Project 1 – Data Visualization Story

For: EAS346 with Prof. Schimpf

Due Date: March 25, 2021

Project Description:

In this project you will bring together the different visualization and communication skills you practiced in activities 1-4 to create one cohesive, integrated data visualization story. This data visualization story will combine one or more data visualizations with a written data story consisting of a description of your data, plot(s) and at least two notable insights you want your viewer to take away from your plot(s). The insights will follow the structure we've discussed for arguments with a clear descriptive claim, clearly identified visual evidence and your logic/reasoning that explains how viewers should read your plot to understanding your claim. The insights you want your viewer to take away from your data story should be sufficiently different – they should not be restatements of the same general point and the insights should come from different visual evidence on your plot. Some overlap between your evidence for your first and second insight is acceptable, but they must not completely overlap. In other words, you will need to map multiple data dimensions to your plot and convey insights about these different dimensions. Creating a basic plot, e.g., a single line plot or a single bar plot will be insufficient for completing this project. Considering using additional visual cues for long data/variables (e.g., shapes, color, linetype, alpha), superposition or juxtaposition or using multiple plots.

You should use one of our somewhat larger datasets for this project: either the clean technology dataset or newly added U.S. energy sources by state. For either of these datasets, you should select a subset of continuous and categorical variables to analyze. You are also free to use your own datasets, so long as that dataset has 1-2 categorical variables and 3 or more continuous variables.

Submission:

- Submit your documents on UB Learns.

Criterion	Description and Guidance	Points
Completion		**5**
R markdown output file	Word format	
R script (process code)	Any processing/analysis	
Project Title and Student Name	Same structure as before YOURFULLNAME_PROJECT1	
Data Visualization		**10**
Contextual information	Descriptive labels or titles, appropriate scales, descriptive legend	
Visualization Complexity	Visualize sufficient data complexity (i.e., data dimensions)	
Good Visualization Practices	Appropriate use of juxta or superposition, legend when needed, data type mapped to appropriate visual cue	
Data Story/Argument		**10**
Writing clarity	Complete sentences, appropriate punctuation. No bullet points.	
Data context and **two or more** arguments	Minimum of 2 arguments, each with a claim, evidence, and reasoning	
Weaknesses or contradictions addressed	For any claim, look for contradictory or weaknesses in your visualization and explain them	
Integration		**5**
Claims apparent in evidence	Any claims you make should be identifiable in your evidence	
Data visualization story coherence	Other aspects of your written argument and data visualization are in agreement.	