

## Lab 5 – Storytelling through Maps

**TGIS 503**

**Fall 2019**

In the final lab of TGIS 503, you will be combining all the skills you have learned through the quarter to create a compelling and persuasive story or narrative using web-maps, along with additional content. This lab is intended to draw upon your HTML and CSS skills to build a beautiful and readable site, as well as your JavaScript and web-mapping skills to display data in an understandable manner.

*The first 4 labs were intended to teach you how to use specific web tools, whereas this lab will encourage you to apply that knowledge to create a cohesive product.*

You are welcome to use some of the same datasets you used in previous labs, but I will expect you to build on previous work with more advanced styling and/or interactivity. This lab may also serve as a stepping stone for your capstone project. In the event that your capstone involves a web-portal, web-interface, or digital maps, this lab can act as a sandbox to learn and apply the skills that you will be using in upcoming quarters. I encourage you to take this opportunity to consider what tools, plugins, interactions and requirements your capstone might have and to learn them as part of this lab where I can guide and support you.

### Background Information

At this point you are all able to make a web page with maps on it. The challenge of this lab is to build a narrative around some data and convey that using the tools and techniques we've learned this quarter.

Choosing the appropriate mapping service (Google Maps, Leaflet, Mapbox), and any appropriate plugins to display your data is important. You should make conscious decisions about the frameworks and associated plugins or details that you use. **Be prepared to explain why you made the decisions you made about your page.** For example: Why would you choose a specific color palette for a choropleth map? Why would you eliminate some pan/zoom functionality from your maps?

### Learning Outcomes

This lab will teach students to:

- Plan the development of an independent, narrative digital map project
- Combine HTML, CSS, JS skills acquired over the quarter to create a cohesive web story
- Develop a narrative and use spatial data to augment that narrative
- Utilize multiple web mapping & HTML frameworks on the same web-page
- Apply basic cartography rules (colors, styles) to web-maps to enhance the contained data

## Deliverables

To satisfy this lab, students must submit:

- A URL link to a SINGLE HTML PAGE that has data, maps and background information
  - Include all elements needed to communicate your story, such as title, maps, body text to provide background and context, charts or images, links to additional information, and references
  - The elements you include on your maps will vary based on
  - Your page must include at least two maps that utilize one or more of the mapping frameworks we've learned this quarter (Google Maps API, Leaflet, or Mapbox. A Google My Map embedded with an iframe will not count to this minimum).
- An accompanying write-up (1-1.5 pages; a word document or PDF, not part of your public-facing webpage but submitted to me on Canvas) that answers the following questions:
  1. What is the story you are trying to tell?
  2. What spatial data best helps to strengthen that story?
  3. Where is the data from, and did you need to do any analysis or transformations of the data before displaying it?
  4. Is there any non-spatial data that strengthens the story?
  5. What web mapping framework(s) did you choose and why?
  6. What interactions/plugins will users require to navigate the web maps?

## Grading Breakdown

- 14 points possible for the web page and all it associated content
- 6 points possible for the accompanying write-up

## Additional Materials

Examples from prior students:

- [https://ninakerr.github.io/Lab\\_5/lab5.html](https://ninakerr.github.io/Lab_5/lab5.html)
- <https://ryanjmitchell.github.io/StoryMap.html>
- <https://aadejong.github.io/geographic-literacy.html>
- <https://lekirk.github.io/onehellofacomment.html>

Other examples

- <https://blog.mapbox.com/adding-truth-to-the-election-debate-ad8d7b078362>
- <https://heavy.com/news/2018/11/california-fire-map-near-me-november-9/>

Tougher examples, included for inspiration:

- <https://what-the-district.aclu.org/>
- <https://blueheart.patagonia.com/discover>