Lab 2: Accessing Data (5% of total grade)

Submission: Submit your answers by copying and pasting your query below each question, then submit your completed lab to blackboard.

Name your file: HTTP5126-L2-AccessData-*LastNameFirstName*.pdf, replace *LastNameFirstName* with your name as displayed in Blackboard.

Purpose: To implement query construction techniques learned in Lesson 2 in order to answer "human" questions.

Requirements: For this lab, you will use the provided Pet Store data tables.

To put ourselves in a "real world" mindset for bridging the Human -- Computer gap, we will pretend that you are a database administrator for a pet store. The queries that you create will answer questions posed to you by your "employer" and "colleagues".

NOTE: Run your queries on your database to make sure they are providing the desired result set before submitting them as text answers in this file.

Pre-Lab:

1. Open MAMP, start the server, click "Open WebStart page", and then after the web page opens navigate to phpMyAdmin.
2. Create a fresh database and identify it to lab 2 in some way. (eg. **http5126_lab2**). Set the collation as **utf8_unicode_ci**.
3. Select the DB and select **import,** select the file **'pet_store_tables.sql'** and click 'import' then 'execute'. This should create 2 tables in your database (***employee*** & ***stock_item***) which will be used for the queries you create below.

Part 0: In-Class Lab Check [1 mark]

However far you get into the lab in-class, check in with the professor before leaving class and show how far you've gotten. [1 mark]

Part 1: Getting to Know Your Data [0.5 marks]

Start off by familiarizing yourself with your data tables.

A. Create a query that will return all of the data in your employee table. [0.25 marks]

```
SELECT * FROM employee;
```

B. Create a query that will return all of the data in your stock_item table. [0.25 marks]

```
SELECT * FROM stock_item;
```

Part 2: Limiting Your Columns [0.5 marks]

A. The assistant manager needs a list of products and their prices. Create a query that provides just the item and price columns for all stock_items. [0.25 marks]

```
SELECT item, price FROM stock_item;
```

B. The manager wants to create a contact list to post in the staff room. Create a query that provides the first name, last name, role and phone number for all employees. [0.25 marks]

```
SELECT first_name,last_name,role,phone FROM employee;
```

Part 3: Customizing Your Columns [1 mark]

A. The assistant manager is doing a stock check to evaluate the balance of items by category in the store. Create a query that provides just the item column (with a heading of: “Product”), and the category column (with the heading of: “Animal”) for all stock_items. [0.5 marks]

```
SELECT item AS 'Product', category AS 'Animal' FROM stock_item;
```

B. The accountant needs a list of employees and pertinent data to create tax forms. Create a query that returns the last name of all employees (with a heading of “Pet Store Staff”); their employee identification numbers (with a heading of “Emp. ID”); and their SIN (with a heading of “SIN”). [0.5 marks]

```
SELECT last_name AS 'Pet Store Staff', id AS 'Emp. ID', sin AS 'SIN'
FROM employee;
```

Part 4: Limiting Your Rows [1 mark]

A. The manager needs to find someone to work this weekend. Create a query that provides the first names and phone numbers for all employees with the role of “Sales”. [0.5 marks]

```
SELECT first_name, phone FROM employee WHERE role = 'Sales';
```

B. The manager needs to know what items need to be reordered. Create a query that returns the name, id, and current inventory of all stock_items that have a dozen or fewer remaining in stock. [0.5 marks]

```
SELECT item, id, inventory FROM stock_item WHERE inventory < 13;
```

Part 5: Extra Challenge: Computer <==> Human [1 marks]

Write a query that answers each of the following "human" questions:

A. What "Kitty Cat" items do you sell and how much are they? [0.5 marks]

```
SELECT item, price FROM stock_item WHERE category = 'Feline';
```

B. What "Staff Member" is ID #115? (HINT: Output should be 1 row.) [0.5 marks]

```
SELECT first_name, last_name FROM employee WHERE id = '115';
```