{

clrscr();

int n;

cout<<"GREETINGS! WELCOME TO PURJAYSIN \*SCHOOL MANAGEMENT\* DATABASE.\n";

main5:cout<<"\nEnter the number of students to be registered.\n";

cin>>n;

if(n>100)

{

cout<<"\nInvalid number. Enter a valid number(less than 100)";

goto main5;

}

cout<<"\nA unique feature of our software is that we can also sort your data for you.";

cout<<"\nYou may enter the data in any order and trust our software to sort it for you.\n";

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

{

stud[i].inputdata();

}

clrscr();

int ch;

char cho,choi;

cout<<"\nThank you for registering.The registration process is over.\n";

main6:cout<<"\nDo you want your data to be sorted(Roll No. wise)? Enter Y for YES and N for NO.";

cin>>choi;

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

{

cout<<"\nAye Aye! Your data is sorted. As quick as it can get!\n";

stud[0].sortdata(n);

}

else if(choi=='N'||choi=='n')

cout<<"\nNo problem. Ahead you go.\n";

else

{

cout<<"\nInvalid choice";

goto main6;

}

do

{

clrscr();

cout<<endl<<"\nThe database is complete,so";

main1:cout<<"\n1.Do you wish to look at any existing record?";

cout<<"\n2.Do you wish to modify any existing record?";

cout<<"\n3.Do you wish to delete any existing record?";

cout<<"\n4.Do you wish to add new record(s)?";

cout<<"\n5.Do you wish to see the sorted list?";

cout<<"\n6.Do you wish to take no further action?";

cout<<"\nEnter 1, 2, 3, 4, 5 or 6 to make a choice.\n";

cin>>ch;

clrscr();

if(ch==1||ch==2||ch==3)

stud[0].searchdata(n,ch);

else if(ch==4)

stud[0].adddata(n);

else if(ch==5)

stud[0].sortdata(n,ch);

else if(ch==6)

{cout<<"\nThank you for registering your group. Have a magnificent day ahead.";

break;}

else

{cout<<"\nInvalid choice";

goto main1;}

cout<<"\n\nDo you wish to perform any of the actions of the MAIN MENU again?";

cout<<"\nEnter Y for YES and N for NO.\n";

cin>>cho;

clrscr();

}while(cho=='Y'||cho=='y');

if(cho=='N'||cho=='n')

cout<<"\nThank you for registering your group. Have a magnificent day ahead.";

cout<<"\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\n\nIt is illegal to reproduce this software without the developer's permission.";

cout<<"\nCopyright@PURJAYSIN Ltd.";

getch();

}