CGT 270 Data Visualization 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

Remembe r	Recall visualization principles.
Understan d	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:

Remembe r	Describe what happens in the refine stage.
Understan d	Describe what stages are impacted by the refine stage and how.
Apply	<i>Implement</i> some method(s) or technique(s) to make the visualization better.
Evaluate	<i>Evaluate</i> 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: *<Cluster bar chart>* Refined Chart type: *<Cluster bar chart>*

How to read it and what to look for (Refined Chart type): <*Read the axes so you know with which categorical value each bar is associated and what the range of the quantitative values is*

Figure Caption: < This is a cluster bar chart that use bars to show the occurrence of the top names. > Export the refined visualization as an image, save as LastnameFirstInitial_Fig1Refined.jpg

Figure 2

Original Chart type: *Proportional shape chart>* Refined Chart type: *proportional shape chart>*

How to read it and what to look for (Refined Chart type): <*Look at the shapes and their associated labels so you know with what major categorical values each is associated. If there are only direct labels, find the largest shape to establish its quantitative value as the maximum and do likewise for the smallest – this will help calibrate the size judgements.* >

Figure Caption: < The largest square means the name that has the most fo occurrence. The size of the square represent the number of occurrence of the name.>

Export the refined visualization as an image, save as LastnameFirstInitial Fig2Refined.jpg

(PNG files WILL NOT be graded)

(add an additional page if needed)