The Second D3 Homework

Moving Scatterplot

Overview

Make an animated scatterplot where the data points move from the right side of the chart to the left side of the chart.

Instructions

1) You can start from the example code, or you can start from other examples, or you can make your own from scratch.
2) Your visualization should work with .json data that follows the same format as stream_1.json and stream_2.json. Each item should have an "xVal" and "yVal" field.
3) In your visualization, the xVal field should correspond to time. One x unit does not necessarily have to map to one second.
4) Glyphs should not appear too early (before the chart area), and they should disappear when they get to the edge of your chart.
5) The x axis should move smoothly at the same rate as the dots.
6) No data points should be visible when you start the visualization. They should not be added until it is time to add them.
7) Bonus: When you mouse over a dot, make a ripple effect that changes the color of points around the point you moused over. The color change should start in a radius close the original point and then increase in size. The effect should follow the position of the moving original dot (that is, the ripple radius should not stay in one spot when the dots are moving). The color should reset to normal when the effect ends. The cooler this looks, the more points will be awarded.
8) Bonus: Add a reset button and a pause/play button that starts or stops the moving scatterplot.

What you turn in:

1. Your code. Zip your files (keep the directory organization).
2. A pdf file that includes:
    a) Screen shots of the visualization. These should match what your code generates.
    b) Reflection points. List the top three things that were difficult or confusing when you worked on this assignment.

Grading:
Graded out of 10 points (but 19 points are possible).

+2 pity points for turning in something that looks like you made progress from the starting example

+3 for having the dots moving appropriately

+3 for moving x axis

+3 for all the little things
(e.g., dots and axis line up during motion, dots enter and exit appropriately)

+5 up to for ripple effect

+3 for reset and pause/play buttons