Week 2 Concepts Assignment

CS441

*This is exercises based on the textbook ones. Note, there are additional steps or requirements that might not be in 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.*

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

**Instructions:**

# Exercise 1-1 Test the Product Discount application

In this exercise, you’ll run the Product Discount application that’s described in this chapter. You’ll also use your browser to view its source code.

**Start the application**

1. If necessary, start (or install and then start) XAMPP.

*Capture a screenshot of your XAMPP Control Panel*:

1. Start your web browser. (Chrome recommended)
2. Run the Product Discount application by entering this URL into the browser’s address bar and pressing the Enter key:

http://localhost/book\_apps/ch01\_product\_discount/

If this application runs, it means that you have installed the software and downloadable applications correctly.

**Test the application**

1. Enter valid values in the three text boxes. Then, click the Calculate Discount button. This should display the results of the calculation on the second page of the application.
2. Look in the browser’s address bar and note that the URL points to a PHP file.
3. View the source code for this web page as shown in figure 1-15. Note that this source code only contains HTML, not PHP code. When you’re done, close the tab or window that contains the source code.
4. Click on the browser’s Back button to return to the first page of the application, enter invalid numeric values like “xx” and “yy” in the second and third text boxes, and click the Calculate Discount button. Then, read the error messages that are displayed. You’ll learn how to handle errors like this later in this book.

*Capture a screenshot of the error:*

1. Click the browser’s Back button to return to the first page of the application. Then, run the application again with valid data.

# Exercise 2-1 Build the Product Discount application

*This exercise steps you through the process of building the Product Discount application.*

**Open the files for the Product Discount application in PhpStorm**

1. Make sure the Apache server is running. Then, start your browser and run the application in this directory:

xampp\htdocs\ex\_starts\ch02\_ex1

To do that, you can use the index of exercise starts that you bookmarked in exercise 1-2 or you can use this URL:

http://localhost/ex\_starts/ch02\_ex1

1. Enter valid data in the three text boxes, and click the Calculate Discount button. Note that the resulting web page indicates that it is under construction.

*Capture a screenshot of the results:*

1. Use your IDE or text editor to open the display\_discount.php file for this application. It is in the same folder as the index.html file. Then, note that this file doesn’t contain the PHP statements that this application needs.
2. Use your IDE or text editor to open the index.html file for this application. Then, note the name attributes for the three text boxes.

**Add the PHP statements**

1. Switch to the display\_discount.php file and add statements that use the $\_POST array to get the product description, list price, and discount percent from the form. Then, modify the first three echo statements so they display this data, save the file, and run the application again. This should display unformatted versions of the data that you enter.
2. Switch to the display\_discount.php file and change the statements that use the $\_POST array to use the filter\_input() function instead. Save the file and run the application to make sure it still works as expected.
3. Switch to the display\_discount.php file and add statements that calculate the discount amount and discount price. Then, modify the last two echo statements so they display this data, save the file, and run the application. This time, the application should display unformatted versions of the calculated data.
4. Switch to the display\_discount.php file and add statements that format the numeric variables with the currency and percentage formats. Then, modify the last four echo statements so they display the formatted data, save the file, and run the application. Now, the application should display the formatted data.
5. Keep the application running and navigate to the index.html page if you’re not already there. In the Product Description textbox, enter “<b>Guitar</b>”, and in the Discount Percent textbox, enter “<i>10</i>”. Click the Calculate Discount button, and notice that the Product Description value is displayed in bold, and the Standard Discount value is displayed in italics.
6. Switch to the display\_discount.php file and add the htmlspecialchars() function to the echo statements for Product Description, List Price, and Standard Discount. Then save the file, run the application, and repeat step 9. Notice that this time, the HTML tags are displayed as HTML entities rather than being implemented by the browser.
7. Switch to the display\_discount.php file and fix the heading for the display\_discount.php file so it says “Product Discount Calculator”. Then, test this change, and *include a screenshot of the results below:*

***Save this file, with any screenshots, in your Github repository. Make sure to do a final commit/push so all files are uploaded to your assignment repository by the due date.***