



Faculty of Science

Course:	CSCI 3230U: Web Application Development
Lab:	#7
Topic:	AJAX

Overview

For this lab, you will create an AJAX-enabled web page for processing student records. The output of this web page will look very much like that of a previous lab, but it will be generated dynamically via DHTML using AJAX to retrieve the data to be displayed. Once finished, integrate the JavaScript from the previous lab so that your table is still clickable in a way similar to a spreadsheet.

Instructions

Data Source

As we have not yet learned about Node.js, our data source will be a static text file (called `student_data.csv`). Presumably, this data could be generated dynamically (in Node.js) using data from a database. The file's contents will look like the following:

Listing 1: Contents of `student_data.csv`:

```
100000000,4.5,3.75,3.4
100000001,4.25,4.12,4.25
100000002,5.0,4.75,4.5
```

HTML Page

Create a simple HTML page with only two elements in its body:

1. A button: When clicked, your JavaScript code will issue an AJAX request. The button text will be 'Generate Spreadsheet.'
2. An empty DIV: This is where your dynamically-generated table will be placed, when you receive the response to the AJAX request.

JavaScript

Implement a click event handler for the button that issues an AJAX request for the page `student_data.csv`. When the response comes back for this request, you will generate a table of student grades, as shown in figure 1, using DHTML. The number of students is not known, but you can assume the headers will remain exactly the same as in figure 1.

Integrate the code from lab #5, so that the columns, rows, and cells are clickable just like the static HTML table from that lab assignment.

Student ID	Asmt 1	Asmt 2	Asmt 3
100000000	4.5	3.75	3.4
100000001	4.25	4.12	4.25
100000002	5.0	4.75	4.5

Figure 1: The table after the AJAX request

How to Submit

Submit the HTML, CSS, and JavaScript files in a ZIP file, with a name following the same pattern as previous labs: Lab07_FirstNameLastName_StudentNumber.zip (e.g. Lab07_RandyFortier_100539147.zip) to the TA.