Data Visualization Assignment 3 Report

A link to the deployed project: https://cmu-vis-2022.github.io/assignment-3-gaurav-ben/

Submitted By: Ben Sun & Gaurav Manchanda

A rationale for your design decisions

Part 1 of the assignment stated unequivocally that we only needed to code for the visualization that was shown to us. For part 2 of the assignment we typically wanted to analyze how the AQI changes in response to various natural factors, most notably wind speed, temperature and so on. The comparison with AQI was important to us, and a line chart was an excellent way to demonstrate that the variables on the x-axis are continuous, so we went ahead with adding a line chart for part-2 as well.

A clear description of the goals of your second visualization

Air quality has been a concern in today's world, and we wanted to focus on **what factors** have the greatest impact on AQI and how, so we investigated the same question and finally plotted a line chart against different factors.

We started by looking at how PM2.5 is related, but that was too basic, and since we had some time, we wanted to learn about different factors and how they are affecting the AQI, so we ended up here finally plotting against the multiple factors.

An overview of your development process

We believed in working together on both parts because we wanted to learn from one another, so we began by using vscode live share to brainstorm everything together and then code it. We initially had a zoom call with all of the members of the final project as well for discussing Part 1 because everyone had some questions about how to approach this assignment. Finally, we were able to figure things out and put our time together to work on them.

Roughly we spent around an overall of 15-20hours for whole of the assignment and it was basically about learning about how to use D3 that was something which took way longer than expected considering less of coding background atleast for one of the teammates but we were both able to together figure out the things. We also spent a good amount of time in order to explore the D3 graph gallery for inspiration. This assignment provided a thorough understanding of D3 and how to proceed if we need to create visualizations in the future.