

# COMP 440 - Course Project: Phase 1

Fall 2023

For all parts of this project, your system must be desktop or web-based application. You can use ANY development tools, however, some simple GUI interfaces are required for each functionality. **All functionalities must be performed via the interface of your system; direct SQL statement execution via any tools (like MySQL Workbench) is not allowed.**

## Part 1 – Deadline: Monday, 10/09 by midnight

Use Java/C#/PHP/Python/C++ and SQL, implement the following functionality:

1. (5 pts) Create a database schema and implement a user registration and login interface so that only a registered user can login into the system. The schema of the user table should be:  
*user(username, password, firstName, lastName, email)*  
*username* is the primary key, and *email* should be unique. You have to prevent the SQL injection attack. There is an attached pdf file about SQL injection attacks.
2. (5 pts) Sign up for a new user with information such as: *username, password, password confirmed, first name, last name, email*. Duplicate *username*, and email should be detected and fail the signup. Unmatching passwords should be detected, as well.

## Hint:

- 1) This is a team project. You are allowed to find and reused codes; however, make sure to refer to the original source.
- 2) ONE submission per team is sufficient and all the team members will get the same grade.

## How to submit:

1. The source code package. All files (source codes, class files, bat, and txt) should be contained in a war or zip file called comp440\_x\_part1.zip for a team whose team number is x submit via Canvas. (A team number will be assigned to your team by the deadline.)
2. A YouTube video. Use a recorder: <https://www.apowersoft.com/free-online-screen-recorder>. And upload your video to [www.youtube.com](http://www.youtube.com). I only need you to record your screen and your voice for the project demo, not your face. You can add the YouTube URL to a readme file inside your project directory or add it to the Canvas comment within your submission. You can create slides for your presentation if that is helpful, Or you can use YouTube for recording your video:  
<https://www.labnol.org/software/create-youtube-screencast/27936/>
3. We may ask you to demo your project online via Zoom. It is only a demo between all your team members and us (instructor and/or grader).

The project is to be done by at least two and a maximum of three students, but each student's contribution needs to be clearly stated in readme.txt. Start your project early, and ask questions if you have doubts. Do not wait until the last minute.