/\*Class 12th Computer Science Project\*/

/\*Cadet Database Management System\*/

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#include<iostream.h>

#include<conio.h>

#include<fstream.h>

#include<ctype.h>

#include<stdio.h>

#include<string.h>

#include<process.h>

class cadet

{

private:

int rc; //Registration Code

char n[25]; //Name

char fn[25]; //Father's Name

char ad[25]; //Address

char c[25]; //City

int pc; //Pin Code

int dob; //Date Of Birth

int hgt; //Hight

int wgt; //Weight

char rgt[25]; //Regiment

public:

void getdata()

{

cout<<"Enter Registration no.\t";

cin>>rc;

cout<<"Enter Name\t";

gets(n);

cout<<"Enter Father's Name\t";

gets(fn);

cout<<"Enter Address\t";

gets(ad);

cout<<"Enter City\t";

gets(c);

cout<<"Enter Pin Code\t";

cin>>pc;

cout<<"Enter Date Of Birth\t";

cin>>dob;

cout<<"Enter Height\t";

cin>>hgt;

cout<<"Enter Weight\t";

cin>>wgt;

cout<<"Enter Regiment\t";

gets(rgt);

}

void putdata()

{

cout<<"Registration No.:\t"<<rc;

cout<<"\nName:\t"<<n;

cout<<"\nFather's Name:\t"<<fn;

cout<<"\nAddress:\t"<<ad;

cout<<"\nCity:\t"<<c;

cout<<"\nPin Code:\t"<<pc;

cout<<"\nDate Of Birth:\t"<<dob;

cout<<"\nHeight:\t"<<hgt;

cout<<"\nWeight:\t"<<wgt;

cout<<"\nRegiment:\t"<<rgt;

}

int getrc()

{

return rc;

}

}c1;

void append() // Enter Function

{

clrscr();

ofstream fo("cadets.dat",ios::app);

cadet c1;

char ans='y';

while(ans=='y')

{

cout<<"\n~ADD DATA\n";

c1.getdata();

fo.write((char\*)&c1,sizeof(c1));

cout<<"(You Want To Enter More)(y/n):\t";

cin>>ans;

cout<<"(Record Entering Succsesful)\n";

cout<<"(Press Enter Key)\n";

getchar();

}

fo.close();

}

void show() // Display Function

{

clrscr();

ifstream fi("cadets.dat",ios::app);

cadet c1;

fi.seekg(0);

while(!fi.eof())

{

cout<<"\n~SHOW DATA\n";

fi.read((char\*)&c1,sizeof(c1));

c1.putdata();

cout<<"\n(Press Enter Key)";

getchar();

}

fi.close();

}

void search() // Search Function

{

clrscr();

ifstream fi("cadets.dat",ios::in);

int s;

cadet c1;

cout<<"\n~SEARCH DATA\n";

cout<<"Enter The Registration No. To Be Searched:\t";

cin>>s;

fi.seekg(0);

char found='f';

while(!fi.eof())

{

fi.read((char\*)&c1,sizeof(c1));

if(c1.getrc()==s)

{

c1.putdata();

found='y';

break;

}

}

if(found=='f')

cout<<"\n(RECORD NOT FOUND!)\n";

cout<<"\n(Press Enter Key)\n";

getchar();

fi.close();

}

void modify() // Modify Function

{

fstream fio("cadets.dat",ios::in||ios::out);

int pcm;

char found='f';

long pos;

cout<<"\n~MODIFY DATA\n";

cout<<"Enter Registration no,to be modify:\t";

cin>>pcm;

while(!fio.eof())

{

pos=fio.tellg();

fio.read((char\*)&c1,sizeof(c1));

if(c1.getrc()==pcm)

{

c1.getdata();

fio.seekg(pos);

fio.write((char\*)&c1,sizeof(c1));

found='t';

break;

}

}

if (found=='f')

cout<<"(Registration No.not found!)\n";

fio.seekg(0);

cout<<"(NOW THE FILE CONTAIN)\n";

while(fio.eof());

{

fio.read((char\*)&c1,sizeof(c1));

c1.putdata();

}

fio.close();

getch();

}

void del() // Delete Function

{

ifstream fio("cadets.dat",ios::in);

ofstream file("cadet.dat",ios::out);

int pcd;

char found='f';

char confirm='n';

cout<<"\n~DELETE DATA\n";

cout<<"Enter Registration No. to be delete:\t";

cin>>pcd;

while(!fio.eof())

{

fio.read((char\*)&c1,sizeof(c1));

if(c1.getrc()==pcd)

{ c1.putdata();

found='t';

cout<<"\n(Are you sure you want this delete this file!)(y/n)\t";

cin>>confirm;

if(confirm=='y')

file.write((char\*)&c1,sizeof(c1));

}

else

file.write((char\*)&c1,sizeof(c1));

}

if(found=='f')

cout<<"(Record not found!)\n";

fio.close();

file.close();

remove("cadets.dat");

rename("cadets.dat","cadets.dat");

fio.open("cadets.dat",ios::in);

cout<<"(NOW THE FILE CONTAIN)\n";

while(!fio.eof())

{

fio.read((char\*)&c1,sizeof(c1));

if(fio.eof());

c1.putdata();

break;

}

fio.close();

}

void main() // Main Funtion

{ int ch;

do

{

clrscr();

cout<<"\n\t\t Cadet Database Management System\n";

cout<<"MAIN MEANU\n";

cout<<"1.Add\n";

cout<<"2.Display\n";

cout<<"3.Search\n";

cout<<"4.Modify\n";

cout<<"5.Delete\n";

cout<<"6.Exit\n";

cout<<"Enter your choice:\t";

cin>>ch;

switch(ch)

{

case 1:append();

break;

case 2:show();

break;

case 3:search();

break;

case 4:modify();

break;

case 5:del();

break;

case 6:exit(0);

break;

}

}

while((ch>=1)&&(ch<=5));

}

//End Program//