Process Book: NAEP Visualizations  
Brandt Redd – CS 6630 Data Visualization – Fall 2023

# 2 November

The data encompassed in the Excel file that I downloaded previously turned out to only contain a fraction of the full dataset that I want to visualize. I found two ways to download the detailed data from <https://www.nationsreportcard.gov/>. One is through an API that would require quite a bit of programming because it only seems to produce one data point per call. The other is by querying for the appropriate data and then copying the table and pasting it into excel. Still, there are three grades, two subjects, and eight categories for a total of 48 query-copy-paste operations.

It took a while, but I got the data that way. I also had to look up the achievement standard levels which are posted elsewhere on the website. With all of that in place, I exported the spreadsheet from Excel into .csv format and wrote a script to convert it all into JSON which I incorporated into the project.

While the data preparation took about five hours, it’s in a format that will greatly facilitate the visualization programming.