CS/INFO 3300; INFO 5100
Project 1
Due 11:59pm Tuesday Mar 8

You are creating a non-interactive data visualization. You will use d3, but the final result will be something that could be published in print or as a static image on a web page. We will grade your work as it appears when we load the HTML file in a browser. We will scroll as necessary but we will not click anything. You are encouraged but *not* required to integrate multiple data sources for this project. Each team has been assigned a TA. Your TA is your best resource.

Examples and sources: You are encouraged to get data and inspiration from other sites. Make sure you acknowledge these in comments and in your written description. Any code that you did not write yourself (such as d3) should go in a separate .js file. Unacknowledged code or concept reuse will be handled with standard academic integrity procedures.

Send a written status report, one from **each** group member, by email to your TA by midnight on Friday 2/19, 2/26, and 3/4 listing what you have been working on and what you will do next. Estimate the relative proportion of work of the *other* two group members (besides yourself). If we need to differentiate grades between team members we will use these reports as a basis. Also feel free to contact your TA individually. On-time completion of these reports will be worth 5 points.

Your final submission has two parts, a d3-based **static** data visualization (70 pts) and a written description of your visualization (25 pts). Turn in a .zip archive containing:

1. An HTML page called index.html containing your visualization. Include any additional script files (such as d3 or jQuery) and any additional data files, preferably in JSON format. We will grade the following elements. You can show your TA a prototype at any time. This section will be graded on the following elements:

A. Complexity of the data. Find a dataset that is manageable, but avoid trivial data. There should be more than two variables, for example. An advanced project might combine multiple datasets to provide a unique, novel perspective. Editing is important! Beginning projects often have too little data or too much. Don't overwhelm us with information. (10 pts)
B. Technical correctness. The code must actually do what you intend it to do. We also prefer good style in coding: use informative variable names, consistent indenting and whitespace, and informative comments. (20 pts)
C. Creativity. Advanced projects will make us think "how did they do that?" or use something familiar in an unfamiliar way. Beginning projects often look like online examples or things we've seen before. Don't bore the judges! (10 pts)
D. Mapping from data to visual elements. Use scales such as position, shape, color, and text appropriately for variables. (10 pts)

E. Usability. Someone viewing your work should be able to understand the data values represented in the visualization easily and accurately. Advanced projects make choices that are clear and intuitive, and may walk us through specific examples. Beginning projects often leave us wondering what we're looking at. (10 pts)
F. Aesthetic quality. We don't want to judge a book by its cover, but aesthetics matter. Your clients will make snap judgments about the quality of your work based on its appearance, so put some time into polishing the look. Choose appropriate fonts, colors, and visual details. (10 pts)

2. A PDF file containing a written description of your project. There are no specific page or word limits. This document should contain:

A. A description of the data. Report where you got the data. Describe the variables. If you had to reformat the data or filter it in any way, provide enough details that someone could repeat your results. If you combined multiple datasets, specify how you integrated them. Mention any additional data that you used, such as shape files for maps. **Editing is important! You are not required to use every part of the dataset. Selectively choosing a subset can improve usability. Describe any criteria you used for data selection.** (10 pts)
B. A description of the mapping from data to visual elements. Describe the scales you used, such as position, color, or shape. Mention any transformations you performed, such as log scales. (10 pts)
C. The story. What does your visualization tell us? What was surprising about it? (5 pts)