

Class #4 -- 23 Feb 2018

- Data & ideas for projects
 - Continue collecting ideas from students
 - APIs are good, shapefiles & GeoTiffs are OK, proprietary formats are bad
 - Data must be public and free (i.e., open data)
- 3 Little Circles
 - <http://bost.ocks.org/mike/circles/> -- 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)
 - <https://github.com/d3/d3-selection> -- 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:
 - <http://bullwinkle.github.io/classes/tree/master/class-04> -- repo with the code
 - <http://github.com/bullwinkle/classes/class-04> -- the visualization

Class #3 -- 9 Sep 2015 (homework revised on 10 Sep 2015)

- Assignment from last week
 - Create a bar chart -- # of earthquakes of magnitude [0 - 1), [1 - 2), [2 - 3), etc.
 - Use: UGSG real-time API
 - Review the solution -- discuss array manipulations & scope
 - Project ideas & data -- find an API and refine/revise your idea.
 - Create a list of ideas/data sets with the students
- Demos
 - <http://bl.ocks.org/pbogden/935370a5272acff2618b> -- umbc
 - <http://bl.ocks.org/pbogden/48cadd9940ad05ec96d2> -- demo
- 3 Little Circles (TO BE DISCUSSED IN THE NEXT CLASS)
 - <http://bost.ocks.org/mike/circles/>
 - Create an svg with 3 circles
 - Select them -- change their attributes
 - Anonymous functions -- element-specific changes
 - Binding data
 - Entering, exiting & updating elements
 - <https://github.com/mbostock/d3/wiki/API-Reference> -- API reference
- Let's Make a Bar Chart (TO BE DISCUSSED IN THE NEXT CLASS)
 - Review selections in part I, II
 - Part III
 - rotating into column chart
 - ordinal data
 - margins
 - axes
 - labels

- effective communication
 - Turn the homework assignment into a histogram
- Assignment #3 (REVISED on 10 Sep 2015 -- due 16 Sep 2015)
 - Complete any previous assignments that you didn't finish by this class.
 - Turn the umbc block (link is above) into a real-time app (using the USGS API)
 - Use different geography. You can use one of the following two templates:
 - <http://bl.ocks.org/pbogden/5da1822e8fffc06cf5ed> -- US states
 - <http://bl.ocks.org/pbogden/8c6bcd912f9edebab99d> -- countries
 - Use at least one of the array methods discussed in class (.map & .filter)
 - Tell a story -- add styling and labels to make your story clear and compelling
 - Put your final result in a public gist that's accessible via bl.ocks.org

Phil -- <http://filupmybowl.github.io> -- <http://bl.ocks.org/filupmybowl> -- bar chart of earthquakes

- zillow API

Binesh -- <http://geoatlantic.github.io> -- <http://bl.ocks.org/geoatlantic> -- almost

Sameer -- <http://sameermalla.github.io> -- <http://bl.ocks.org/sameermalla> -- ?? (dropped class?)

Rachel -- <http://mcconnell2015.github.io> -- <http://bl.ocks.org/mcconnell2015> -- almost

Gena -- <http://genavictoria.github.io> -- <http://bl.ocks.org/genavictoria> -- earthquake histogram!

Todd -- <http://tmcneil.github.io> -- <http://bl.ocks.org/tmcneil> -- bar chart of earthquakes

Adam -- <http://adamwd392.github.io> -- <http://bl.ocks.org/adamwd392> -- bar chart of earthquakes

Suzee -- <http://jsparsons2.github.io> -- <http://bl.ocks.org/jsparsons2> -- bar chart of [Object]'s