Joe Whisler
Final Project Prototype

https://jwhisler1117.github.io/anatomy-of-tornado-alley/

What have you done so far?

I wanted to make the final project related to weather and more specifically tornadoes. The data set came from NOAA's Storm Events data sets which had data beginning in 1950-present with several data points on tornadoes (starting/ending latitude/longitude, EF rating, width, distance traveled, etc) along with other types of storm events such as blizzards. I transformed the data set to just use the tornado data points. I really enjoyed the Mapbox project and wanted to use that again so I've come up with a prototype overlaying individual tornadoes throughout the year in the United State including a heatmap, year slide, and also tooltip for when hovering over each individual tornado where it will provide details on that specific tornado. Originally I was going to make it based on tornado alley in the south and how that's changed over the years but I think seeing the whole country is more appealing (especially seeing tornadoes in states you don't expect like here in California.

What will be the most challenging of your project to design and why?

I had the idea of trying to show a visual/animation of the starting and ending points for each tornadoes but I've come to find that may be overwhelming due to the sheer amount of tornadoes. The challenge I have right now is separating the heatmap showing yellow/red for a high concentration of tornadoes for an area but I also want to show strong EF4/EF5 tornadoes at the same time. Zoomed in one can see the individual tornadoes but not when the map is zoomed further out. This make it look the yellow or red spots are all strong tornadoes when that may not be the case. I think an option would be to change the size of the tornado dots based on EF rating. That way even when zoomed in, a viewer can quickly see strong tornadoes and this would also affect the heatmap by more heavily weighting stronger tornadoes. I do also intend to make additional filters based on states, injury/death, property damage, and potentially some others.