PROJECT MILESTONE 2: EXPLORING THE DESIGN SPACE

Directions

1. Have one member of your team submit a write-up on Canvas by the Canvas deadline.
2. Write-ups must be no longer than 1200 words.
3. Also post a copy of your write-up to Piazza. This will be used for peer reviews.

Learning Outcomes

By the end of this milestone, you will be able to,

1. Use R and / or D3 to translate conceptual visualization approaches into practically usable implementations.
2. Reshape and prepare unprocessed datasets for use in data visualizations.
3. Given data analysis tasks, prioritize visual representations and interactivity that are suitable to the task.

Milestone Description

Now that you and your team have formulated a motivating goal and have acquainted yourself with pertinent literature, it is time to experiment widely with prototype visualization approaches. Regardless of whichever project modality you chose (design studio or research synthesis) your task in this milestone is to design and implement 3 - 5 visualization components that could potentially be used in your final designed interface / synthesis report.

At this stage, allow yourself to explore contrasting approaches. If you cast a wide net, you will have a better chance at discovering creative approaches. There will be time to refine your work before the final submission. Be sure to relate your choice of designs to the literature review and high-level goals that you developed in milestone 1. You should be able to clearly explain why you chose to implement the visualizations you did. Once your prototypes are ready, we ask that you critically evaluate them.

We ask you to structure your write-up to include the following elements,

1. Choice of design prototypes. Which visualization approaches did your team decide to implement, and why did you choose the ones that you did?
2. Demonstration and implementation discussion. For static visualizations, directly include your prototype figure. For interactive views, link to either a web-hosted prototype or a video recording. Explain the logic of your implementation.
3. Critical evaluation. Now that you see the designs on your real data, what trade-offs do you think exist between alternative designs? How do you plan to proceed in the final interface or review?

Please also provide a public link to code used during preprocessing and visualization. We encourage you to refer to existing code examples as you design your components, but be sure to cite the sources you draw from.

Rubric

Choice of designs (9 points): The proposed designs are well-motivated by milestone 1's review, appropriate to the project goals, and reflect attention to detail.
Code logic and style (8 points): All code is readable and modularized appropriately.
Critical design evaluation (8 points): The discussion of the implemented designs is sophisticated, including both concrete details and higher-level commentary.