Estevan Lule

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Assignment 3 - Write Up

Overview

* The visualization displays the count of a particular Pokémon type for each generation. The visualization incorporates interactive features that allow the viewer to gain additional and accurate information. The viewer can use the drop-down list to change the Pokémon type that is being displayed. The visualization also incorporates a tooltip that allows the viewer to see information about a given datapoint.

Dataset challenge

* We tried out several datasets. We were originally planning to create a global map that showcased the population density of every country and how that density changed overtime. However, our lack of experience with javascript, and d3 in particular, made it difficult to manipulate the dataset. Additionally, the data was too large and complex to utilize the same way that many tutorials and examples that we found online did. For these reasons, we opted to use a dataset that was easier to manipulate and that had plenty of potential for user interaction.

How Interactive features help exploration

* The visualization includes two interactive features: a drop down list for swapping the Pokémon type in view and a tooltip which displays the generation and count for a specific datapoint. The drop down list allows viewers to quickly and easily switch the Pokémon type, additionally, the transitions that occur when switching Pokémon type allows that viewer to more easily compare the counts of each Pokémon type. The tooltip allows the viewer to quickly get accurate information about a particular data point, without having to rely purely on the axes.

Discuss your choices in visual encoding and design choices 20 points possible here

* A line chart was selected for the visualization because it showcases how the count each Pokémon type changed as the generations progressed. We considered using a bar chart but felt that the line chart better captured the change in count for a Pokémon type between generations. Additionally, the chart is color coded with each type having a different color. This color coding is primarily used to allow the viewer to more easily distinguish the various Pokémon types.

Development Process

* We had several different ideas for the visualization. Our first few attempts to create a visualization didn’t go well, so we had to start over several times. This is mostly because we didn’t have much experience with d3, and we found most of our initial ideas were too complicated given our limited knowledge. For example, we considered creating a spider chart that would compare the stats of two Pokémon, but we found that the dataset was too difficult to manipulate for the purpose of the visualization. Eventually, we settled on a simpler visualization that still had potential for viewer interaction, which is the line chart that we ended up creating. We both put in many hours into the project. It’s difficult to say how many hours we worked on the project specifically, but we ultimately worked on it everyday for about two and a half weeks. Again, a lot of this time was spent just trying to get a better understanding of d3. So, the aspect that took the most time was looking through tutorials and learning about d3.