**SOURCE CODE**

#include<fstream.h>

#include<conio.h>

#include<stdio.h>

#include<string.h>

#include<iostream.h>

#include<string.h>

#include<process.h>

class person

{

protected:

int appno;

int age;

int lictype;

int issued;

char name[25];

char add[25];

public:

void getdata();

void showdata();

void returnissued() //assigns license

{issued=1;}

};

void person::getdata()

{

clrscr();

cout<<"\n\n\n\t\tLicense Application";

cout<<"\n\n\t\tApp.No. :\t";cin>>appno;cout<<endl;

cout<<"\t\tName :\t";gets(name);cout<<endl;

cout<<"\t\tAddress :\t";gets(add);cout<<endl;

do {

cout<<"\t\tAge :\t";cin>>age;cout<<endl;

}while(age<18);

cout<<"\t1. Two Wheeler 2.Four Wheeler 3. Heavy Vehicle"<<endl;

cout<<"\n\t\tLicense Type :\t";cin>>lictype;cout<<endl;

issued=0;

}

void person::showdata()

{

clrscr();

cout<<"\n\n\n\t\tLicence Verification"<<endl;

cout<<"\n\n\t\tNo :"<<appno<<endl;

cout<<"\t\tName :";puts(name);cout<<endl;

cout<<"\t\tAddress :";puts(add);cout<<endl;

cout<<"\t\tAge :"<<age<<endl;

cout<<"\t\tType :"<<lictype<<endl;

issued=0;

cout<<flush;

}

class vehicle

{

protected:

char oname[20]; //owner name

char vname[20]; //vehicle name

char type[10];

char regno[15];

char engno[15];

char chassisno[15];

char cost[8];

public:

void getvehicle();

void showvehicle();

};

void vehicle::getvehicle()

{

clrscr();

cout<<"\n\n\n\t\tVehicle Registration Application"<<endl;

cout<<"\n\n\t\t\tOwner Name :\t";gets(oname);cout<<endl;

cout<<"\t\t\tVehicle Make:\t";gets(vname);cout<<endl;

cout<<"\t\t\tVehicle Type:\t";gets(type);cout<<endl;

cout<<"\t\t\tVehicle Cost:\t";gets(cost);cout<<endl;

cout<<"\t\t\tEngine No. :\t";gets(engno);cout<<endl;

cout<<"\t\t\tChasis No. :\t";gets(chassisno);cout<<endl;

cout<<flush;

}

void vehicle::showvehicle()

{

clrscr();

cout<<"\n\n\n\t\t\tVehicle Registration"<<endl;

cout<<"\n\n\t\t\tOwner Name :";puts(oname);cout<<endl;

cout<<"\t\t\tVehicle Make:";puts(vname);cout<<endl;

cout<<"\t\t\tVehicle Type:";puts(type);cout<<endl;

cout<<"\t\t\tVehicle Cost:";puts(cost);cout<<endl;

cout<<"\t\t\tEngine No. :";puts(engno);cout<<endl;

cout<<"\t\t\tChasis No. :";puts(chassisno);cout<<endl;

cout<<flush;

}

class license:public person

{ public:

char licenseno[10];

void displicense()

{

person::showdata();

cout<<"\n\t\tlicense no :";puts(licenseno);cout<<endl;

}

};

class reg:public vehicle

{

public:

char regno[15];

void dispreg()

{

vehicle::showvehicle();

cout<<"\n\t\t\tregistration no:"<<regno<<endl;

}

};

/////////////////// MAIN FUNCTION ///////////////////////////////

void main()

{

int choice,choice1,choice2,flag=1;

char tans='n',tans1='n';

fstream file,file1,vfile,vfile1;

license lob;

reg rob;

char pwd[3];

char ch1='y',ch2='y';

do{

clrscr();

cout<<"\n\n\n\n\n\t\t welcome to the RT Office Management system"<<endl;

cout<<"\n\t\t\t 1.Applications"<<endl;

cout<<"\t\t\t 2.RTO Login"<<endl;

cout<<"\t\t\t 3.Exit\t\t" ;cin>>choice1;

if(choice1==1)

{

do {

clrscr();

cout<<"\t\t\tApplications"<<endl;

cout<<"\t\t\tselect your choice(1-2)"<<endl;

cout<<"\n\t\t\t 1.Driving License"<<endl;

cout<<"\t\t\t 2.Vehicle Registration"<<endl;

cout<<"\t\t\t 3.Exit\t";cin>>choice;

if(choice==1)

{

do

{

file.open("license.txt",ios::app);

lob.getdata();

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

file.close();

cout<<"\n\n\n\t\tdo you want to continue(y/n)?\t";

cin>>ch1;

}while(ch1=='y');

}

if(choice==2)

{

do

{

vfile.open("reg.txt",ios::app);

rob.getvehicle();

vfile.write((char\*)&rob,sizeof(rob));

vfile.close();

cout<<"\n\n\n\t\tdo you want to continue(y/n)?\t";

cin>>ch1;

}while(ch1=='y');

}

if(choice==3)break;

}while((ch1=='n')); // choice3

}

if(choice1==2)

{clrscr();

cout<<"\n\n\t\tRTO LOGIN"<<endl;

cout<<"\n\n\t\Password:";gets(pwd);

if(strcmp(pwd,"rto")==0)

{

do

{

clrscr();

cout<<"\n\n\n\t\t\tRTO Login"<<endl;

cout<<"\n\n\t\t\t 1.Issue License"<<endl;

cout<<"\t\t\t 2.Registration"<<endl;

cout<<"\t\t\t 3.Show all licenses"<<endl;

cout<<"\t\t\t 4.Show all registrations"<<endl;

cout<<"\t\t\t 5.Exit\t\t";

cin>>choice2;

if(choice2==1)

{

file.open("license.txt",ios::in);

//file.seekg(0);

while(!file.eof())

{

tans='n';

file.read((char\*)&lob,sizeof(lob));

if(file.eof()){cout<<"\n\t\tno more applications today";cout<<flush;break;}

lob.showdata();

cout<<"\n\n\t\tApproved [y/n]";cin>>tans;

if(tans=='y')

{

// write new file with info

file1.open("licenseissued.txt",ios::app);

cout<<"\n\n\t\tLicense No :\t";gets(lob.licenseno);cout<<endl;

file1.write((char\*)&lob,sizeof(lob));

file1.close();

}

}

file.close();

remove("license.txt");

cout<<"\n\n\n\t\tpress n to go back to menu ";cin>>ch2;cout<<endl;

cout<<flush;

}

else if (choice2==2)

{

vfile.open("reg.txt",ios::in);

// vfile.seekg(0);

while(!vfile.eof())

{ tans1='n';

vfile.read((char\*)&rob,sizeof(rob));

if(vfile.eof()){cout<<"\n\t\tno more applications today";cout<<flush;break;}

rob.showvehicle();

cout<<"\t\t\tApproved [y/n]";cin>>tans1;

if(tans1=='y')

{

// write new file with info

vfile1.open("regissued.txt",ios::app);

cout<<"\t\tEnter Registration No.:\t";gets(rob.regno);cout<<endl;

vfile1.write((char\*)&rob,sizeof(rob));

vfile1.close();

}

if(tans=='n')continue;

}

vfile.close();

remove("reg.txt");

cout<<"\n\n\n\t\tpress n to go back to main menu";cin>>ch2;cout<<endl;

}

else if(choice2==3)

{ cout<<"\t\t\t Display all licenses"<<endl;

file1.open("licenseissued.txt",ios::in);

while(!file1.eof())

{

file1.read((char\*)&lob,sizeof(lob));

if(file1.eof()){cout<<"\n\t\tno more applications today";cout<<flush;break;}

lob.displicense();

getch();

}

file1.close();

cout<<"\n\n\n\t\tpress n to go back to main menu";cin>>ch2;cout<<endl;

}

else if(choice2==4)

{

cout<<"\t\t\t Display all registrations"<<endl;

vfile1.open("regissued.txt",ios::in);

while(!vfile1.eof())

{

vfile1.read((char\*)&rob,sizeof(rob));

if(vfile1.eof()){cout<<"\n\t\tno more applications today";cout<<flush;break;}

rob.dispreg();

getch();

}

vfile1.close();

cout<<"\n\n\n\t\t press n to go back to main menu";cin>>ch2;cout<<endl;

}

if(choice2==5)break;

}while(ch2=='n');

}

else

{ flag=0;

cout<<"\n\n\t\twrong password"<<endl;

getch();

}

}

if(choice1==3)

{

clrscr();

cout<<"\n\n\n\n\n\t\t\t Thank You For Visiting us ";

getch();

exit(0);

}

}while((choice==3||choice2==5||flag==0));

} //end of main function