INT222 Lab 6 – Section B

Submission Deadline:

Thursday, Dec 8th, 2016 @ 11:59 PM

Assessment Weight:

5% of your final course Grade

Objective:

- To work on JavaScript coding with DOM
- To practice an AJAX call to a Web service

Specification:

In this lab you will implement the **JavaScript** code to request **JSON** data from an online web service using **AJAX**, to render a table of users consisting of 4 "pages". The first page of data will load when the user first opens up the html page (ie, window.onload). If the user then clicks any of the "paging" buttons at the bottom of the table, the data for the current page will be removed from the table and new data will be loaded. The matching button will then have the class "active" added to it so that it appears highlighted (and all other buttons will have the class "active" removed). For example:

Show Page 1
When the user first **opens lab06.html**, and/or when the user presses the "**1**" button, or the "**first**" button

Show Page 2
When the user presses the "**2**" button

Lab 06: AJAX

User ID	First Name	Last Name	Avatar
1	george	bluth	
2	lucille	bluth	
3	oscar	bluth	

First 1 2 3 4 Last

Lab 06: AJAX

User ID	First Name	Last Name	Avatar
4	eve	holt	
5	gob	bluth	
6	tracey	bluth	

First 1 2 3 4 Last

Show Page 3
When the user presses the "**3**" button

Lab 06: AJAX

User ID	First Name	Last Name	Avatar
7	michael	bluth	
8	lindsay	bluth	
9	tobias	funke	

First | 1 | 2 | **3** | 4 | Last

Show Page 4
When the user presses the "**4**" button, or the "**last**" button:

Lab 06: AJAX

User ID	First Name	Last Name	Avatar
10	byron	bluth	
11	george michael	bluth	
12	maeby	funke	

First | 1 | 2 | 3 | **4** | Last

To get started:

1. Download the template files from here: Lab06_files.zip
2. Extract the files and open the **lab06.js** file from inside the **js** folder
3. Note the areas indicated with a "TODO:" comment (ie, lines: 5, 14, 68, 77, 84) – these are the areas where you will be writing your code (there is no need to touch the HTML or CSS files). Pay attention to the comments, as these are there to help guide your solution
4. NOTE: you can test your solution by opening the lab06.html file in any browser, however you must have an internet connection active to see any results from your AJAX requests.

AJAX URL(s) & JSON Data

In order to obtain our data, we will be issuing AJAX requests to a server hosted by http://reqres.in/ - a free REST-API loaded with test data that we can use to make requests for JSON formatted data. The specific url's for each "page" follow the pattern:

- Page 1: http://reqres.in/api/users?page=1
- Page 2: http://reqres.in/api/users?page=2
- Page 3: http://reqres.in/api/users?page=3
- Page 4: http://reqres.in/api/users?page=4

Click each of the links to see the JSON formatted response in the browser. You will find that the data follows the same consistent format (ie, for page 1):

```
{
  "page":"1",
  "per_page":3,
  "total":12,
  "total_pages":4,
  "data":[
    {
      "id":1,
      "first_name":"george",
      "last_name":"bluth",
      "avatar":"https://s3.amazonaws.com/uifaces/faces/twitter/calebogden/128.jpg"
    },
    {
      "id":2,
      "first_name":"lucille",
      "last_name":"bluth",
      "avatar":"https://s3.amazonaws.com/uifaces/faces/twitter/josephstein/128.jpg"
    },
    {
      "id":3,
      "first_name":"oscar",
      "last_name":"bluth",
      "avatar":"https://s3.amazonaws.com/uifaces/faces/twitter/olegpogodaev/128.jpg"
    }
  ]
}
```

Once the data is parsed, if we wish to obtain the information for the 2nd user on the current page (1) for example, we can access it with our jsData object (see lab06.js – line 66) using the syntax:

jsData.data[1].id // 2
jsData.data[1].first_name // "lucille"
jsData.data[1].last_name // "bluth"
jsData.data[1].avatar // "https://s3.amazonaws.com/uifaces/faces/twitter/josephstein/128.jpg"

where jsData.data[] is an array that holds 3 objects.

Other Requirements

- You are not permitted to use element.innerHTML except to clear out the contents of the table, ie: using **element.innerHTML = ""**
- If your code fails to fetch any data or update the DOM with the results, your lab will be given a grade of zero (0)
- All JavaScript code must not contain any **run-time errors/exceptions**.

Final Submission Guidelines:

a) Zip **all of your files** as **Lab06.zip**

b) Upload the zip file to **My.Seneca** under **Labs -> Lab 6** (same submission procedure as all previous labs)

c) **NO LATE SUBMISSIONS** for labs. Late Lab submissions will not be accepted and will receive a **grade of zero (0)**.

d) After the end (11:59PM) on the due date, the lab submission link on the Blackboard will no longer be available.