CIS 1152 - Lab #6 DB setup and single table SQL
S. Ruegsegger
Modified with permission by Peter Chapin

Objective

Be able to setup a SQL table – with properly defined columns.

Task 1 – MySQL DB and client setup

Student skill: DB setup

Document how you setup MySQL and a DB within it for this course's labs.

    A. Whether you used the CLI or the GUI, how did you get to MySQL?
    B. How did you create your *database* within MySQL? You can name it whatever you want.
    C. Document complete CRUD example.
        1. Create a table with more than one column. Insert a row or two of data.
        2. Read / verify it's there (SELECT).
        3. Update a value in a column of a row.
        4. Delete the table (DROP). Verify the table is gone.

Task 2 – Bake Sale (single table)

Student skill: create your first DB table and add data.

Your friend is a teacher and is trying to keep track of a bake sale. A couple of classes are trying to raise money for a field trip. In the morning, her students bring in items to sell. They are sold during lunch & anyone in the school can purchase them – student or staff -- anonymously.

She is using a spreadsheet like the one below to track how much money each her students are earning from their baked items which they brought into sell. The spreadsheet is getting tedious. She asks you to setup a database for her. Since you are taking CIS-1152, you know how. Create the (one) SQL table which represents the data below. Create the same column names with appropriate data types. Then get this dataset from the class server and insert all this data into the table from the csv file.

	A	B	C	D	E	F	G	H	I
1	Student	grade	homeroom	description	category	init quantity	unit price	sold	sale day
2	sam	5	Mrs B	chocolate chip	cookie	24	0.50	3	Mon
3	sam	5	Mrs B	chocolate frosted	brownie	36	0.75	5	Mon
4	betty	4	Mr H	pink frosted	cupcakes	18	1.00	4	Mon
5	betty	4	Mr H	dipped with sprinkles	pretzel	36	0.25	7	Mon
6	betty	4	Mr H	dipped with sprinkles	pretzel	36	0.25	2	Mon
7	sam	5	Mrs B	chocolate chip	cookie	24	0.50	2	Tues
8	sam	5	Mrs B	chocolate frosted	brownie	36	0.75	3	Tues
9	betty	4	Mr H	pink frosted	cupcakes	18	1.00	6	Tues
10	betty	4	Mr H	dipped with sprinkles	pretzel	36	0.25	9	Tues
11	sam	5	Mrs B	chocolate chip	cookie	24	0.50	6	Wed
12	sam	5	Mrs B	chocolate frosted	brownie	36	0.75	7	Wed
13	betty	4	Mr H	pink frosted	cupcakes	18	1.00	8	Wed
14	betty	4	Mr H	dipped with sprinkles	pretzel	36	0.25	8	Wed
15									

Task 3 – College scheduling system (single table)

Student skill: create another database table and add data.

Create a single table which represents *your* college class schedule. I would think you need a dept (like CIS), a course ID (1152), and a course name ("Advanced Web Development"). Let's also add columns for semester ("Spring) and year (2020). Additionally, let's have a column for the professor's name. Finally, let's add a string for days (MWF or TR) and a start time (1400) and an end time (1600). If you want to use SQL TIME data type you may, or you can just stick with integers.

Here is an *example* of that description above. You may use different columns names and data, of course.

```
MariaDB [advwebdev]> select * from schedule;
+------+--------+-------------+------------+----------+------+------+-----------+---------+
| dept | course | name        | instructor | semester | year | days | starttime | endtime |
+------+--------+-------------+------------+----------+------+------+-----------+---------+
| CIS  |   1152 | Adv Web Dev | Ruegsegger | Spring   | 2020 | T    |      1400 |    1600 |
| EES  |   2001 | Circuits 1  | Kirkov     | Spring   | 2020 | MF   |      1200 |    1400 |
| ENG  |   1234 | English 2   | Smith, M   | Spring   | 2020 | MW   |      1000 |    1050 |
+------+--------+-------------+------------+----------+------+------+-----------+---------+
3 rows in set (0.000 sec)
```