Accessing XML Data with AJAX

Extensible Markup Language (XML) is designed to store and transport data, and is used in many aspects of web development. It simplifies the process of updating dynamic data – information that is asynchronously changed – by removing it from the HTML and storing it in a completely separate file. To access the data in an XML database file, a web page can to make a request using Asynchronous Javascript and XML (AJAX). To implement the database functionality, the <u>iQuery</u> Javascript library will be used.

Instructions

Download the **Nirvana XML Database Files.zip** file via Canvas and extract all files. In your text editor, open the XML database file called **albums**. Review the code and, if helpful, read through the XML Basic section of XML Tutorial. Then, using http://en.wikipedia.org/wiki/Nirvana (band) as your source, code the missing data for the remaining albums (13 total). You must include:

- Album title
- Release date
- Cover art
- Live album (1=yes; 0=no)
- Studio album (1=yes; 0=no)
- Compilation (1=yes; 0=no)
- Box set (1=yes; 0=no)
- URL to the Wikipedia page of the album
- Notes (one-sentence trivia or fact about the album)

Make sure to save the cover art in the **images** folder.

NOTE: Some of the content for this assignment was compiled for the **Creating a Table** assignment, and may be reused.

Review the **nirvanaJavacols.js** file by opening it in a text editor; this contains the AJAX call. Take note of how the XML data is used – this tells the web page WHAT data to display.

Open the **nirvanaColumns.html** file in a text editor and review the code – this tells the web page HOW to display the data from the XML database. In the head section, you can see the files linked to the web page; in this case, the jQuery file is linked via the Web and

cannot be edited. Additionally, the style rules are coded in the style element. Alter the style rules to display the following changes:

- Add a background color of #CC3333 for the body of the page (HINT: you will need to add a body element selector first)
- To the **container** id selector add a background color of **#FFFFF** and a **5px**, **solid** border, with the color **#666666**
- Add a left padding of **3px** to the **leftCol** class selector
- Change the width in the rightCol class selector to 69%

Check to make sure your page looks similar to the screen shot in Canvas.

NOTE: In order to check your work locally, you must open the **nirvanaColumns.html** in Mozilla Firefox.

How to Submit Your Work

- 1. Before submitting, please validate your HTML and CSS files
 - a. Using Mozilla Firefox, navigate to the following pages and choose the **Validate by File Upload** tab.
 - i. HTML Validator: http://validator.w3.org
 - ii. CSS Validator: http://jigsaw.w3.org/css-validator
 - b. All HTML and CSS files **MUST** pass validation in order to be considered for full credit.
- 2. Save all site files (including images) to CWU's server
 - a. On Campus
 - i. From a campus lab computer, you can save your files directly to the public folder on DriveI@HTDOCS
 - b. Off Campus
 - i. If you are off-campus, you can save your files to the **public** folder on **DriveI@HTDOCS** via <u>NetDrive</u> or <u>NetStorage</u>
- 3. Check the Index Page
 - a. If you do not have an index page in your **public_html** folder, you will need to create one (please visit http://www.cwu.edu/~durhamj for an example. Click the link that corresponds to your class; then, after the page loads right-click on the browser window and choose **view source** from the list feel free to copy and use the code for your own index page
 - b. Make sure the main (home) page of your web site assignment or project is properly linked on the index page
- 4. Test your URL

- a. Type the URL for your website into your browser and press **enter** on your keyboard
 - i. For example: http://www.cwu.edu/~yourcwuusername
 - ii. There may be a delay of 30 60 minutes from the time you upload your file(s) to CWU's server to the time you can view your web site live

b. If your URL does not open your index page:

- i. Notify your instructor via GroupWise email immediately
- ii. Skip to step **4** to complete the Canvas submission process, then return here to troubleshoot the URL issues
- iii. Check your URL for the correct information
 - 1. http://www.cwu.edu/~yourcwuusername
 - a. your instructor's URL happens to use the last name and first initial format, but yours may be different
- iv. Make sure the index.html is located in your public_html folder located on DriveI@HTDOCS, and that there are no other files named index.html
 - 1. If the index.html file does not exist, please see step **2.c** above
- v. Check all file extensions to make sure they are correct (.html, .css, .js, .xml, .php, etc.) as well as spelling
 - 1. Please note that file names are case-sensitive, and it is recommended that you use lowercase letters and no spaces
- vi. Make sure all files uploaded to CWU's server are **NOT** saved in a .zip file
- vii. If the site is not viewable via your URL after 24 hours from uploading your file(s), please contact the <u>CWU Help Desk</u>
- 5. Save a copy of all your site files (including images) to a .zip file by following these steps (in Windows 7)
 - a. Select all your site files
 - b. **Right-click** your selection and choose **send to** from the list
 - c. Choose Compressed (zipped) folder
 - d. Rename the .zip file using the filename format

lastname_firstinitial_assignemnttitle

- i. For example: **Durham_J_Project1.zip**
- ii. Submission must follow the file name format in order to be considered for full credit
- 6. Upload via the assignment link in Canvas
 - a. Click the **Submit Assignment** link at the top-right of the assignment page

- b. Choose the **File Upload** tab (bottom right of assignment page) and click **browse** to upload your .zip file
- c. Click the Add Another File button, then click browse to upload your url.html file
 - i. If you have not created your url.html file, please visit http://www.cwu.edu/~durhamj/url.html. Once the page loads, rightclick in the browser window and choose view source to copy the code. In your text editor, create a new .html file named url and paste the code into the file. Before saving and uploading your file, make sure to change the href attribute of the anchor element to link to your URL by replacing my username with yours.

7. Click **Submit Assignment** to submit your work

- a. Check to make sure the correct file(s) were successfully submitted by clicking on the **Submission Details** link at the top-right of the assignment page
- If needed, you can resubmit your assignment by clicking the **Re-submit Assignment** link
 - Please note that resubmission of assignments is only offered before the assignment deadline; and, once an assignment has been graded (including early submissions), resubmission is not accepted for credit.
- 8. What to do if you have questions or concerns regarding the assignment instructions, content, or submission process:
 - a. Post a message on the Student Discussion Forum to consult your peers –
 they are a very valuable resource and often can respond quickly
 - b. Contact your instructor via **GroupWise email** (see the Syllabus for email procedures and etiquette)