Module 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	<b>Describe</b> what happens in the <b>represent</b> stage.
Understand	<b>Describe</b> what stages are impacted by the <b>represent</b> stage and how.
Apply	<b>Demonstrate</b> the ability to use the appropriate visualization tool/chart/layout for the task.
Evaluate	<b>Determine</b> if the data is sufficient or if additional data is needed.
Analysis	<b>Determine</b> 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 <a href="https://tinyurl.com/Filter-and-Represent-Worksheet">https://tinyurl.com/Filter-and-Represent-Worksheet</a>

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 Caption:**

Figure 1: Common Name by Count in State

In the x-axis the state and count variables were placed and on the x-axis the names were placed. Through this you can see how often each name was used (by looking at the count variable) in each state. The count amount was also displayed next to each data point however there was no color key. The data is represented through a bar graph.

Figure 2: Name Count by State

In the x-axis the name variable was placed and the location (state) variable was placed in the y-axis. The count values are not displayed textually but instead demonstrated through a color block code. Each count value is assigned a different value (accompanying key) and placed under the corresponding name and state. The data is represented through a symbol map.

## **Question 2 Caption:**

Figure 1: Most Common Name by Year

In the x-axis the name variable was placed and the temporal (year) variable was placed in the y-axis. The count variable is displayed through color codes. The color code has a different color for each count variable. The graph has the blocks of count with the corresponding name and state (looks similar to a bar graph in a way).

Figure 2: Name Count by Year

In the x-axis the temporal variable (year) was places and in the y-axis the name variable was located The count variable is displayed both textually and through color codes. The data is displayed in a grant view and has uses the color codes to represent different count values.