CSC/SDS 109: Communicating with Data

HW 01: Data & Data-Visual Mapping

This is a pair assignment—individual submissions must be pre-approved!

Goals:

- Explore data documentation in real-world visualizations
- Evaluate the data visual mappings in real-world visualizations

Instructions

Choose Visualizations

Choose a visualization from one of the galleries here: https://www.vislies.org/2024/

Choose a visualization from a news reporting outlet.

Choose one additional visualization from any third source.

Deliverables

For each visualization, fill out a copy of the attached worksheet.

Submission

Submit your deliverable(s) as a PDF on Gradescope. If you worked with a partner, submit as a group (https://guides.gradescope.com/hc/en-us/articles/21863861823373-Adding-Group-Members-to-a-Submission).

Rubric

The following matches the rubric you will see on Gradescope.

	Points	Criteria
For each visualization:	1	Raw data link or search procedure
	0.5	Raw data collector
	0.5	Raw data collection time
	0.5	Raw data observations
	0.5	Raw data variables
	1	Raw data biases
	0.5	Visualization screenshot
	0.5	Visualization link
	1	Visualization marks
	0.5	Mark representation
	0.5	Visualization variables
	1	Visualization data-visual mapping
	1	Visualization data-visual mapping evaluation
	1	General evaluation
TOTAL	30	

SDS/CSC 109 hw01 Worksheet

Fill out one worksheet per visualization.

Part 1: Data Investigation

Link to source of the visualized data (i.e the raw data). If you cannot find the raw data, document the steps you took to find it. Your documentation should include enough detail for someone to replicate your process, and show that you spent at least 20 minutes searching.

Who collected the raw data?

When was the raw data collected?

What does one observation (row) in the raw data represent?

What variables (columns) are in the raw data?

What biases are present in the raw data?

Part 2: Visualization Decomposition

Link to the visualization

Screenshot of the visualization

What marks are in the visualization?

What does one mark represent?

What variables are visualized?

Which visual channel represents each variable (i.e. what is the data-visual mapping)?

For each variable-visual channel pair, is the visual channel chosen appropriate based on the variable's data type?

Do you think the visualization is well designed? Why or why not?

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