Blair Ednie
CS-39AE

Lab 3.6: Familiarizing D3.js

October 30, 2024

1. The type of visualization you selected and why.

    - I chose to visualize the Australian Temperature dataset I am using for HW5. Since I am familiar with it and the dataset contains temperature data over a number of years, I thought it would be perfect for a simple line plot.

2. Key D3.js features you used.
    - Tooltips for nodes on the line chart to show data at that point.
    - SVG append text for adding the axis labels and chart title
    - Load from csv: d3.csv
        - Load the dataset from a csv, which I copied into my github repo.

3. Any challenges you encountered and how you overcame them.
    - I ran into problems with the tooltips. They would draw for the first station, but then if I updated the station, the line would be redrawn but not the tooltips. I used Claude to help make a function to update the tooltips any time the user selects a new station.
    - Positioning the labels and title was challenging because they need to be readable while not occluding chart data. Initially the code from Claude had the labels inside the chart, which made it hard to read and covered up some data points. We moved them outside the chart. Then with the title, about half of the letters were cut off at the top, so we had to move the title down about a half of a line. This was challenging because the height of the chart is dependent on the page size, so it isn't always the same. I need to test this with different page sizes to be sure it is a good solution to move the title down a hardcoded 10 px.