CS601: Module 5 Assignment

General Rules for Homework Assignments

- You are strongly encouraged to add comments to your source code. Doing so will help your facilitator to understand your logic/approach and grade your work more accurately.
- You must work on your assignments individually. You are **not allowed** to copy the answers from others. However, you are encouraged to discuss approaches to the homework assignment with your facilitator.
- You are expected to write your own code for all assignments. You may use an IDE or advanced text editor for your assignments, but you *must not* use any auto generated code provided by such tools or other applications. So be sure to write your own code in the editor window, don't use the WYSIWYG builder (if applicable).
- Do not use any unapproved code libraries or frameworks.
- Each assignment has a strict deadline. However, you are still allowed to submit your assignment within **two (2) days** after the deadline with a penalty. 15% of the credit will be deducted unless you made previous arrangements with your facilitator. Assignments submitted 2 days after the deadline will not be graded.
- When the term *lastName* is referenced in an assignment's file or folder name, please replace it with **your** last name.

Create a new folder/directory named **CS601_HW5_*lastName***. Place your solution(s) to the assignment requirements in this folder.

NOTE: THIS DOCUMENT CONTAINS MULTIPLE PAGES

Part 1 – JSON (25 Points)

Requirements:

1. Create an JSON document:
   a. You will be storing information about your college degrees earned to date and those you currently working towards. For each degree, store the following information:
      i. School
      ii. Program/Major:
      iii. Type (AA, BA, BS, MS, etc.)
      iv. Year conferred (future dates OK)
   b. Consider looking at *my_favorite_movies.json* in the lecture notes as an example

After you create your JSON file, validate it at http://jsonlint.com

Assessment/Grading:

Your assignment submission will be scored by the following criteria:

1. Strict adherence to the requirements stated above: 80%
2. Code validates as valid JSON: 20%

Note: Preserve the code from this part of the homework, as you may be building upon this in future assignments.

Part 2 – AJAX and JSON (75 Points)

Using HTML 5, CSS, and JavaScript:

Requirements:

1. Upload your JSON file from Part 1 of this assignment to a web server.
   a. Your instructor will post information about obtaining web server space in the Class Discussion -> Common Area forum.
2. Create a JavaScript program that performs the following tasks:
   a. An event occurs (mouse click):
      i. Write the event handler
      ii. Create a XMLHttpRequest object
      iii. Write the code to create the request for your JSON data on the server (you must first upload it to the server using FTP)
      iv. Send the request to the server
      v. Process the returned JSON data using JavaScript

       vi. Update the page content
              1. The JSON data must be displayed in a HTML table.
3. Upload your JavaScript program to the same directory on the webserver where your JSON file resides.
4. Run your program and verify it works as outlined above.

Assessment/Grading:

Your assignment submission will be scored by the following criteria:

1. Strict adherence to the requirements stated above: 70%
2. Code validates without errors (warnings are OK): 10%
3. Overall quality of work and effort as determined by your facilitator: 20%

Tip: You learned about JavaScript objects in Module 3. JSON objects are JavaScript objects. You then learned how the DOM works and how to manipulate it in Module 4 and how AJAX works in Module 5. You'll need to string these concepts together in order to programmatically implement part 2.a.vi.1 above.

Note: Preserve the code from this part of the homework, as you may be building upon this in future assignments.

Submission

Export your **CS601_HW5_*lastName*** folder containing all the relevant sub-folders and files as a zip file, and upload the zip file to the appropriate assignment submission area. Also, please be sure to include the URL for the hosted files for part 2 using the comments section in Blackboard when you submit your assignment files.