8.6 Activity 2: Module 8 practical exercises 3–5

Purpose

These exercises build upon Exercise 1 and Exercise 2. You will need to complete **8.5 Activity 1: Module 8 practical exercises 1–2 (https://canvas.westernsydneyonline.edu.au/courses/1261/pages/8-dot-5-activity-1-module-8-practical-exercises-1-2)** before moving on to exercises 3, 4 and 5.

All of the exercises in Module 8 will be assessed and have to be submitted as part of **Assignment 2B: Practical exercise set 2 (https://canvas.westernsydneyonline.edu.au/courses/1261/assignments/15052)** . Make sure that all files have been uploaded to your TWA website before the submission due date.

Task

Exercise 3

Step 1: Write an SQL statement that extracts the name, quantityInStock, and price from the product table for the products that have **more than 10** in stock and sorts the results in ascending order of quantityInStock.

Step 2: Incorporate this SQL in a PHP page to **display the results in an HTML table**. Above the table display the heading: Products with stock > 10.

Step 3: Save the file as Exercise3.php. Upload it to your website and test it. Verify your output by comparing it with the data in the product table as obtained from Exercise 2.

Note: you can use the code from Exercise 1 as a guide for producing the required PHP script for this exercise.

Exercise 4

This exercise uses the file exercise4.html (found in the zip file for this practical) in the practicals/week10 folder of your TWA website.

Step 1: Create a PHP file named exercise4.php in the practicals/week10 folder of your TWA website. This file will be the PHP script that processes the data submitted from exercise4.html (i.e. this is the action URL of the form).

Step 2: As a starting point, copy the code from exercise3.php into exercise4.php. Modify the code in exercise4.php so that the SQL query incorporates the value from the form into the where clause, instead of the quantity value always being 10 as in exercise 3.

Step 3: Test the script by loading the form in the browser, entering a value in the form and submitting. Verify your output by comparing with the data in the product table as obtained from exercise 2.

Step 4: If you enter a value in the form that is 60 or larger (the current largest value in the quantity field) the PHP script will produce output that looks like:

Products with stock > 60

Note: The value of '60' is the value entered in the form by the user, **not** a static value.

This type of output is not very helpful to users. Instead, an appropriate message should be displayed.

Modify your script in exercise4.php so that instead of the above being displayed, the script displays the message:

There are no products that have more than 60 in stock.

Step 5: If you enter a value in the form that is not a number, the PHP script will crash with an error message regarding the query. **Test** this by entering a word in the text box and submitting the form to observe the error that is generated. Instead of allowing the code to crash in this situation, we should validate that the value entered into the form is a number before running the query.

Step 6: Modify your script in exercise4.php to validate that the value entered into the form is a number.

*Note: T*he validation **must** be written in PHP, not JavaScript. That is, the validation of the user input occurs on the server, not the client. The output generated by the script, when the value entered is not a number, should be the message:

The value entered for the quantity was not a number.

Exercise 5

Step 1: Create a PHP file named exercise5.php in the practicals/week10 folder of your TWA website.

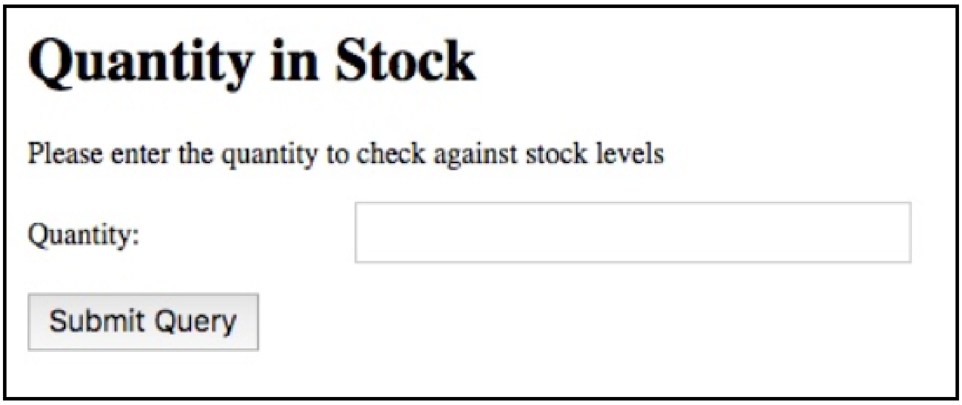
Step 2: Combine the code from exercise4.html and exercise4/php into exercise5.php (this is similar to Exercise 3 in Module 7) so that the PHP script and the HTML are in the same file.

Step 3: Modify the code so that:

1. The form uses postback (i.e. the form action is the same file exercise5.php).
2. Only the form is displayed on first load of the page.
3. The table of products is only displayed when there are records to display.
4. The form and the messages as described in Exercise 4 are displayed when appropriate in appropriate locations.
5. The value that the user enters in the form is maintained in the text box after form submission.

The following screen dump figures provide guidance for expected output for these scenarios. Figure 1 is an example of no. 2, where only the form is displayed on the first page load. Figures 2–4 are examples of:

- no. 3. table of products only displayed where there are records to display
- no. 4. the form and the messages as described in Exercise 4 are displayed when appropriate in appropriate locations
- no. 5. the value that the user enters in the form is maintained in the text box form after submission.

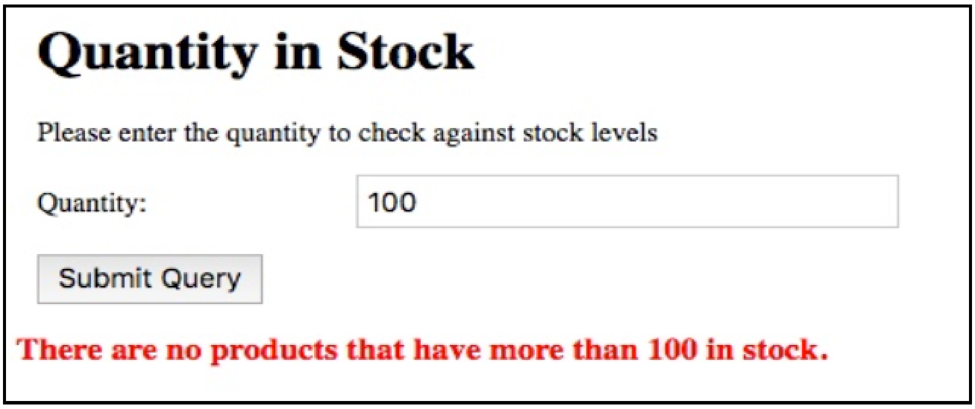


Quantity in Stock

Please enter the quantity to check against stock levels

Quantity:

Figure 1 (2021) courtesy of Paul Davis



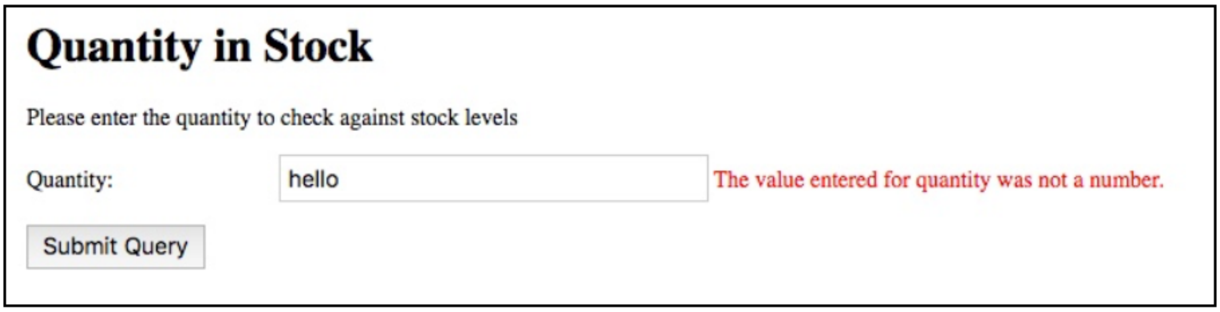
Quantity in Stock

Please enter the quantity to check against stock levels

Quantity: 100

There are no products that have more than 100 in stock.

Figure 2 (2021) courtesy of Paul Davis

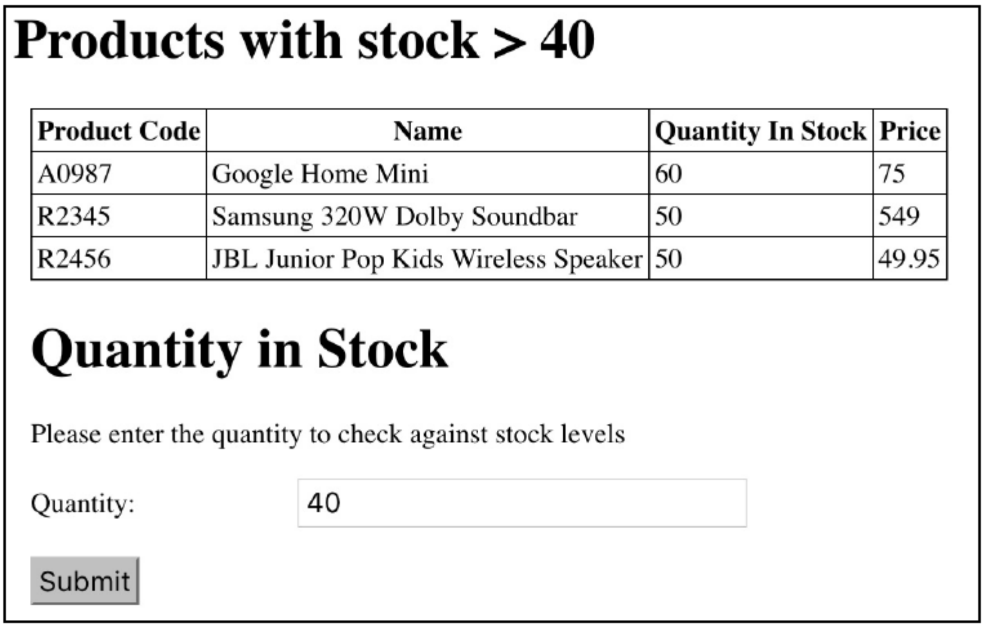


Quantity in Stock

Please enter the quantity to check against stock levels

Quantity: hello The value entered for quantity was not a number.

Figure 3 (2021) courtesy of Paul Davis



Products with stock > 40

Product Code	Name	Quantity In Stock	Price
A0987	Google Home Mini	60	75
R2345	Samsung 320W Dolby Soundbar	50	549
R2456	JBL Junior Pop Kids Wireless Speaker	50	49.95

Quantity in Stock

Please enter the quantity to check against stock levels

Quantity: 40

Figure 4 (2021) courtesy of Paul Davis