#include <iostream>

#include <conio.h>

#include <Windows.h> // for time

#include <string.h>

#include <string>

#include <shellapi.h> // for redirect

using namespace std;

typedef string DATA;

void Clock();

class USER

{

public:

DATA Firstname;

DATA Lastname;

DATA Username;

DATA Password;

bool ConfirmPassword;

DATA OldPassword;

DATA Email;

DATA SecurityQuestion;

DATA SecurityAnswer;

class DOB

{

public:

int Day;

int Month;

int Year;

};

DOB Age;

class USER\* next;

};

typedef class USER\* PTR;

class USERList

{

private:

PTR LAST;

int Total;

public:

USERList(); //done

~USERList(); //done

void Menu(); //done

bool Empty(); //done

bool CheckUserData(DATA UserEmail); //done

void SignUP(); // done

void SignIN(int choice); //done

void ForgotUsername(); //done

void ForgotPassword(); //done

void ForgotEmail(); //done

void Redirect(int choice); // done

};

void USERList::SignUP()

{

if (Empty())

{

PTR L = new USER;

cout << "Enter First name: ";

cin >> L->Firstname;

cout << "Enter Last name: ";

cin >> L->Lastname;

cout << "Enter User name: ";

cin >> L->Username;

cout << "Enter Email Address, eg: abc@yahoo.com: ";

cin >> L->Email;

do

{

cout << "Enter Password: ";

cin >> L->Password;

cout << "Confirm Password: ";

cin >> L->OldPassword;

if (L->Password != L->OldPassword)

{

cout << "The Entered password do not match. Please try again" << endl;

cout << endl;

L->ConfirmPassword = NULL;

}

} while (L->Password.compare(L->OldPassword) != 0);

L->ConfirmPassword = true;

cout << "Enter Date of birth, eg: DD MM YYYY" << endl;

cout << "DD: ";

cin >> L->Age.Day;

cout << "MM: ";

cin >> L->Age.Month;

cout << "YYYY: ";

cin >> L->Age.Year;

int choice = 0;

do {

cout << "Choose any one of the Security Question to Answer" << endl << endl;

cout << "1) In what city were you born?\n2) What is the name of your favorite pet?" << endl;

cout << "3) What is your mother's maiden name?\n4) What high school did you attend?" << endl;

cout << "5) What is the name of your first school?\n6) What was the make of your first car?" << endl;

cin >> choice;

if (choice == 1)

{

L->SecurityQuestion = "In what city were you born?";

cout << "In what city were you born? ";

cin >> L->SecurityAnswer;

}

else if (choice == 2)

{

L->SecurityQuestion = "What is the name of your favorite pet?";

cout << "What is the name of your favorite pet?";

cin >> L->SecurityAnswer;

}

else if (choice == 3)

{

L->SecurityQuestion = "What is your mother's maiden name?";

cout << "What is your mother's maiden name?";

cin >> L->SecurityAnswer;

}

else if (choice == 4)

{

L->SecurityQuestion = "What high school did you attend?";

cout << "What high school did you attend?";

cin >> L->SecurityAnswer;

}

else if (choice == 5)

{

L->SecurityQuestion = "What is the name of your first school?";

cout << "What is the name of your first school?";

cin >> L->SecurityAnswer;

}

else if (choice == 6)

{

L->SecurityQuestion = "What was the make of your first car?";

cout << "What was the make of your first car?";

cin >> L->SecurityAnswer;

}

else

{

cout << "Wrong choice entered: Try Again" << endl;

}

} while (choice <= 0 || choice > 5);

Total++;

L->next = L;

LAST = L;

system("CLS");

cout << "User has been Registered!" << endl;

cout << "You can now Login to your account through the SignIn Section" << endl;

}

else

{

PTR L = new USER;

cout << "Enter First name: ";

cin >> L->Firstname;

cout << "Enter Last name: ";

cin >> L->Lastname;

bool loop = true;

do

{

cout << "Enter Username: ";

cin >> L->Username;

if (CheckUserData(L->Username))

{

cout << "The Username you have entered is already in use." << endl;

cout << "If you forgot your password, Press 1" << endl;

cout << "If you want to try another username, Press 2" << endl;

int choice;

cin >> choice;

if (choice == 1)

{

ForgotPassword();

Menu();

}

}

else

{

loop = false;

}

} while (loop);

bool loop2 = true;

do

{

cout << "Enter Email Address, eg: abc@yahoo.com: ";

cin >> L->Email;

if (CheckUserData(L->Email))

{

cout << "The Email you have entered is already in use." << endl;

cout << "Please enter another Email Address" << endl;

}

else

loop2 = false;

} while (loop2);

do

{

cout << "Enter Password: ";

cin >> L->Password;

cout << "Confirm Password: ";

cin >> L->OldPassword;

if (L->Password != L->OldPassword)

{

cout << "The Entered password do not match. Please try again" << endl;

cout << endl;

L->ConfirmPassword = NULL;

}

} while (L->Password.compare(L->OldPassword) != 0);

L->ConfirmPassword = true;

cout << "Enter Date of birth, eg: DD MM YY" << endl;

cout << "DD: ";

cin >> L->Age.Day;

cout << "MM: ";

cin >> L->Age.Month;

cout << "YY: ";

cin >> L->Age.Year;

int choice = 0;

do {

cout << "Choose any one of the Security Question to Answer" << endl << endl;

cout << "1) In what city were you born?\n2) What is the name of your favorite pet?" << endl;

cout << "3) What is your mother's maiden name?\n4) What high school did you attend?" << endl;

cout << "5) What is the name of your first school?\n6) What was the make of your first car?" << endl;

cin >> choice;

if (choice == 1)

{

L->SecurityQuestion = "In what city were you born?";

cout << "In what city were you born? ";

cin >> L->SecurityAnswer;

}

else if (choice == 2)

{

L->SecurityQuestion = "What is the name of your favorite pet?";

cout << "What is the name of your favorite pet?";

cin >> L->SecurityAnswer;

}

else if (choice == 3)

{

L->SecurityQuestion = "What is your mother's maiden name?";

cout << "What is your mother's maiden name?";

cin >> L->SecurityAnswer;

}

else if (choice == 4)

{

L->SecurityQuestion = "What high school did you attend?";

cout << "What high school did you attend?";

cin >> L->SecurityAnswer;

}

else if (choice == 5)

{

L->SecurityQuestion = "What is the name of your first school?";

cout << "What is the name of your first school?";

cin >> L->SecurityAnswer;

}

else if (choice == 6)

{

L->SecurityQuestion = "What was the make of your first car?";

cout << "What was the make of your first car?";

cin >> L->SecurityAnswer;

}

else

{

cout << "Wrong choice entered: Try Again" << endl;

}

} while (choice <= 0 || choice > 5);

Total++;

PTR Q;

Q = LAST;

L->next = Q->next;

LAST = L;

system("CLS");

cout << "Another User has been registered" << endl;

}

}

USERList::USERList()

{

LAST = NULL;

Total = 0;

}

USERList::~USERList()

{

delete LAST;

}

void USERList::Menu()

{

do

{

system("CLS");

Clock();

cout << "Welcome to the Menu" << endl;

int choice;

cout << endl;

cout << "Press 1 for SignIN/SignUP for Gmail" << endl;

cout << "Press 2 for SignIN/SignUP for Facebook" << endl;

cout << "Press 3 for SignIN/SignUP for Yahoo" << endl;

cout << "Press 4 for SignIN/SignUP for Twitter" << endl;

cin >> choice;

cout << endl;

system("CLS");

int choice2;

cout << "Please Choose any of the below\n" << endl;

cout << "Press 1 to SignUP \nPress 2 to SignIN" << endl;

cin >> choice2;

if (choice2 == 1)

{

SignUP();

}

else

{

SignIN(choice);

}

} while (true);

}

bool USERList::Empty()

{

return(LAST == NULL ? true : false);

}

bool USERList::CheckUserData(DATA UserEmail)

{

PTR Check = LAST;

do

{

if ((Check->Username == UserEmail) || (Check->Email == UserEmail))

{

return true;

break;

}

else

{

return false;

Check = Check->next;

}

} while (Check != LAST);

}

void USERList::SignIN(int choice)

{

if (Empty())

{

cout << "No user has currently been registered" << endl;

cout << "Please Register" << endl;

\_getch();

Menu();

}

int choicee;

PTR Check;

Check = LAST;

DATA UserEmail;

DATA Password;

loop2:

cout << "Enter Username or Email Address: ";

cin >> UserEmail;

if (CheckUserData(UserEmail))

{

loop:

cout << "Enter Password: ";

cin >> Password;

do

{

if ((Check->Username == UserEmail && Check->Password == Password) || (Check->Email == UserEmail && Check->Password == Password))

{

cout << "Login Successful!" << endl;

cout << "You will be redirected to your Page Soon" << endl;

\_getch();

Redirect(choice);

exit(0);

}

Check = Check->next;

} while (Check != LAST);

cout << "The Password you have entered may be incorrect" << endl;

cout << "Press 1 To try again\nPress 2 to Reset Password" << endl;

cin >> choicee;

if (choicee == 2)

{

ForgotPassword();

}

else

goto loop;

}

else

{

cout << "The username or Email you have entered may be incorrect." << endl;

cout << "Press 1 to try again \nPress 2 to find your Username\nPress 3 to find Email\nPress 4 to Exit program" << endl;

int choice;

cin >> choice;

if (choice == 1)

goto loop2;

else if (choice == 2)

{

ForgotUsername();

}

else if (choice == 3)

{

ForgotEmail();

}

else

{

cout << "Program Exited successfully" << endl;

\_getch();

exit(0);

}

}

}

void USERList::ForgotUsername()

{

PTR Check = LAST;

DATA Email;

DATA Answer;

int choice;

loop2:

system("CLS");

cout << "Enter Registered Email: ";

cin >> Email;

do

{

if (Check->Email == Email)

{

loop:

cout << "Please answer the Question Below" << endl;

cout << Check->SecurityQuestion;

cout << ": ";

cin >> Answer;

if (Answer == Check->SecurityAnswer)

{

cout << "The Registered username is: ";

cout << Check->Username;

\_getch();

Menu();

}

else

{

cout << "The entered Answer is incorrect. \nPress 1 to try again\nPress 2 to Exit" << endl;

cin >> choice;

if (choice == 1)

goto loop;

else

{

cout << "The Program Exited Successfully!" << endl;

\_getch();

}

}

}

Check = Check->next;

} while (Check != LAST);

cout << "The entered Email is incorrect. \nPress 1 to try again\nPress 2 to Exit" << endl;

cin >> choice;

if (choice == 1)

goto loop2;

else

{

cout << "The Program Exited Successfully!" << endl;

\_getch();

}

}

void USERList::ForgotEmail()

{

PTR Check = LAST;

DATA User;

DATA Answer;

int choice;

loop2:

system("CLS");

cout << "Enter Registered Username: ";

cin >> User;

do

{

if (Check->Username == User)

{

loop:

cout << "Please answer the Question Below" << endl;

cout << Check->SecurityQuestion;

cout << ": ";

cin >> Answer;

if (Answer == Check->SecurityAnswer)

{

cout << "The Registered Email is: ";

cout << Check->Email;

\_getch();

Menu();

}

else

{

cout << "The entered Answer is incorrect. \nPress 1 to try again\nPress 2 to Exit" << endl;

cin >> choice;

if (choice == 1)

goto loop;

else

{

cout << "The Program Exited Successfully!" << endl;

\_getch();

}

}

}

Check = Check->next;

} while (Check != LAST);

cout << "The entered Username is incorrect. \nPress 1 to try again\nPress 2 to Exit" << endl;

cin >> choice;

if (choice == 1)

goto loop2;

else

{

cout << "The Program Exited Successfully!" << endl;

\_getch();

}

}

void USERList::ForgotPassword()

{

PTR Check = LAST;

DATA UserEmail;

DATA Answer;

int choice;

loop2:

system("CLS");

cout << "Enter your Registered Email Address or Username: ";

cin >> UserEmail;

do

{

if ((Check->Username == UserEmail) || (Check->Email == UserEmail))

{

loop:

cout << "Please answer the Question Below" << endl;

cout << Check->SecurityQuestion;

cout << ": ";

cin >> Answer;

if (Answer == Check->SecurityAnswer)

{

do

{

cout << "Enter New Password: ";

cin >> Check->Password;

cout << "Confirm Password: ";

cin >> Check->OldPassword;

if (Check->Password != Check->OldPassword)

{

cout << "The Entered password do not match. Please try again" << endl;

cout << endl;

Check->ConfirmPassword = NULL;

}

} while (Check->Password.compare(Check->OldPassword) != 0);

Check->ConfirmPassword = true;

cout << endl;

cout << "The Password has been Updated! You can now SignIN through your new Password" << endl;

\_getch();

Menu();

}

else

{

cout << "The entered Answer is incorrect. \nPress 1 to try again\nPress 2 to Exit" << endl;

cin >> choice;

if (choice == 1)

goto loop;

else

{

cout << "The Program Exited Successfully!" << endl;

\_getch();

}

}

}

} while (Check != LAST);

cout << "The entered Username is incorrect. \nPress 1 to try again\nPress 2 to Exit" << endl;

cin >> choice;

if (choice == 1)

goto loop2;

else

{

cout << "The Program Exited Successfully!" << endl;

\_getch();

}

}

void Clock()

{

cout << "DATE: " << \_\_TIMESTAMP\_\_ << endl;

}

void USERList::Redirect(int choice)

{

if (choice == 1)

{

ShellExecute(NULL, "open", "https://www.gmail.com", NULL, NULL, SW\_SHOWNORMAL);

exit(0);

}

else if (choice == 2)

{

ShellExecute(NULL, "open", "https://www.facebook.com", NULL, NULL, SW\_SHOWNORMAL);

exit(0);

}

else if (choice == 3)

{

ShellExecute(NULL, "open", "https://www.yahoo.com", NULL, NULL, SW\_SHOWNORMAL);

exit(0);

}

else

{

ShellExecute(NULL, "open", "https://www.twitter.com", NULL, NULL, SW\_SHOWNORMAL);

exit(0);

}

}

void main(void)

{

USERList L;

L.Menu();

}