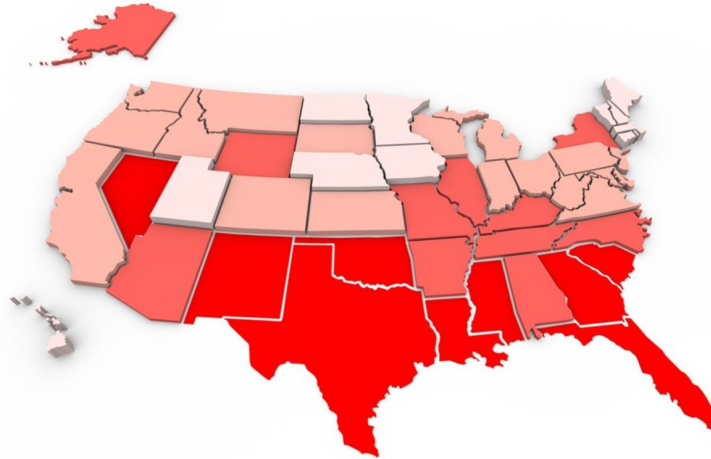


Assignment 10 - White Hat, Black Hat

Giulio Cappellani

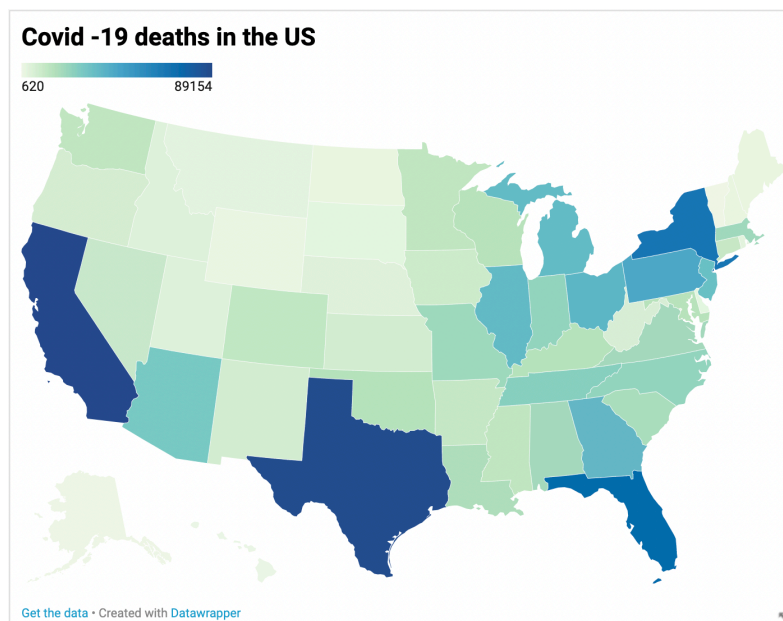
Task 1



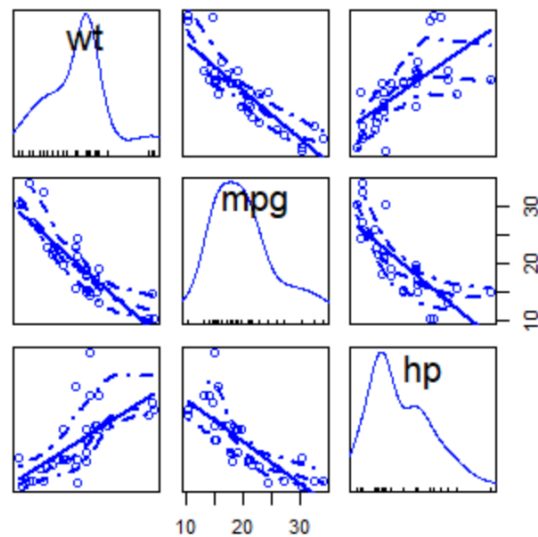
I definitely think, or at least I hope, that the author of this visualization made this on purpose, as there are way too many errors.

- The map is missing a title
- The map is also missing a legend
- The country seems being visualized from below, so that Texas appears to be huge as it is closer with respect to the point of view
- The borders of the states are represented with using different type of colors (white, gray) and different type of thickness, so that some states appears to be at an higher level than the others (see Utah)

Below we propose a correct one, without any of the mentioned errors, made with using datawrapper:



Task 2



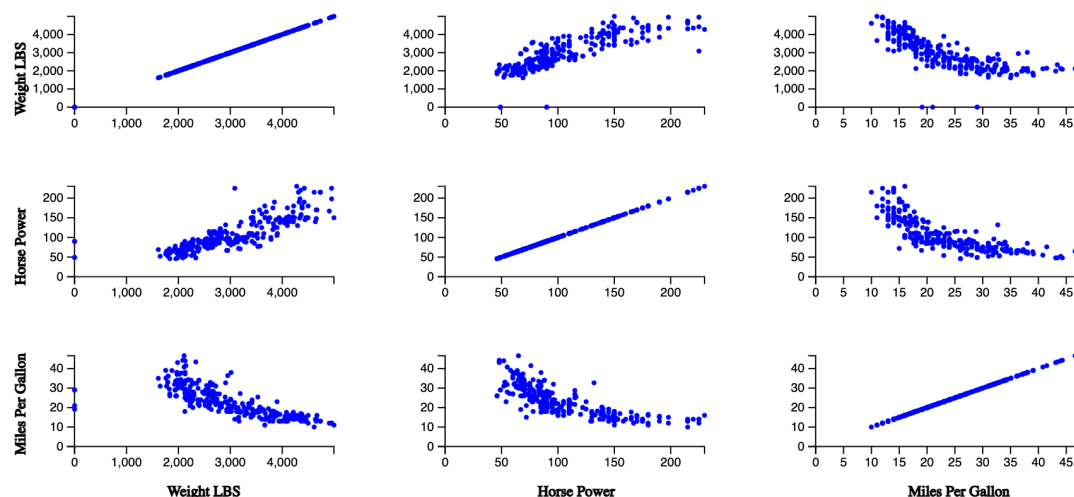
The purpose of this visualization is to show the relation between weight, mpg and horsepower for a set of cars. There are several errors in this:

- Again, there is no title
- Because of this it is not clear what are the lines for, neither what are the distributions on the diagonal representing
- The squares are just too little and each one of them is too messy as lines and dots overlaps each other
- There are missing ticks for hp and weights
- The axis labels are shown inside the diagonal squares and some of them overlap the distribution line (which we are still figuring out what is that for)

So here we present a better way to plot this, the implementation of the following visualization has been made with using d3 and the code can be found at:

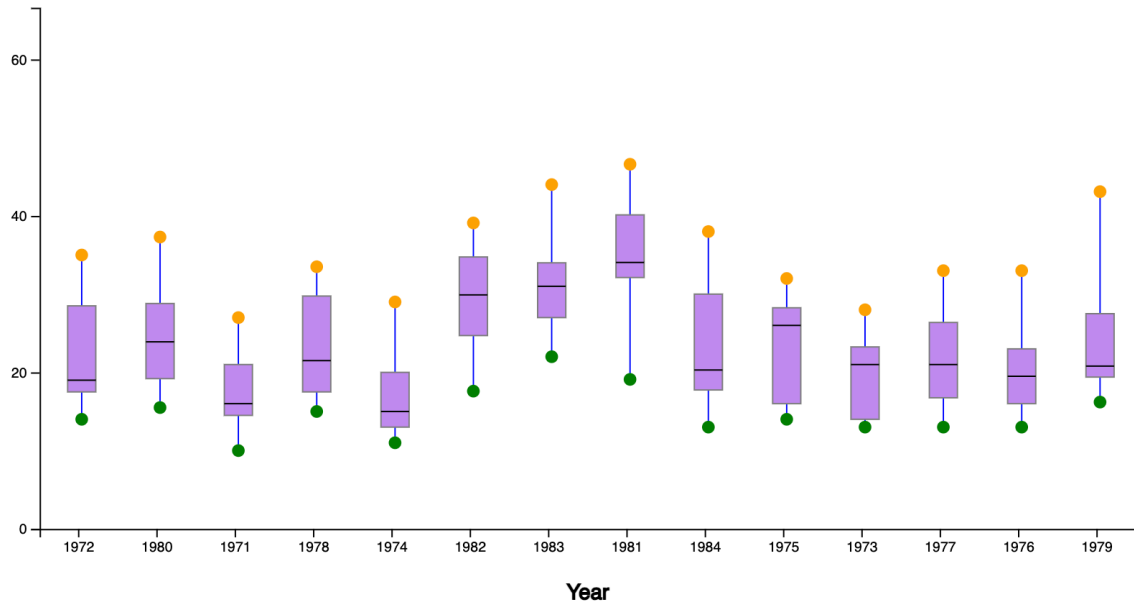
<https://vizhub.com/gcappellani/5c72039a5d67451a9bcc60dc43bad1bd?edit=files>

Weight, Cubic Inches and MPG relations



Here we have solved all the previous errors, as the visualization now presents a title, x and y ticks, axis labels and no extra lines or distributions.

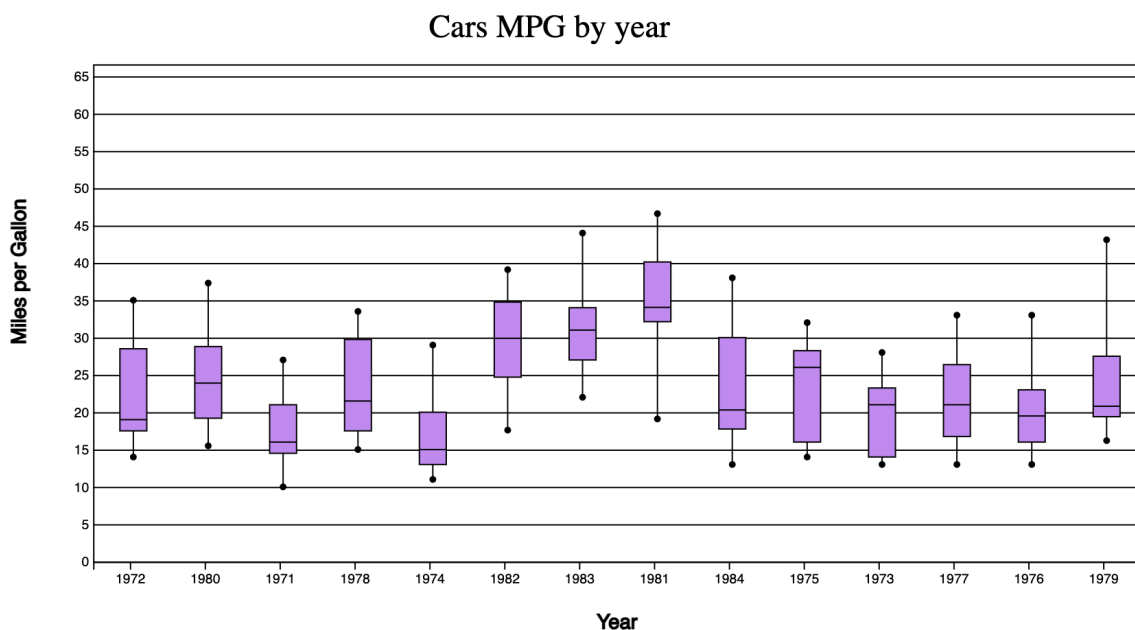
Task 3



Now we present a bad visualization made by us, here we decided to use the same dataset we used in the previous task. Let's get a look on all the errors that are present here:

- No title
- There are way too many colors, as the fact that lines and dots are colored do not provide any information
- There are too few ticks on the y axis, so that it is hard to associate each percentile to a value
- There is no y label

Below the white-hat implementation of this visualization:



Again, our solution solves all of the up-mentioned problem as:

- The visualization presents an informative title
- There is a good data-to-ink ratio
- There are more ticks on the y axis, also we added y-lines to better associate percentiles with values
- There is a label for the y axis

The code for the black-hat and the white-hat for this visualization can be found, respectively, at:

<https://vizhub.com/gcappellani/f2af95f4cdcd4d729069094d04939842?edit=files>

<https://vizhub.com/gcappellani/c9682e0c238e4aeca75d96bf6a5c4ec3?edit=files>