Information Visualization and Presentation

Final exam, 23 January 2023

Dataset to work with: significantvolcanoeruptions-simplified.xls this is a sample dataset coming from Tableau, but I cut many columns as they were irrelevant for the exam. On the second sheet of the dataset there is the Wikipedia reference for the volcano explosivity index.

TASK 1: With the provided dataset create a dashboard with only 3 charts. The intended audience are secondary school teachers.

Overall implementation of the dashboard: labels, axes, legends, clarity of code... 1 point

Question 1. Explain the selection of charts. Bottom-up and top-down reasons to choose them. 2 points

Question 2. In one of the charts reason the encoding decisions. And the perception principles acting on this chart and encoding. 2 points

Question 3. Explain Gestalt principles affecting overall layout of dashboard. 1.5 points

Question 4. Explain what interaction is available at chart level or dashboard level and reason it. 1.5 points

TASK 2. Draft a storytelling with the data

Explain the script how you will introduce the story, the middle and the end. I don't expect any finished chart nor design, just a draft idea of the sequence. 2 points

Deliver answers to these questions and dashboard (code and final view).