Data Visualization (CSCI 627/490)

Marks and Channels

Dr. David Koop
D3 Data Joins

• Two groups:
  - data items
  - visual elements
• Three parts of the join between them:
  - enter: `s.enter()`,
  - update: `s`,
  - exit: `s.exit()`
D3 Introduction (Continued)

- https://observablehq.com/@dakoop/d3-intro
- Standalone version: http://dakoop.github.io/IntroD3/
  - (Updated from original)
- Other references:
  - Murrary’s book on Interactive Data Visualization for the Web
  - The D3 website: d3js.org
D3 Examples

• Observable Notebook
• Three Bar Charts:
  - Similar Solution
  - With Axes and Scales
  - With Objects and Margin Convention
• More on Margin Convention:
Toward Reusable Charts

• D3 does not provide "standard" charts
• E.g. there is no barchart method
• What is a standard chart?
  - "Should you expose the underlying scales and axes, or encapsulate them with chart-specific representations?"
  - "Should your chart support interaction and animation automatically?"
  - "Should the user be able to reach into your chart and tweak some aspect of its behavior?"
Assignment 3

• Upcoming
• Same visualization
• Different tools