CS590V: Data Visualisation & Exploration

Homework 3: Maps Due: March 9, 2018 11:55PM

Goal: Gain confidence working the geographic data and creating maps, familiarize yourself with d3.geoPath, and continue to add interactions to our visualizations. Similar to the first assignment, you will be submitting a bl.ocks.org link on Moodle.

Data set: You may choose your own dataset. Look for GeoJSON files online, and make sure they can are able to satisfy all the requirements of this homework. A search for "geojson dataset" should point you in the right direction.

Submitting homework: You will be submitting a link to your bl.ocks.org. Once you are done creating your file, <u>index.html</u>, you can upload it to <u>gist.github.com</u> and then view it on <u>bl.ocks.org</u>. It is the link from bl.ocks that you will be submitting. Make sure you are submitting a link to the bl.ock page that contains your code and a preview of your designed webpage, Make sure you are using v4 of D3. You can write your answers in the actual HTML page or you can write them in the README.md section of your block.

Questions:

- 1. (10 points) Explain your dataset, what is its size, what does it contain, and what can it be used for.
- 2. (10 points) State what type of projection you will be using and how that projection works.
- 3. (25 points) Create a map visualizations. Place points on your map based on some other information from your data source.
- 4. (15 points) Allow for the user to hover over points or regions and for more information to be shown.
- 5. (25 points) Allow for the user to interact with the data in another way, this could be from a slider, drop down menu, etc.
- 6. (10 points) Allow for the user to zoom in and zoom out of the map, this is NOT the same as zooming into your browser window, the zooming should be done through the SVG window.
- 7. (5 points) Provide good code documentation and organization.
- 8. (10 points) Extra credit some novel interaction and description