DOUGLAS COLLEGE

COMMERCE AND BUSINESS ADMINISTRATION

COURSE OUTLINE AND SCHEDULE

CSIS 3280-002: WEB BASED SCRIPTING

Group Project

Due Date: Thursday, November 29 (by end-of-day)

Purpose

The purpose of this project is to give you hands-on experience in the development of a PHP/MySQL powered (i.e., data-driven) web application.

What You Group Should Do

Please choose a topic of interest to you as a group. I have provided database models for three sample topics as example. Other potential topics include developing a website site for PHP resources (e.g., https://code.tutsplus.com/articles/40-invaluable-php-tutorials-and-resources--net-5123 and https://php.resourceindex.com/). Obviously, the choice of topics is as endless as your interests! However, when choosing a topic, bear in mind that you need to keep things simple and manageable. I suggest that your data model should have **2 to 8 database tables**. Bear in mind that you will have to come up with sample data for each database table and also HTML forms that site administrators can use to add new records to database tables.

Preliminaries

Please create a folder, name it as follows: *CSISProject-GprX* (replace the "X" with your group number). This folder will be the repository for ALL your project files, which you ultimately upload to the Blackboard.

Project Requirements

Like I said, above, you may use the sample project topics I have provided or choose your own topic of interest to you.

1. **Develop a Proposal for the Project**

   Each group, one group member should email me your project topic. If you choose to us the sample project topics I have provided, please indicate your first, second, and third choice. You should attach a Word document to the email. The content of the Word document should include:

   - The title of your project and the full names of the group
   - A short narrative description of the business/topic used for the project.
   - A data model for your project's database similar to the ones of the sample projects I provided (if you know to use MySQL Workbench, please use it to create the data model; otherwise you can create one either in Word or Excel).

2. **Sample Data and Database Implementation**

   - Next, create an Excel file for each table in your data model and populate each table with relevant (appropriate) data. The main tables (those on the "1" side of the 1:M relationships) should have at least 10 records (rows) of data and other tables (those on the "M" side of the 1:M relationships) should have at least 30 records (rows) of data. To have true 1:M relationships, make sure that some records on the "1" side are associated with more than one record on the "M" side.
   - Create comma-separated values (CSV) formats for your Excel files (i.e., save them as CVS).
   - Thereafter, go to http://www.convertcsv.com/csv-to-sql.htm and create a sql script for each table, as demonstrated in class. From this website, you'll be able to create both the table structure and insert your sample data into the tables.
   - **Note: The CSV to sql coverter website facility does not create foreign key constraints; you will have to do so manually. Also, remember to disable foreign key checks when inserting values into tables with foreign keys**.
   - Combine ALL your individual table SQL scripts into ONE SQL dump script. At the top of the combined script, insert code which creates the database and also selects the newly created database as the one to be used. Note: You should give your database a name that is descriptive enough (e.g., if the database is about recipes, you could call it "recipedb").
   - Start WampServer and open PHPMyAdmin. Import the SQL dump file to create the database.

3. PHP Data Entry Interface

- For each table, design an HTML form that can be used to insert new data/records into the database table. **Note**: You do not need to include on the form inputs for IDs which are auto-increment (the system will automatically generate the number sequence for such IDs). Save the form as a PHP file with table name in the file name (e.g., if it is ingredients table, you would save it as "ingredientsForm.php").
- Set up a connection to the database.
- For each table's form, extract the relevant user inputs and write and execute SQL queries to insert the values into the respective table. **Note**: when inserting values into auto-increment IDs, use the keyword "default".

4. Displaying Information from the Database

- When it comes to displaying information from the database, there is no "one-size-fits-all" magic formula to use. You should think of the necessary information to display and the best way possible to display it. Visiting sites on a similar topic can provide insight into how to display the information.
- For example, for the actor bios database, wikipedia.com offers some insights into how to display actor bios information. You could also display the information as in the following resource (mentioned above): https://code.tutsplus.com/articles/40-invaluable-php-tutorials-and-resources--net-5123.

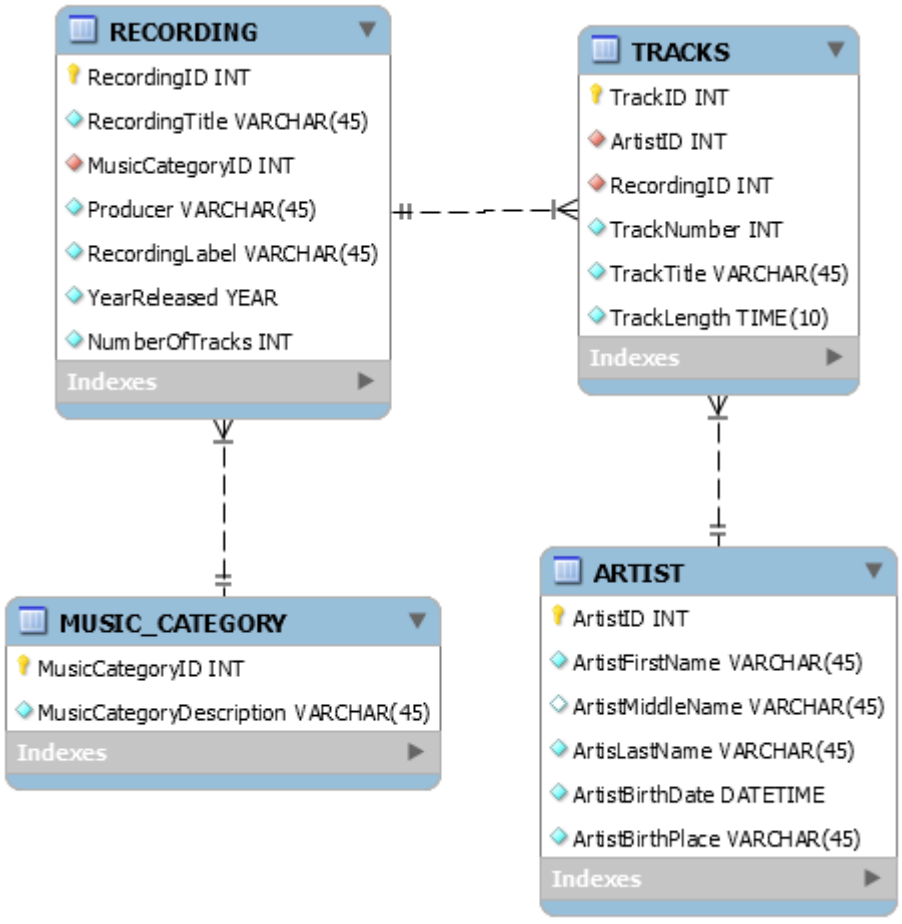
5. Deliverables

- Data model files (if you chose a different topic than the examples I provided)
- Excel and CSV files (for your database tables)
- SQL dump file
- PHP files

Note: Please create a folder, name it as follows: *CSISProject-GprX* (replace the "X" with your group number as before). Gather all your files into this folder, zip it and upload to the Blackboard one zipped file.

Addendum: Sample Project Topics & Data Models

1. Online Music Collection



2. Online Actor Bios Database

3. Online Recipe Management System