

CS 4347- Database Systems
Assignment 6, Group Assignment
SQL Injection Assignment
Due Date: Monday, April 28, 2025

This is a group assignment based on the database project that you are currently working on with your team members. Only the project team leader should submit this assignment (The name and ID of each team member should be listed on the first page of your submitted assignment).

- a) **[15 points]** Write an interface form in HTML that will create a form (Similar to the form interface presented in your SQL injection slides). This form should input some data fields from the user and retrieve (**Select**) the corresponding information from the database. Experiment with this form so that the resulting SQL-injected query (**select**) does not have complete data about those input data fields, but it is still able to retrieve the corresponding information from the database.
- b) **[15 points]** Rewrite part (a) above, but now use an **update** command. Then, experiment with this form so that the resulting SQL-injected update query does not have complete data about those input data fields, but it is still able to update the corresponding information in the database.
- c) **[20 points]** Use the prepared statement technique (presented in the SQL injection slides) to rewrite the routine of part (a) to prevent SQL injection of the select statement presented in part (a).

Submission Instructions:

You may submit this assignment using one of the following two options:

Option1:

**Demonstrate to the grader this assignment during your project phase four demo.
Make sure to show the grader that all parts of this assignment work properly.**

Option2:

Take snapshots that would show the results of each of the above experiments. These snapshots should illustrate the following:

- i) **Each actual routine code (for parts a, b, and c),**
- ii) **Show each injected SQL command (for parts a, b, and c) through the forms that would result from the actual routine codes (part (i) above), and**
- iii) **The results of the execution of the injection commands after submitting each form (for parts a, b, and c) to the database engine.**

Collect these snapshots in one PDF file, then submit this one PDF file into your eLearning course shell.