Assignment 3 – JavaScript

Due Date
14 March 2014 – 11:59pm

Purpose
This assignment will teach you how to create JavaScript functions to:

1) Rotate a banner on the front page
2) Dynamically remove elements from the cart
3) Automatically add comments to the blog
4) Verify that the shipping form has been filled out correctly

Groups
You may work with up to **one** other person. Put the names of both members in the comment section at the top of the JavaScript file.

Task
There should only be five named functions, one for each of the tasks (graded) and an outputToConsole function (not graded). Each function is described below. You are allowed to use jQuery (jquery.com) functions. You should not include jQuery in your upload to Canvas.

You will likely need to install XAMPP (www.apachefriends.org) for this assignment.

Function 1 – Rotating Banner (20 points)
function rotateBanner (element, source) { … }

This function should be called when index.html finishes loading.

This function should take two arguments 'element' as the container element for the images that you want to rotate in an out and 'source' a page outputting JSON information that contains image locations. The function when first called, the function should read the source file via an AJAX call (hint: use jQuery). Output the results of the call to the console. The JSON results will likely be put into an array. A sub function will likely then begin on a timer for about every 7-10 second to change the image in the element that is passed in. The images should be on an infinite loop.

Source should be an html file for now with no html markup, but with something similar to the following:

[{"image" : "images/Asmodai.jpg", "link" : "product.html?p=1", "alt" : "product1"},
 {"image" : "images/Asmodai2.jpeg", "link" : "product.html?p=2", "alt" : "product2"},
 {"image" : "images/Asmodai3.jpeg", "link" : "product.html?p=3", "alt" : "product3"}]

Rotating Banner Rubric				
0 points	5 points	10 points	15 points	20 points
There is no function to rotate the banner.	Function exists.	Function exists and JSON is output in the console.	The function exists, the JSON is output to the console, and the images rotate on the page.	The function exists, the JSON is output to the console, the images rotate on the page, the images loop, and the link and the alt change with the images.

Function 2 – Remove Element (20 points)

function removeCartItem (element) { … }

This function should be called when someone clicks on the "remove" link on the cart page.

The function should take one argument 'element'. It should first send a post to a page 'removefromcart.php' in JSON the name of the product. Second it should use the element that was passed in to remove the desired row from the cart without leaving a blank row.

Remove Element Rubric			
0 points	10 points	15 points	20 points
There is no function to remove and element.	Function exists and removes something (anything).	The function exists and removes the row completely without leaving a blank row.	The function exists, removes the row completely without leaving a blank row, and posts to another page the name of the product (and just the name).

Function 3 – Add Comments to the Blog (20 points)

function addComment () { … }

Before starting this function, you should first add an element to the bottom of the single blog (after the element that contains the text, but before the closing body tag). Give this element a specific ID (e.g., blog-comments). This will be used for the comments that have been posted.

Next, grab the form from the addcomment.html page, and put it below the element that you just inserted into article.html.

The function should grab the email and the comment from the form. It should post this information to an html page called 'postcomment.php'. For now, this page should just be:

[{ "status" : "good" }]

Your function should check to make sure the status is good. If the status is good put the email and the comment in the new element (blog-comments). The email should be cut off before the @ symbol. The date should be included in the new information that is added. Then remove the email and the comment to get ready for the next comment.

Adding Comment Rubric			
0 points	5 points	10 points	20 points
There is no function to remove and element.	Function exists.	Function exists and adds the comment with the date to the page.	Function exists, adds the comment to the page, posts the information to the page, checks for a good status, and clears the form.

Function 4 – Form Validation (40 points)

function validateForm (form) { … }

This function takes the form element as an argument. In the shipping form, all fields are required except the phone. You can show this by using classes so that JavaScript can know what fields are required and what you expect to be in the field (e.g., name, phone, etc.).

Your function should validate that:

- the name field is only characters and spaces
- the address field is only numbers characters and spaces
- the city field is only characters
- the state field is selected
- the email field is an email
- the phone field is a phone number if it is entered
- that a shipping option is selected.

This should be done before the user is allowed to submit the form. Also when something doesn't validate, a warning of some sort should come up telling the user all of the errors.

4 points will be given for each field that is correctly validated (28 points), 6 points for not letting the form submit till it is completely validated, and 6 points for showing all of the errors.

What to Turn In

Turn in a zipped up file of all of your files (HTML, CSS, and JS) on Canvas.