# ***Cosc 360 labs: AJAX & XML***

Oct 17: AJAX: *Asynchronous* proof-of-concept … Due Oct 24th, demo for Deb in lab … Grade: 6 marks

Oct 24: AJAX: *Synchronous* proof-of-concept … Due Oct 31st, demo for Deb in lab ... Grade: 6 marks

Review the course folder for source files from the AJAX textbook; for Chapter 2. You are welcome to customize these files to you own website, but you must come up with a unique names/labels for similar input fields: http://www.headfirstlabs.com/books/hfajax/

See sample website from Chapter 2 of the AJAX textbook:
http://www.headfirstlabs.com/books/hfajax/ch02/registration.html

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In the third and fourth year of the BCIS degree, the courses should afford the opportunity to build proof-of-concept prototypes that will eventually become part of a portfolio that you can demonstrate during a job interview.

Oct 17:

Proof-of Concept: *Asynchronous* request object that puts data from web input fields into server side database. You should have at least *three* input fields of your own choice, plus a Submit or Register button. Examples from the textbook are acceptable: i.e. username, email, phone number.

You should have a number of prompt alerts that trigger (i.e. the onreadystate reports back the state … p75 may be helpful). Sample prompts are located on the following text pages.

You should also have client-side validation on two input fields (see resources below).

When Deb reviews your completed web page in lab, she will look for validation and prompts from the server on changes to the *onreadystate* state.

You are welcome to use either the dev server on your laptop, or the live-to-the-Internet account (i.e. Production server) that you set up Oct 10th.

Oct 24:

Proof-of Concept: *Synchronous* request object that checks data from web input fields with a server side database. You should have at least *three* input fields of your own choice, plus a Submit or Register button. Examples from the textbook are acceptable: i.e. username, email, phone number. See details below for server-side validation.

It should be obvious that you will take the data such as a username, compare to values listed in the database, and return a response that states whether the username is acceptable or not.

You should also have server-side validation on one input field (see resources below).

When Deb reviews your completed web page in lab, she will enter a repeat value into the input field, look for the appropriate response from the server. Then enter a unique value and look for the appropriate response. The SUBMIT/Register button should be disabled while the server is checking the value.

You are welcome to use either the dev server on your laptop, or the live-to-the-Internet account (i.e. Production server) that you set up Oct 10th.

## *Web Input Validation:*

I am certain that you can find your own resources on the Internet for validation, but hear are two to consider.

Client-side:

W3Schools: Javascript Form Validation

https://www.w3schools.com/js/js_validation.asp

Mozilla: Form data validation

https://developer.mozilla.org/en-US/docs/Learn/HTML/Forms/Form_validation

Server-Side:

This would be a server-side script usually written in php. The request object will usually call this script once the request reaches the server. Results of the script will be delivered to the response object and displayed by the callback function.

A typical use of server-side validation would be checking to see if a unique username is available for use or has been taken by someone else listed in the database. Typically, this would be a synchronous call to the server, and the user would have to wait until the server responds. The web page input fields and any buttons would be disabled while the server-side script is determining if the username is available. The user interface would give appropriate cues (see p 83 or of Head First AJAX text) in progress, accepted, not available), and then re-enable buttons and input fields. P 177 may also be helpful.

See sample website from Chapter 2 of the AJAX textbook:
http://www.headfirstlabs.com/books/hfajax/ch02/registration.html