## Class #4 -- 23 Feb 2018

- Data & ideas for projects
  - Continue collecting ideas from students
  - o APIs are good, shapefiles & GeoTiffs are OK, proprietary formats are bad
  - Data must be public and free (i.e., open data)
- 3 Little Circles
  - <a href="http://bost.ocks.org/mike/circles/">http://bost.ocks.org/mike/circles/</a> -- Reading
  - Create an HTML page with an SVG element that contains 3 circles
  - Select them with D3 -- change their attributes
  - Review anonymous functions -- element-specific changes
  - Bind data to a selection
  - Distinguish enter, exit & update selections
  - https://github.com/d3/d3/blob/master/API.md -- API reference docs (D3)
  - <a href="https://github.com/d3/d3-selection">https://github.com/d3/d3-selection</a> -- d3-selection
    - See sections on selection.data( data ), selection.enter(), selection.exit()
- Solve homework #3 in class, in detail
  - Start from Class #3 demos
    - https://github.com/umbcvis/classes/tree/master/class-03
    - Copy & paste earthquake code from Oklahoma demo
    - Add the earthquakes to "states" demo
  - Do everything in jsbin so students can follow along
  - Review selection.data() in detail

## Assignment #4:

- http://earthquake.usgs.gov/fdsnws/event/1/
- Modify the result from Homework #3 as follows...
  - Add magnitude-dependent styling for the earthquakes
  - Add a title to the plot
  - Add labels that indicate the number of earthquakes of various sizes
  - Add a legend for the styling
- Make sure your completed homework assignment is served from your github repo using the same organization as the umbcvis class notes. For example, if your github username were bullwinkle, your homework for this assignment would be:
  - o <a href="http://bullwinkle.github.io/classes/tree/master/class-04">http://bullwinkle.github.io/classes/tree/master/class-04</a> -- repo with the code
  - <a href="http://github.com/bullwinkle/classes/class-04">http://github.com/bullwinkle/classes/class-04</a> -- the visualization