CSE 163 2020 Spring
Data Programming for Visualization

Assignment 12
Enhancement Project (optional for A/A+)
Proposal Rolling Due Date: May 17 to May 29
Presentation Date: June 8, Monday, 7:30-10:30pm
(20 points+)

The objective of this enhancement project is to enrich an existing D3 project. The project must be focused on adding significant additional code to an existing project. The existing D3 visualization that you propose to enrich may (or may not) be the same as your class presentation project. The project can be enriched in one or many ways as described below:

1. Enhance to D3 V5 version (after ensuring that a V5 version does not exist on the web).

2. Enhance Functionality: Add new functions such as
https://sureshlodha.github.io/CMPS263_Winter2018/CMPS263FinalProjects/PrescriptionDrugs/index.html

3. Enhance Design: Add new visualization design (only if it is meaningful) such as presenting alternative views of the same data.
https://sureshlodha.github.io/CMPS165_Spring2016_FinalProjects/projects/hotpeppers/pepperhtml.html

4. Add interactivity to parameters to build a tutorial: An example is
D3.keys() are:
https://observablehq.com/@dnarvaez27/understanding-enter-exit-merge-key-function
(understanding enter, exit, merge, and key functions)
https://bl.ocks.org/boeric/8b34abda1d33b983b09b
(D3 key function demo)

5. Extend the visualization to a new application domain (by adding new data) perhaps in conjunction with some of the possibilities mentioned above. However, adding mere new data without additional code does not qualify as an enhancement project.

6. Remedy errors or provide missing critical detail in existing visualization. However, this enhancement may not suffice by itself and may have to be combined with additional efforts.

7. Technical/Tutorial Excellence: Enrich/Extend an existing tutorial and demonstrate mastery.

8. Any other ideas?
https://sureshlodha.github.io/CMPS165_Fall2016_FinalProjects/USCensusDensity/CensusTractsMap-master/

If proposed enhancement ideas are mere cosmetic leading to some mediocre extension, your proposal will not be approved.

Enhancement ideas must be approved by the instructor.
If you are considering an enhancement project (even if you are not 100% sure), you must connect with the instructor on a 1-1 basis via zoom on May 19, Tuesday, during class time. If you do not connect with the instructor on May 19, it will be assumed that you will not be pursuing class enhancement project.

In addition, you are welcome to discuss the topic with the instructor in person before-during-after the class or during office hours (that will be 20 minutes before the class begins starting at 5:00pm and until 30 minutes after the class ends till 7:30pm on TuTh on May 19, 21, 26, and 28.)

You will submit your enhancement ideas on canvas as follows:
1. Please submit the weblink for the existing visualization as a clickable web link.
2. Submit a pdf document describing enhancement ideas briefly (a couple of paragraphs may do but definitely not more than one page).

You may use multiple submissions as you enrich/evolve/modify your project ideas.

Submission Requirements (on canvas) as a zip file:
1A. **Code** (D3 Version V5
Please be sure to include **Weblinks** (of all the code that you used for your presentation/preparation) embedded as comments inside your js file. These are likely to be the same as the ones you used for your proposal, but may have additional links here.

1B. **Presentation** Slides (no more than 10 slides please!)

2. **Enrichment code/data file(s**).

3. **Effort Document (optional)**: Please submit a brief statement with few sentences (*and no more*) describing your effort.

4. **ReadMe** (optional) only if needed to describe how to interact. In most cases, interactions within the visualization should be self-evident eliminating the need for any tutorial.

5. **Weblink (optional):** You may add a weblink where you may have hosted your class presentation and code. Submit this weblink on canvas *and* add this link as a comment to your main javascript code file.

Submit everything as one zip file. Make sure to include all the files and data because we will be running the code/data on our machine to make sure that it works. If we need to take any additional steps in order to run the code, please document it in README file.