Designing Narratives through Web-based Data Visualization

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Visual Studies Session A - A4820
Thursdays, 9a to 11a – 200 Beull Hall

The web is a dynamic medium, and recent technologies enable interactive visual narratives that are deeper and more intricate than ever before. Visual approaches are especially useful for understanding the vast amounts of data facing the modern world and communicating those understandings to a wide and diverse audience. Emerging from the overlaps between 'objective' data and 'subjective' art and storytelling, online narratives rooted in information visualization offer an accessible, engaging, and powerful way for designers to relate their ideas to thousands of viewers.

This workshop explores the web as a visual medium for data-based storytelling, using HTML, CSS, JavaScript, and the increasingly popular D3 visualization framework. The course has two main goals: first, to provide grounding in the design of elegant and clear data visualizations, and second, to provide a technical introduction to implementing data-based narratives using D3 and web technologies.

The output of this workshop for each student/group will be an online data-based narrative that integrates interactive data visualizations with more traditional storytelling elements. Grading will be based on attendance, engagement, and the clarity, design, and narrative focus of final projects and project presentations.

Students should come into the course with a basic understanding of HTML and CSS. (The first two lessons at http://is.gd/DU5rBq provide a good foundation!) Familiarity with Javascript is very beneficial, but not necessary. Any software or platforms used in this workshop will be open source, and students are strongly encouraged to use their personal laptops for the work done in the course.

Tentative Schedule

WEEK	TOPIC
1	Conceptual introduction and definitions
	Storytelling, audience, consistency, data, and techniques
	Technical introduction
	HTML, CSS, and the Document Object Model
	Assignment: Rough project sketches and proposals
2	Building interactivity with Javascript and D3
	Assignment: Become familiar with online reference materials and tutorials
3	Data
	Sources, filtering, formats, and analysis
	Advanced D3 techniques
4	Design principles for data visualizations
	Clarity, perception, forms, efficiency, and intent
5	Project work and discussion
6	Project work and discussion
7	Final project presentations