CGT 270 Data Visualization Fall 2021
Module II
Week 5
Lab 5: Critique & Refine

The goal of this lab is to critique and refine visualizations you created in Lab 4: Filter & Represent using your **Tableau Training Data**. In this lab you will perform a self-critique of the two visualizations you created last week and refine each of the visualizations.

Part I

Load each visualization to the website below, then perform your self-critique/assessment
https://stephanieevergreen.com/rate-your-visualization/

For each visualization you will rate all 24 checkpoints in about 5 minutes or less (per visualization). At the end, you'll see your visual's total score, along with a list of the checkpoints where you rocked it and places where you could improve. **Save your scores for each visualization (Print to PDF) and upload it with your assignment.**

By the end of Part I you should be able to

Remember	*Recall* visualization principles.
Understand	*Discuss* data visualization best practices.
Apply	*Examine* visualization solution(s) for insight.
Evaluate	*Assess* data visualization products for impact & effectiveness of visualization(s).
Analysis	*Distinguish* between the question being asked and the visual solution provided; does the visualization address/answer the question(s) .
Create	*Propose* and make recommendations for improvement.

Part II

You will need the Andy Kirk Book.

By the end of Part II, you should be able to:

Remember	*Describe* what happens in the **refine** stage.
Understand	***Describe*** what stages are impacted by the **refine** stage and how.
Apply	***Implement*** some method(s) or technique(s) to make the visualization better.
Evaluate	***Evaluate*** the advantages and disadvantages of the changes made.
Analysis	***Explain*** the rationale for the features that were refined.
Create	***Generate, produce and/or*** improve the visualization. Tips to improve your data visualization design.

The Andy Kirk Book (Data Visualization Handbook for Data Driven Design) contains a gallery of visualization chart types (CHRTS) located in Chapter 6: Data Representation). Each chart type in the gallery includes: representation description, an example, how to read it and what to look for, presentation tips and variations and alternative chart types.

Locate the chart type you chose to represent your data as part of the Filter & Represent Lab (Week 4) in in the gallery of visualization chart types. For each of the visualizations you created in the Filter & Represent Lab (Week 4) locate the variations and alternatives section on the gallery page and choose one of the variations and/or alternative chart type to represent the refined version of your visualization.

For example, if you created a bar chart, find out what variations and alternative chart types are recommended. Using the same data, you used in the Filter and Represent lab, create a new visualization using one of the variation or alternative chart types.

You must use data visualization best practices (see **Data Visualization Check list**).
Perform a self-assessment of the newly created visualizations (see Part I).

WHAT TO TURN IN

Part I: Critique

1. Self-assessment of the two visualizations you created in the Filter & Represent Lab (Week 4); saved in PDF format
    a. LastnameFirstInitial_Fig1SelfAssessmentScore.pdf
    b. LastnameFirstInitial_Fig2SelfAssessmentScore.pdf

Part II: Refine
Make sure you use data visualization best practices (See Data Visualization Check list).

Figure 1
Original Chart type: *Area Chart*
Refined Chart type: *Area Chart*
How to read it and what to look for (Refined Chart type): *I have filtered out the companies that are hard to see. The colors are changed for people with colorblindness and added a takeaway message for the chart. This is used to show how values have change over time for multiple categorical items. It is often shown in a sequencing of values that follows a chronological left to right direction.*
Figure Caption: *The legend shows the company name for the area under the chart. On the y-axis the T shown means the amount of truncation during the year associated.*
Export the refined visualization as an image, save as LastnameFirstInitial_Fig1Refined.jpg

Figure 2
Original Chart type: *bar graph*
Refined Chart type: *line graph*
How to read it and what to look for (Refined Chart type): *This is for a single company so only one line would apply. The chart shows how quantitative values have changed over time. The color for it emphasizes lines of interest using the saturation. It is friendly for people with colorblindness. This type of data would be best to be presented in a line graph.*
Figure Caption: *The M on the Y-axis shows the amount of value earn in million. On the legend the 6 and 2 B shows the lows value and the highest value the company earn. The B means billion for the values.*
Export the refined visualization as an image, save as LastnameFirstInitial_Fig2Refined.jpg

(PNG files WILL NOT be graded)

(add an additional page if needed)