## CS3380 - Lab Exercise 7

### Goals:

1. Understand the basics of MySQL interaction
2. Deploy and understand a PHP-to-Mysqpl script.
3. Understand the security involved in storing passwords
4. Understand how to prevent simple SQL inject attacks

### Preventing SQL injection (5 points)

In class, a PHP page will be presented which contains a vulnerability to SQL injection. Describe below a method that will prevent this particular SQL injection and turn in this sheet before the end of class.

### Setting up the Database (10 points)

In MySQL, create a ‘Members’ and ‘Authenticate table to hold the user information. Your create table statement will be stored in **Lab8.sql**. The table should look like this when you describe it (USERNAME is the primary key):

**Details:**

In MySQL create a ‘Members’ table.

Name Null? Type

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USERNAME PK NOT NULL VARCHAR(15)

FIRSTNAME VARCHAR(30)

LASTNAME VARCHAR(30)

PENDING DEFAULT=1 BOOLEAN

AUTH\_ID FK NOT NULL INTEGER

Create an ‘Authenticate’ table

Name Null? Type

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Auth\_ID PK NOT NULL INTEGER AUTO INCREMENT

PASSWORD NOT NULL CHAR(40)

SALT NOT NULL VARCHAR(30)

You should then insert a minimum of 5 rows into this table. For one of these rows, the username should be ‘Admin’ and the password should be ‘cs3380’. Remember that the password field should be hashed using SHA1 and the Salt technique described in class. These insert statements should also be stored in **Lab8.sql** and shown to your TA for points.

### Please show the your “Show tables”, “Desc \*” and SELECT \* by END OF LAB