#include <iostream>

#include <fstream>

#include <string>

using namespace std;

class User {

    public:

    string username;

    string password;

};

void registerUser() {

    ofstream file("users.txt", ios::app);

    User user;

    cout << "Enter username: ";

    cin >> user.username;

    cout << "Enter password: ";

    cin >> user.password;

    file << user.username << " " << user.password << endl;

    file.close();

    cout << "Registration successful!" << endl;

}

bool validateUser(string username, string password) {

    ifstream file("users.txt");

    string storedUsername, storedPassword;

    while (file >> storedUsername >> storedPassword) {

        if (username == storedUsername && password == storedPassword) {

            return true;

        }

    }

    return false;

}

void login() {

    string username, password;

    cout << "Enter username: ";

    cin >> username;

    cout << "Enter password: ";

    cin >> password;

    if (validateUser(username, password)) {

        cout << "Login successful!" << endl;

    } else {

        cout << "Invalid username or password." << endl;

    }

}

int main() {

    int choice;

    do {

        cout << "1. Register\n2. Login\n3. Exit" << endl;

        cin >> choice;

        switch (choice) {

            case 1:

                registerUser();

                break;

            case 2:

                login();

                break;

            case 3:

                cout << "Goodbye!" << endl;

                break;

            default:

                cout << "Invalid choice. Try again." << endl;

                break;

        }

    } while (choice != 3);

    return 0;

}

