

D3: Diving into the library

David Leonard

City College of New York

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Scales

"Scales are functions that map from an input domain to an output range"

- Mike Bostock

Items and Pixels

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- ▶ Requires bigger display to view bars
- ▶ How do we scale these values?

Linear Scales

Linear scales is nothing more than normalization, in which we map a numeric value to a new value between 0 and 1, based on the possible minimum and maximum values. For example, 365 days in a year, day 310 maps to 0.85.

With linear scales, the input value is normalized according to the domain, and then the normalized value is scaled to the output range.

Constructing a Scale

```
var scale = d3.scale.linear()  
              .domain([100, 500])  
              .range([10, 350]);  
  
scale(100); // Returns 10  
scale(300); // Returns 180  
scale(500); // Returns 350
```