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**

**Fig1 Caption:**

To display the answer to my first question I first used a tree graph. The size and color of the squares change as the population (in 1000s) changes. Greener lighter colors are used to smaller cat populations while darker red colors are used to show the highest cat populations. To answer my question with the graph: California, Texas, and Florida have the highest cat population in the United States.

**Fig2 Caption:**

To display the answer to my first question on my second graph I used a simple bar graph. The color of each bar in the graph are different based on the U.S. state. To answer my question with the graph: California, Texas, and Florida have the highest cat population in the United States.

**Question #2**

**Fig1 Caption:**

To display the answer for my second question I used a circle graph. The colors of each circle turn a darker blue for a high population and a lighter blue as the population gets smaller. The size of the circles also change size as the U.S. states dog population rises or shrinks. The graph only labels the states with the highest dog population numbers (in 1000s). To answer my question with the graph: Texas, California, and Florida have the highest dog population. These numbers are similar to my previous question although, this time Texas leads California in dog population.

**Fig2 Caption:**

To display the answer to my second question on my second graph I used a simple bar graph. The color of each bar in the graph are different based on the U.S. state. To answer my question with the graph: Texas, California and Florida have the highest dog population in the United States.