INFO1-CE9224 Lab Assignments

You're not responsible for turning these assignments in. They are for your own benefit so that you can learn in class and I can help you as you go. Choose whichever assignments you'd like in any order.

If you have any questions, please feel free to ask during the lab.

Assignment #1

Review the Authors and Entries Database

Import the SQL file located here. To import, using phpMyAdmin, create a new database, then click on the SQL tab. Copy the SQL from the file mentioned above, and paste it into the text area and submit it.

This database has 3 tables:

- entries_denormalized: A table with blog entries as well as author data.
- entries: A table with blog entries and the id's of the authors who created the entry.
- authors: A table with author information.

Using the *entries_denormalized* table:

1. List all of the rows and all of the columns in the entries_denormalized table.
2. List only the rows and all of the columns in the entries_denormalized table where author's name is Julie.
3. How many rows in the entries_denormalized table have been written by Julie (hint use COUNT() and GROUP BY)?

Using the *entries* and *authors* tables:

Insert a few new rows into the entries and authors tables:

email: joe@gmail.com
name: Joe

title: Another Hint Of Bad Jobs News...
entry: Yesterday ticking up.
author_id: 7

title: Remember Gold?
entry: It sure is quiet these days
author_id: 7

title: The US Market Is Remarkable
entry: Maybe thanks to Ben?
author_id: 7

Answer the following questions:

1. Print a full list of entries along with the email and name of the author who created the entry (hint: INNER JOIN).
2. Print a full list of authors along with the number of entries they created. Sort this list in descending order of the number of entries they created (hint: INNER JOIN, COUNT and GROUP BY).
3. Print a full list of entries (no other table's data) and list them in order in which they were created.
4. Alyson changed her email address to alyson@yahoo.com, update only this row in the database.
5. Steve no longer works on this blog, delete his account, but don't forget to also delete all of the entries he created.

Assignment #2

A Database from Scratch

You will create a database from scratch with the following criteria and then answer some questions. This database will host user created recipes and reviews.

Using phpMyAdmin, create a new database called recipes. Create the following tables in the recipes DB. The columns mentioned are just recommendations. If you think you can come up with another way, or a better way to solve the problem, go ahead. Please use the slides, the book or the web to determine which type each column should be. Another good reference is the Lab Assignment #1 sql.

- recipes
    - id
    - user_id
    - title
    - description
    - ingredients
    - date_created
- users
    - id
    - first_name
    - last_name
    - username
    - email
- reviews
    - id
    - user_id
    - recipe_id
    - review
    - date_reviewed

Populate the database with 5 records in each table. The values for each row can be whatever you like. Be sure that the id's of the users and recipes match up in their join tables. For example, the user_id column in the recipes table should always point to an existent id in the users table. Again, a good example can be found in the Lab Assignment #1 sql.

Answer the following questions:

1. Print a list of recipes along with the username, first name, and last name of the user who created the recipe (hint: INNER JOIN).
2. Which user created the most recipes, tell me the username (hint: INNER JOIN, COUNT and GROUP BY)?

3. Print a full list of recipes (no other table's data) and list them in order in which they were created.
4. Print a list of reviews along with the recipes title.
5. Which recipe has been reviewed the most, and how many times was it reviewed (hint: COUNT, GROUP BY, INNER JOIN, ORDER BY, LIMIT 1)?
6. Which ingredient has been used most? The keen-eyed developer will have recognized this as a trick question. Why is this a trick question? Can you think of how to normalize recipes and ingredients? What other benefits are there for normalizing this?