GEOG 458

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Final Project Report

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Final Project Report----Washington State COVID-19 case per 10k

Although, it seems that the effect of COVID-19 is reducing recently in United States, the pain it causes doesn’t seem to be abating. There are still new cases report around Washington State every day. Even in our campus, there are still many cases. We can’t ignore all these cases and say we have beaten the COVID-19. However, it’s also inappropriate to exaggerate and fear COVID-19 too much.

So, to clearly show the degree of severity of the COVID-19 in Washington State. I want to make a map to show the case per 10k people in each county of Washington State. I imagine that my target audiences should be normal citizens who are caring about COVID-19, they might live in Washington State, and may be affected by the pandemic before. To avoid panic, and in case people don’t take it seriously enough, I will use data from US government and The New York Times to ensure the authenticity of data, the color I will use for the map will also avoid using overly bright and percussive colors to reduce the effect of psychological suggestion.

To improve accuracy and reduce the workload, I will use API from Mapbox and tool functions in it for my map, this will help me add mouse over event and data display in an easy way instead of handwriting in the code. The Mapbox also has the function that allow users to drag the map to view. My most effort will on data organization and preparation.

The final product is like images in the following:

地图

描述已自动生成

地图

描述已自动生成

The work is not that easy as I thought in the first place, it took me long time to organize the data to let all covid-19 cases correspond to the geoID in GeoJSON file.

To make map clear and beautiful, I decided to set code frame for the whole map in CSS. Then, I imported base map from Mapbox website and data from previous organization. Because my map is for Washington State, so I set the center of the map at Washington State and divide all data into different counties to separate cases from New York Times. However, the first version of the map was still not clear enough that the colors of choropleth map blur the names of counties, and legends can’t let viewers know the detail numbers of cases in Washington State. So, I add transparency for the layers, and add mouse events and hover window to show the precise number of cases per 10k in Washington State. The pictures above show the two different views of the map: the first is that viewers are not putting mouse on any county, so the window is showing a sentence to tell viewers to find a county to show the number; the second one is the picture shows viewers put mouse on the county and present case number.

Data Sources:

1. COVID-19 Cases: <https://github.com/nytimes/covid-19-data>
2. Population: <https://ofm.wa.gov/washington-data-research/population-demographics/population-estimates/april-1-official-population-estimates>
3. Cartographic: <https://www.census.gov/geographies/mapping-files/time-series/geo/carto-boundary-file.html>