CGT 270 Data Visualization Fall 2021

Module 1

Week 4

**Lab 4: Filter & Represent**

The goal of this lab is to filter and visually represent your **Tableau Training Data**. In this lab you will list two questions you want to answer with your Tableau Training data, filter the data to extract only the data needed to answer the two questions and generate visualizations of the filtered data.

By the end of this lab you should be able to:

|  |  |
| --- | --- |
| Remember | ***Describe*** what happens in the **represent** stage. |
| Understand | ***Describe*** what stages are impacted by the **represent** stage and how. |
| Apply | ***Demonstrate*** the ability to use the appropriate visualization tool/chart/layout for the task. |
| Evaluate | ***Determine*** if the data is sufficient or if additional data is needed. |
| Analysis | ***Determine*** if sufficient data is available to visually represent the data. |
| Create | ***Plan, generate, and produce*** insightful visualizations. |

Part I: Filter & Represent Activity Worksheet

Use the following link to complete the Filter & Represent Activity Worksheet

<https://tinyurl.com/Filter-and-Represent-Worksheet>

Your responses will be emailed to you. Save your responses as a PDF file.

You should create a minimum of two visualizations from the same data set (the Tableau data set)

For each visualization provide a paragraph to support the visualization (in a separate file). You may use any visualization tool of your choosing. Make sure you use data visualization best practices (See Data Visualization Check list).

Take a screen capture of your visualizations and **save each visualization as a separate .jpg file**:

LastnameFirstInitial\_Fig1.jpg

LastnameFirstInitial\_Fig2.jpg

**(PNG files WILL NOT be graded)**

Upload your supportive paragraphs in this file.

**Question 1: Highest Atk**

**Fig1 Caption:**

For this I decided to go for a chart where it shows a gradient of squares of the varying attack values of all of the pokemon up to generation 6. This visualization is easy to read as the highest attack value will be on the corner while the lowest is the on the other end of the spectrum.

**Fig2 Caption:**

This visualization is simply all of the different attack values compiled into a circle where it goes highest attack value to lowest attack value from the middle of the circle to the outer edge. The color also visualizes the attack values as the higher attack values are darker while the lower attack values are lighter.

**Question 2: Highest type representation**

**Fig1 Caption:**

The type that has the highest representation (in this case Water) is the largest circle on the visualization while the type that has the least amount of representation is more towards the outside and is a bit smaller when compared to the highest. The colors also help differentiate the types better and makes it easier to view the chart overall.

**Fig2 Caption:**

This is a more conventional table that gives the numbers from highest to lowest for typing representation in Pokemon. The type with the most representation Water is shown at the top of the gradient while the type that has the least is shown at the bottom.