San José State University
Department of Computer Engineering

CMPE 226
Database Systems
Spring 2017
Instructor: Ron Mak

Assignment #4

Assigned: Tuesday, February 28
Due: Thursday, March 9 at 11:59 pm
Team assignment, 100 points max

Table joins and PHP prepared statements

The purpose of this assignment is to give your team practice writing SQL SELECT
statements that perform table joins and using PHP prepared statements.

You can add more database tables to your project (or modify the ones you already have).
Your tables must be in third normal form (3NF).

First write SQL queries that perform 5 **join operations** among your tables. At least one
join should involve more than two tables. At least one join should have a GROUP BY
HAVING clause. (They can be the same join.)

Test your queries by executing the SQL statements directly on the MariaDB command
line or in phpMyAdmin.

Implement the join operations with PHP PDO and **prepared statements**. Through
actions on the client interface, end users should cause the join operations to occur. The
PHP code should generate web pages that display the results of the join operations.

What to turn in

Create a zip file named after your team (e.g., **Supercoders.zip**) containing:

- Screen shots or text files of the test output from running your SQL queries
  directly on the command line or in phpMyAdmin. Be sure that the SQL
  statements can be clearly seen.
- Screen shots from your project showing user input via HTML forms and the
  dynamically generated web pages that include output from the resulting joins.
- Your .html and .php files.
- A dump of your MariaDB database created with phpMyAdmin or the mysqldump
  utility.

Submit into Canvas: **Assignment #4**

Rubrics

Criteria	Max points
SQL	**60**
• 5 joins	• 20
• At least one join with more than two tables.	• 10
• At least one join with a GROUP BY HAVING clause	• 10
• Screen shots or text files from running the joins directly from the command line or in phpMyAdmin	• 10
• Database dump	• 10
PHP and HTML	**40**
• Implementation of the 5 joins as PDO prepared statements	• 20
• Screen shots of user input via HTML forms and the resulting generated web pages showing the join output	• 10
• PHP and HTML files	• 10