Interactive redesign project (SI649 W2025)

Due date: Sunday March 23rd, 2025 at 11:59pm (Eastern time)

In this project, you will **share your work from the first project** with someone else from the class, **critique each other's work**, and **redesign two of your previous static visualizations** into new and improved **interactive** versions. The context is the same as the static viz project (the same topic, news article, and data), but you are free to bring in additional resources and/or use different tools if you like.

Ultimately the goal is the same: to design visualizations for the news article we previously provided, but this time to do so using interactive visualizations, following a structured process, as outlined below.

This project will proceed in two phases:

Phase 1: Preliminary Discussion in Pairs

During phase 1, you will be matched with a **random partner** from the class (we will pair you up by email).

Sometime over the next two weeks (by Wednesday March 12th) you should:

- **Meet with your random discussion partner** that we will assign (either in person or by zoom)
- **Take turns sharing your designs** with each other, and giving each other feedback
- In particular, follow this process (taking turns, first one person than the other):
    - **Person 1 shares their static viz project designs** with person 2, describing what data they used, and what they were trying to create;
    - **Person 2 provides feedback**, thoughts, suggestions, and/or ask questions;
    - (Person 1 should also feel free to ask Person 2 about specific things they would like thoughts or opinions on);
    - **Person 1 takes notes** on person 2's feedback;
    - Person 1 should include these notes (as bullet points is fine) with their submission for this project; that is, you should include notes on the feedback you received from your partner;
    - **Then swap roles and repeat.**

You should also feel free to share data, code, and tips with each other if you like.

Phase 2: Interactive Redesign

Following your discussions in Phase 1, you should now work independently on interactive redesigns of your work from the first project.

Using the same context as assignment one (i.e., the same news article, the same data, etc), design two interactive visualizations that could accompany the article

Here are some guidelines and tips for this phase:

- You are welcome to start with one of your previous designs, or an idea from your partner, or something totally new (any of these are fine)
- Try to think about different ways that you could add interactivity to make these visualizations as effective as possible
- Adding tooltips is okay, for example, but that would be considered a very minimal augmentation of your existing work, and not very ambitious; try to be creative!
- This is also a chance to improve all aspects of your designs, based on whatever feedback you receive

To submit (by March 23rd)

- Your **two interactive visualizations**, along with whatever context would be helpful (e.g., a caption); you do *not* need to embed these in the article as you did before;
- Data, code, or workbook used to create your visualizations (as a zip file)
- The **notes you took on the feedback you received** from your partner on your designs from the static viz project. (Please share your notes with your discussion partner first, to make sure that you have adequately captured their feedback);
- **A brief report** (2-3) pages of text, on how you approached this redesign exercise. For each figure, briefly describe:
    - What the starting point was (e.g., one of your earlier designs, one of your partner's designs, something else, etc.)
    - What you were trying to achieve (e.g., what tasks or comparisons did you want to support);
    - The type(s) of interactivity you considered or explored;
    - How well your final design meets your goals.
- It would also be helpful to include **screenshots** of your initial and final designs, to show the differences.

How to submit

For submitting your interactive visualizations, you have multiple options, but you should **make sure that we are able to view and interact** with your visualizations **without any additional steps** required. In essence, you have three options:

- Submit a Tableau workbook; OR
- Submit a python notebook, using **only** the libraries we have suggested you install (e.g, Altair, matplotlib, numpy, pandas, etc.); we should not have to install additional packages; OR
- Host your interactive visualization somewhere online (e.g., Github pages), such that anyone can access it.

Obviously the third option above is the easiest for us and most flexible. It is therefore the *recommended* option but it is not required, in part because this may be more challenging for Tableau. If you are using some other tools (e.g., Power BI, R, etc.), you will need to find a way to host your work on line such that we can view and interact with it.

Evaluation Criteria

For the final submission, we will use the following evaluation criteria:

1. **Insights and Contribution**: How much do your visualizations add to the reader's understanding, beyond the static version of the figures?
2. **Clarity, effectiveness, and functionality**: How effective are your interactive visualizations for the tasks you have selected? How well does your interactivity function?
3. **Aesthetics and Attention to Detail**: Have you used good design principles and considered human perception and cognitive limitations in designing your visualizations? Have you carefully designed all aspects of your visualizations, with strong attention to detail?
4. **Creativity and effort**: How interesting or ambitious are your visualizations? Do they reflect a considerable amount of effort?
5. **Writing**: how well written, detailed, and reflective is the report?