## **Design Choices**

- Gather data that I was interested/intrigued by, preferably in CSV format.
  - https://www.kaggle.com/zusmani/us-mass-shootings-last-50-years
- Convert CSV to JSON format by using Python. I changed the order of the columns in the CSV so that only relevant information remained.
- Load the JSON data into webpage with the d3.json module. Convert strings of dates to Javascript date objects.
- First create a basic bar chart that doesn't look very nice, but shows the bars/data correctly.
- My Y domain goes from 0 to 670, because the maximum amount of casualties in one year is 670. This number is determined with the d3.max function.
- The X domain uses the time scale. With this scale type is was able to show every 5 years instead of every year on the X axis. This was way clearer with the amount of data.
- Once the data was mapped, the scale and proportions where right, I went to find an easy to use tooltip. This resulted in the D3-tip library. The library came with some default looks that I like and just tweaked it a bit. For example, I prepended the number of casualties from each year with a red cross, so the difference between the year and the number of casualties is clear to the user.
- Added the labels to the X axis (years) and Y axis (number of casualties). Also added the title, source, context and footer to the canvas.
- For the color scheme of the chart I searched for the exact colors of the flag from the USA. The bars are normally the blue color from the palette, and change to 'USA red' when hovering. The same red is used with the cross that prepends the number of casualties in the D3 tooltip. <a href="http://www.color-hex.com/color-palette/6829">http://www.color-hex.com/color-palette/6829</a>
- The background color is "whitesmoke" that is in good contrast with the other colors and does not cause any eyestrain quickly.
- Hereafter, I centered the graph and all the horizontal text on the webpage.
- Finally I animated the bar chart a little bit. When the page is loaded, the bars in the chart "bounce". This is done by using the "ease" function from the D3 library.