





DLI Accelerated Data Science Teaching Kit

Lecture 9.1 - Why Learn D3?



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D3: The Crash Course

aka D3: The Early Sticking Points aka D3: Only the Beginning







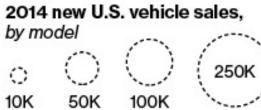


Pickup truck





Car SUV/Crossover/Van



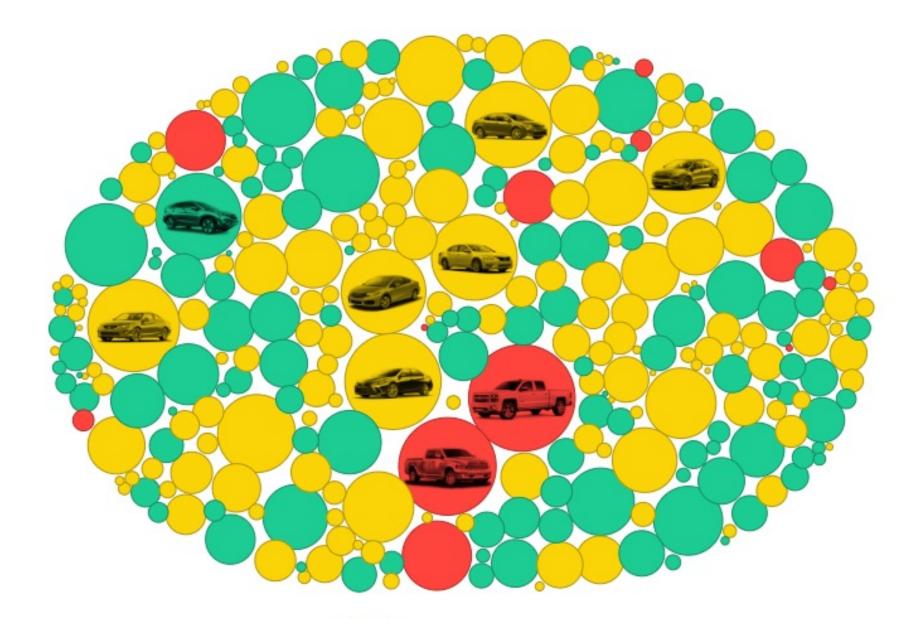


Pickups are king of the road.

Automakers sold more than 16.5 million new vehicles in the U.S. last year, up 5.9 percent from 2013. The most popular model, by a huge stretch, was the Ford F-Series pickup. In 2014, Americans bought 754,000 of them, making it the top-selling vehicle for the 33rd year in a row.

The F-Series trucks alone beat Volkswagen's total U.S. sales.

And Lincoln's. And Cadillac's. And Mitsubishi's. Combined.





Ford's F-Series: America's best-selling vehicle

Retrieved: on December 1, 2017 from http://www.bloomberg.com/graphics/2015-auto-sales/







Why should you learn D3?







If you visualization/system/tool will benefit from interactivity.

Otherwise, use anything you want

(e.g., tableau, excel, python:seaborn, R:ggplot2, etc.)

More online discussion: https://news.ycombinator.com/item?id=11995332







D3 v4.0.0 released (github.com)

438 points by 224 days ago | hide | past | web | 94 comments | favorite

▲ 224 days ago [-]

D3 has the reputation of being super-complicated because of all the libraries that are based on it, "simplifying" it so that everyone can use it. In the past year I wanted to create pretty unique type of data visualisation, so I dived into D3 and discovered it a makes a lot more sense than I though. Of course, if you only want a regular bar chart, you'll do better with things like C3, nvd3 etc'. But if you want anything a bit special, D3 itself is very powerful and the documentation in pretty good - there's no reason to avoid using it directly.

Definitely looking forward to try the new release.

▲ 224 days ago [-]

To add to that, if you are a complete newbie to any data visualization, do not start with d3. If you want to make pretty charts programatically, using R/ggplot2 or Python/Seaborn is good enough. Even Excel is fine if you tweak the defaults.

D3 is good if your visualization benefits from interactivity, either with dynamic data adjustment or rich tooltips. But static visualizations are important too. (I recently restructured my workflow so I can output static images and interactive charts with the same code, which makes it the best of both worlds.)

224 days ago [-]

What is your static+interactive workflow now, if I can ask? Also, is it fairly easy to build a workflow that generates static visualizations via D3 (i.e. making savable SVGs)?

D3 versions

- Most D3 examples/tutorials uses v3 and v4
- This lecture is based on v3; concepts covered generalize to higher versions
- V6 is the latest, but has "breaking" changes













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Thank You

We thank Dr. Chad Stolper for sharing teaching materials for visualization and D3.