

Introduction

In order to demonstrate a working knowledge of the design principles and technical skills taught throughout this course, all students will be required to participate in the CS1501 design symposium. As a part of this symposium, students will design and implement web-based data visualizations that exemplify graphical excellence, demonstrate graphical integrity, and provide an intellectually stimulating look into the data they choose to investigate. The best projects will be simple, elegant, and embody the Data Visualization principle of “2 + 2 = 5.”

Specifics

Students will be organized into groups in which they will work together to visualize a data set of their choosing. Students have the option to work alone if they like but teamwork is preferred in the interest of time the student spends on the project, time the class spends at the symposium, and time the instructor spends grading. Teams have no size limit but expectations for the project scale with size. A team of six should be able to accomplish a more sophisticated project than a team of three. Dumping all of the work on one member will not be tolerated.

Some data sets will be provided for convenience, including some from our friends at VividCortex, but students are free to find outside data of their choosing for their projects. Students should seek to challenge themselves with their datasets and use their visualizations to provide greater insight than the numbers alone can communicate. One-dimensional data will not be accepted and neither will trivially small datasets.

Throughout the latter part of the course we have discussed Raphael for drawing graphics. Students are encouraged to use Raphael in order to complete their projects but may also elect to work in PHP + SVG or use a library such as D3.js. Pre-rendered visualizations produced in Illustrator (or similar) will not be accepted.

Deadlines

Final project deadline: Monday December 2nd at 11:55pm

Design Symposium: Tuesday December 3rd at 5:00pm (the final class meeting)

Examples and Final Statement

These examples are included for **inspiration**, not as a requirements sheet. The exact requirements are intentionally loose. Students unsure about what is expected should discuss their uncertainties with the course instructor. This class is 1-credit, pass/fail; you will be placed in teams and given the better part of a month to work. Exercise your best judgement – the project is designed to educate, not to overburden. **Now go make something insightful!**

Major Regions of Virtual Water Trade by Kevin McVey

<http://people.virginia.edu/~kmm4ce/water/>

Team Diversity by Kevin McVey

<http://kevin.4mcveys.com/mhiviz/>

US Power Plants by Professor Eric Field

<http://people.virginia.edu/~emf2a/viz/examples/USpowerplants/>

Living US Presidents by Ravi Parikh

<http://www.ravi.io/living-us-presidents>

512 Paths to the White House by Mike Bostock and Shan Carter

http://www.nytimes.com/interactive/2012/11/02/us/politics/paths-to-the-white-house.html?_r=0