#include<stdio.h>

#include<stdlib.h>

#include<string.h>

struct user

{

int Id;

char name[50];

int age;

long int phoneNumber;

char emaild[50];

char collegeName[50];

char registrationNumber[50];

char branch[50];

int semester;

char password[50];

char languages[50];

float cgpa;

};

struct user u;

void signup(struct user u);

int branch( char str[50])

{

int con;

printf("Menu\n1.Computer Science\n2.Information Science\n3.Electronics and communication\n4.Electrical ,Electronics and Instrumentation\n");

scanf("%d",&con);

switch (con)

{

case 1:printf("Computer Science\n");

return 1; break;

case 2:printf("Information Science\n");

return 1; break;

case 3:printf("Electronics and Communication\n");

return 1; break;

case 4:printf("Electrical ,Electronics and Instrumentation\n");

return 1; break;

default:return 0;break;

}

}

int ch=0,temp=0;

int main()

{

FILE \*F;

F=fopen("user.txt","a");

if(F==NULL)

{

printf("cannot open file\n");

exit(0);

}

int dig=0; //count ph no.

int b1,b2,b3,b4,b5,b6; //cmp reg no

//int r1,r2,r3,r4; //cmp branch

int p; //confirm pwd

int i=0,ic=0,id=0,is=0,ia=0,z; //check strength of password

int j=0,k=0; //check validity of email

char pass[50],cp[50]; //confirm pwd

char un[50];

int res;

char str[50];

do

{ menu:

printf("1.Sign up\n2.sign in\n3.Exit\n");

scanf("%d",&ch);

getchar();

if(ch==1)

temp=1;

else

temp=0;

switch(ch)

{

case 1:

printf("Enter Name\n"); n:

scanf("%[^\n]s",(u.name));

getchar();

if(u.name[0] == ' ')

{

printf("Name can't be empty!Re-enter Name\n");

getchar();

goto n;

}

printf("Enter age\n");

scanf("%d",&(u.age));

printf("Enter phone number\n"); pn:

scanf("%li",&(u.phoneNumber));

dig=0;

while((u.phoneNumber)!=0)

{

(u.phoneNumber)/=10;

++dig;

}

if(dig!=10)

{

printf("Phone number should consist of 10 digits only\n");

goto pn;

}

printf("Enter email\n"); em:

scanf("%s",u.emaild);

for(i=0;(u.emaild[i])!='\0';i++)

{

if((u.emaild[i])=='@')

j++;

if((u.emaild[i])=='.')

k++;

}

if((j!=1)&&(k!=2))

{

printf("Enter a valid email id\n");

goto em;

}

printf("Enter college\n"); cn:

scanf("%s",u.collegeName);

if((u.collegeName[0])=='\0')

{

printf("College name can't be empty! Re-enter college Name\n");

goto cn;

}

printf("Enter the college registration number\n"); rn:

//getchar();

scanf("%s",u.registrationNumber);

b1=strncmp(u.registrationNumber,"4NI",3);

b2=strncmp(u.registrationNumber,"01JST",5);

b3=strncmp(u.registrationNumber,"4MH",3);

b4=strncmp(u.registrationNumber,"4VV",3);

b5=strncmp(u.registrationNumber,"4GS",3);

b6=strncmp(u.registrationNumber,"4JN",3);

if((b1!=0)&&(b2!=0)&&(b3!=0)&&(b4!=0)&&(b5!=0)&&(b6!=0))

{

printf("Entered registration number doesn't belong to list\n");

goto rn;

}

printf("Enter branch\n"); br:

//scanf("%s",(u.branch));

//strcpy(str,(u.branch));

res=branch(str);

if(res==0)

{

printf("Entered branch doesn't belong to list\n");

goto br;

}

printf("Enter semester\n"); sem:

scanf("%d",&(u.semester));

if(((u.semester)<1)&&((u.semester)>8))

{

printf("Semester should be less than 8\n");

goto sem;

}

printf("Enter password\n"); pwd:

scanf("%s",u.password);

for(i=0;u.password[i]!='\0';i++)

{

z=u.password[i];

if(z-'0'>='0' && z-'0'<='9')

id++;

else if(z>='A' && z<='Z')

ic++;

else if(z>='a' && z<='z')

ia++;

else

is++;

}

//printf("%d%d%d%d",id,ic,ia,is);

if((ia<2)&&(id<2)&&(ic<2)&&(is<2))

{

printf("Password must consists of at least 2[A-Z], 2[a-z],2[!@..+\*] and 2[0-9] character\n");

goto pwd;

}

printf("Confirm password\n"); cp:

scanf("%s",pass);

p=strcmp((u.password),pass);

if(p!=0)

{

printf("Passwords don't match\n");

goto cp;

}

printf("Enter languages known\n");

scanf("%s",u.languages);

printf("Enter CGPA\n"); cg:

scanf("%f",&(u.cgpa));

if((u.cgpa)>10)

{

printf("CGPA should be less than 10 and numeric value\n");

goto cg;

}

goto menu;

fwrite(&u,sizeof(u),1,F);

case 2:

printf("Enter username\n"); a:

scanf("%s",un);

if(strcmp(un,(u.emaild))!=0)

{

printf("wrong username\n");

goto a;

}

printf("Enter password\n"); b:

scanf("%s",cp);

if(strcmp(cp,(u.password))!=0)

{

printf("Password doesn't match try again!!!\n");

goto b;

}

printf("Welcome to i-Box!!!%s\n",u.name);

case 3:

if(temp==1)

printf("Thank you for using i-Box!!!\n");

}

}while(ch!=3);

fclose(F);

return 0;

}