Web Mapping & Internet GIS Fall 2020

GEOG 586 Lab 1: Simple Javascript

Dr. Ryan Burns web map

## DUE via D2L Fri, October 2nd, 5 p.m.

*DO NOT PUT THE FOLLOWING PARAGRAPH IN YOUR LAB REPORT*

Purpose of the lab: To practice some of the JavaScript skills you’ve only heard about in class, and begin building your own skillset. In this lab assignment you will begin to access key JavaScript mapping functions.

**Instruction before starting: Github access**

Before you begin, you should have write access to our class Github repo. If you haven’t yet sent me your Github username, please do so ASAP. You may want to work locally rather than editing in the Github online interface (I recommend this). To do so, I recommend downloading and installing Github’s Desktop user interface from here: <https://desktop.github.com/>, or for a more sophisticated (and complex!) user interface, I recommend GitKraken from here: https://www.gitkraken.com/. Note that there are many user interfaces for working with Github, some of which are listed here: <https://git.wiki.kernel.org/index.php/Interfaces,_frontends,_and_tools#Graphical_Interfaces>. After you download and install one of these, you will need to “clone” the course repo to your local computer. You will then be able to edit the files, commit those changes, and sync with the remote repo. The main thing to remember: (1) clone, (2) edit, (3) commit, (4) push.

**1. Walkthrough**

Take advantage of the rich educational material available for learning JavaScript! In addition to your brilliant instructor (\*wink\*), you have at your disposal a range of online tutorials and practice spaces to try out new ideas[[1]](#footnote-1). In class we practiced “thinking like a computer”, but now you will get some of the vocabulary and syntax for “speaking” like a computer. Go here: http://www.w3schools.com/js/ (another resource: https://www.codecademy.com/learn/javascript). Complete the JavaScript tutorial from “JS Introduction” up to and including “JS Events”. The more you pay attention through this tutorial, the easier web mapping will be for you.

In addition, note this site: https://leafletjs.com/examples/quick-start/.

**2. Assignment**

Choose from the following topics, and create a web map to showcase it:

* Your personal story (where you were born, where you moved, where you went to school or worked, etc.)
* *Your* Calgary’s key attractions
* UofC’s or your neighbourhood’s landmarks, buildings, and departments/amenities
* Places you have visited, in the past or during a recent vacation
* Branches of a bank or supermarket in your city or region
* Projects that your organization has accomplished or is working on
* Other interests

Create your own personal folder in the “Lab1” repo to store your web map, ***or*** host it on your own Github Pages account (this is a free website hosting service provided by Github, and you already have access to it – you just need to activate it. Let me know if you need help).

Write a 2-page lab report following the structure provided in the course documents. Use this space for critical reflection on your map. Imagine a stakeholder (defined as broadly as necessary) who will benefit from reading your analysis and report, and draft your lab report as if it were going to them. Your mapping should have a purpose (say, an “Objective” section); a set of steps that you went through to gather, process, and map your data; results, where you spend a great deal of time thinking about your map and the mapping process (see below for more tips); and a conclusion, where the main takeaways are summarized in case that’s the only section your stakeholders read in close detail.

In your report list all your data sources.

**3. Tips**

When stylizing your website, you may find it helpful to consult the following resource regarding CSS: http://www.w3schools.com/css/css\_howto.asp

* Make good use of CSS and div objects!

Remember, whether or not it feels like it, you have produced spatial knowledge about the world. This means that the reader of your map and report will gain knowledge or understanding about *something*, even if it seems insignificant to you. The lab report is where you elucidate what that knowledge is.

Some questions you may ask yourself in order to write the lab report:

* What, precisely, does your map show? What does it *not* show?
* What kinds of geographic research questions might it answer?
* What might be its bigger implications – what does it suggest might be interesting to look at in future work?
* Is there any way the map could be taken up for purposes other than those for which you designed it?
* What were some of the limitations of the platform itself? Were there things you wish you could do with the platform, but couldn’t?
* Why did you choose to represent the data the way you did? Might there be a better way of representing it?
* What makes it geographic? Or: what does a spatial perspective give you?

**4. Submission**

Submit your lab report, including a link to your web map, to D2L by the deadline.

1. In addition to the W3Schools site, you can learn a lot by consulting: http://javascript.info/tutorial/basics [↑](#footnote-ref-1)