Week 12 Concepts Assignment

CS441

*This is exercises based on the textbook ones for Chapter 18. Note, there are additional steps or requirements that might not be in the book, or steps removed from the book, so be sure to follow this document vs directly following the textbook.*

*Note, all required student files are located in the Week 1 Module of Canvas. Look for the “Student Download files” and add to your htdocs folder. Remember that the weekly code will be copied back and forth from your local Github repository and the htdocs folder.*

*Before starting, make sure to copy the directories “book\_apps” and “ex\_starts” to your local computer in the following directory: C:\*xampp\htdocs\

***With lab PCs, make sure to back up any incomplete work to your U drive!***

**Instructions:**

# Exercise 18-1 Work with the data in a database

In this exercise, you can run some of the examples in this chapter. Then, you can write some of your own SQL statements to work with the data in a database.

## Run some of the examples from this chapter

1. Start phpMyAdmin. (XAMPP)
2. Use your text editor to open the script named my\_guitar\_shop2.sql that’s stored in the book\_apps/\_db\_create directory. Note that this script ends with INSERT statements that load data into the database.
3. Use phpMyAdmin to run this script as shown in figure 3-10 of chapter 3.
4. Use your text editor to open the script named fig18-01.sql that’s in the book\_apps/ch18\_db\_scripts directory. Then, use phpMyAdmin to run the first SELECT statement in this script. To do that, you can select that statement in your text editor and copy it into phpMyAdmin. (Don’t forget to use phpMyAdmin to select the correct database.) Then, run the next three state-ments to limit the number of columns and rows.
5. Open the script named fig18-10.sql in your text editor, and use phpMyAdmin to run the first SELECT statement in this script. Note how this statement selects data from two tables. Then, run the second SELECT statement. Note how this statement selects data from four tables. Capture a screenshot below of your successful query execution.
6. Open and run any of the other examples in this chapter that you’re interested in reviewing. Include the code from one of them below:

## Write your own SELECT statements

1. Use phpMyAdmin to write and test a SELECT statement that selects the productName, description, and listPrice columns for all rows in the products table.
   1. Paste the code below:

Add code to this statement so it sorts the result set by list price. Then, run this statement again to make sure it works correctly. This is a good way to build and test a statement, one clause at a time.

1. Paste the code below:

Add code to this statement so it only selects rows that have the word “electric” in the description column, and run this statement again to make sure it works correctly. Paste your final code below and a screenshot of the results of its execution:

1. Write a SELECT statement that joins data from the customers and addresses tables. This statement should select these columns: firstName, lastName, line1, line2, city, state, zipCode. It should only select the billing addresses for customers who have a last name of “sherwood”. Paste your final code below and a screenshot of the results of its execution:
2. Write a SELECT statement that returns a count of the number of products in the category that has a name of “Guitars”. To do this, use a subquery to get the category ID. Paste your final code below and a screenshot of the results of its execution:

## Write your own INSERT, UPDATE, and DELETE statements

1. Write an INSERT statement that adds a customer named John Smith to the customers table. Use an email address of “johnsmith@example.com” and a password of “sesame”. Paste your final code below and a screenshot of the results of its execution:
2. Write an UPDATE statement that changes the password for John Smith to “5e5ame!”. Paste your final code below and a screenshot of the results of its execution:.
3. Write a DELETE statement that deletes the customer named John Smith. Paste your final code below and a screenshot of the results of its execution:
4. To restore the database to the way it was initially, run the creation script again as you did in step 3.

# Exercise 11-1 Use PHP to work with a database

In this exercise, if time permits, we will be doing this as an in-class hands-on activity. Include any requested code changes in your Github Assignment repository.

***As all code (unlike the textbook instructions) should be included in this word document, simply save and commit this document to your Github Week 12 Assignment.***