ITMD 465/565

Lab 1

Introduction

This first lab will have you try to implement some of the JavaScript syntax and basic DOM manipulation similar to what we discussed in class.

Objective

Create a single HTML5 file that includes some CSS and JavaScript embedded on the page. This single file will have some basic JavaScript functionality where the scripts gather information from form fields and modify the page with basic DOM manipulation.

Requirements

- All HTML tags and page structure should be **HTML5** compliant
- CSS and JavaScript needs to be embedded in the HTML page. I only want one HTML file turned in, and not zipped.
- You do not need an HTML form tag on the page. JavaScript will be used to handle the input fields. Use button element not input type=submit or input type=reset
- Do not put any spaces in your file name
- Do not use jQuery for this lab. Pure JavaScript for DOM manipulation.

Steps

1. Make a single HTML 5 compliant web page and save it as described in the submission format specification section. It must have an .html extension, be plain text, and follow the HTML skeleton.
2. Embed any CSS in the HEAD section on that same page.
3. Place all JavaScript in an embedded script tag at the bottom of the body section.
4. Build the html page similar to the mockup provided. Use appropriate HTML tags where needed. You do not need a form tag. JavaScript will be manipulating the data and the form controls will not be submitted with an HTML form. Class and Lab 1 title should be an H1. Name and email can be an H2. Body Text and Quantity inputs should be text input elements. Color should be a select element with at least 3 (Red, Green, Blue) colors as choices. There should be a Run Lab button. There should be a Reset Lab button.
5. You need to create at least one function. It should execute when the run lab button is pushed. This function needs to be added to the button as click event handler with the addEventListener JavaScript function. This function will contain most of your code.
6. The run lab function should get the input from the two text boxes and the color select menu. If either text box is empty you should use a JavaScript alert prompt to tell the user they must have content and stop executing the function. Use the parseInt function

to convert the quantity text box to a number. If the user didn't enter a number use a JavaScript alert box to tell them and do not continue executing the function. You will be using multiple if/else conditional statements and return statements.

7. If everything is ok with the text input and quantity box add that quantity of output boxes to the results area. You will need a loop for this. Each output box should consist of a div with a H2 as the header and a P as the body text nested inside it. The H2 should have Output and the number it is in the loop. The div and H2 should be colored based on the choice in the color drop down. You can do this multiple ways. You could add inline styles to the div and H2 or you could add a class to the div and then write css to color each item. The class and css route is probably the better choice. You will also need to clear the values out of the body text input and quantity input on a successful attempt.
8. If the user runs the lab again it should automatically clear the lab results first.

Graduate Additional Requirements

If you are involved in **any section of 562** you need to complete the additional requirements listed here.

Need to add the reset lab button as shown on the mockup. We should see another function that is bound to the click event on that button for this. Reset button should be disabled if there is not content in the results section. Enable it on successful attempt and disable after reset. There is a property for this on buttons.

README File

Not Required for this Lab

Due Date / Late Policy

This assignment is due **Saturday January 30, 2016 11:59 PM Chicago Time**. Late assignments will receive a **10% per day deduction starting at 1 minute late**. We will discuss this in the following class on February 2 so **no assignments will be accepted as of class (6:30pm) that night**. See syllabus for full late policy. **No Extensions**.

Submission Guidelines

You must upload your submission, to the blackboard assignment by the due date. The submission must be in the following format and structure. If you do not submit your assignment exactly as specified, you will receive an immediate 5% deduction.

Submission Format Specification:

YourUsername_YourIdA#_lab1.html

Hints

JavaScript Functions:
getElementById
addEventListener
createElement
createTextNode
appendChild
removeChild
alert method
parseInt
isNAN
value property of an element
class property of an element

https://developer.mozilla.org/en-US/docs/Web/API/Node
https://developer.mozilla.org/en-US/docs/Web/API/Element
https://developer.mozilla.org/en-US/docs/Web/API/Document
https://developer.mozilla.org/en-US/docs/Web/API/Node/removeChild
https://developer.mozilla.org/en-US/docs/Web/API/Node/appendChild
https://developer.mozilla.org/en-US/docs/Web/API/Document/createElement
https://developer.mozilla.org/en-US/docs/Web/API/Document/createTextNode
https://developer.mozilla.org/en-US/docs/Web/API/Document/getElementById
https://developer.mozilla.org/en-US/docs/Web/API/Window/alert
https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/parseInt
https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/NaN