Intro to Data Visualization for the Web

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What is data visualization?

Why are you here?

Why am I here?

#### This course:

- •4 Saturdays
- •Repo: <a href="https://github.com/hustonhedinger/IntroToDataViz">https://github.com/hustonhedinger/IntroToDataViz</a>
- 4 Parts:
  - Theory
  - Code
  - Workflow
  - Project

## Today:

- 10-11: Intro + intros + Tufte
- 11-12: Intro to d3.js and svg
- 12-1: Using selections to manipulate the DOM + intro to callbacks
- 1-2: "Lunch"
- 2-3: Databinding, what it is + intro code challenge
- 3-4: Manual Lima + Intro to Yeoman
- 4-5: Final Projects: pick groups, white board ideas

#### Tufte

http://en.wikipedia.org/wiki/Edward\_Tufte

https://www.youtube.com/watch?v=Th\_1azZA2OY

break?

Part 1: Intro to d3.js and SVG

### Selections

/course/week1/examples/selections

selection.attr selection.classed selection.style selection.property selection.text selection.html selection.append selection.insert selection.remove

selection.attr - get or set attribute values.

selection.classed - add or remove CSS classes.

selection.style - get or set style properties.

selection.property - get or set raw properties.

selection.text - get or set text content.

selection.html - get or set inner HTML content.

selection.append - create and append new elements.

selection.insert - create and insert new elements before existing elements.

selection.remove - remove elements from the document.

## Basic SVG Shapes

```
<rectangle>
```

<circle>

line>

<text>

<path>

# Basic SVG Shapes

The g element <g>

## Basic SVG Shapes

Explore in the docs:

https://developer.mozilla.org/en-US/docs/Web/SVG/Element

d3.text

d3.json

d3.html

d3.xml

d3.csv

d3.tsv

d3.text - request a text file.

d3.json - request a JSON blob.

d3.html - request an HTML document fragment.

d3.xml - request an XML document fragment.

d3.csv - request a comma-separated values (CSV) file.

d3.tsv - request a tab-separated values (TSV) file.

# Data Binding in d3.js

More on "joins in d3.js: <a href="http://bost.ocks.org/mike/join/">http://bost.ocks.org/mike/join/</a>
More on the d3 update pattern: <a href="http://bl.ocks.org/mbostock/">http://bl.ocks.org/mbostock/</a>
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