**ASSIGNMENT NO 5 -**Asmita Shelke

Chart

Description automatically generated

I have selected a covid dataset which has data about covid cases across the countries, data about cases in 2020 vs 2021 in united states as well as state wise deaths due to Covid in United states. In this web visualization I have used three different google charts – geochart, pie chart and bar chart to analyze my dataset.

The geochart shows the spread of corona virus across different countries. When we hover through the geochart, we can see that since Norway is highlighted in a dark blue color, it was the most affected country related to its population whereas China is highlighted in light blue, it was less affected country. The bar chart shows us monthly comparison of cases in 2020 and 2021 in United States. Using this chart, we can understand which month had comparatively high cases, and whether the pattern was followed for the next year as well. Using this concept, it will be easier to analyze the spread of corona virus. In the bar chart we can see that for the month of December, the cases were relatively higher than the other months. Moreover, in December 2021, the graph shows a sudden increase. From this analysis we can go back and understand the reasons for such a pattern. Since December is a festive month, most of the population is out shopping or on vacations, which could be a potential reason for the hike in covid cases. The raise of cases in December 2021 could be due to a new version of the virus which was spreading easily.

The pie chart shows the number of deaths across the different states in US. We can analyze the state which had maximum number of deaths and then use this analysis to understand the reason behind the high number of deaths. We can see that New York is the state with highest deaths as compared to other states. Moreover, with the slider we can select the range of the deaths and it will change the pie chart accordingly.

I have implemented the algorithm 9 from the Ware chapter. The algorithm is multidimensional dynamic queries wherein I have included a pie chart which has a slider that will show the values according to the slider values. Moreover, I have also implemented the pathfinding map using the geochart. If I had more time, I would have implemented brushing algorithm. Wherein suppose if I select a country in geochart with the number of cases, it will highlight the same country in pie chart and would show the deaths in the country. This way we could relate the number of cases to the number of deaths in any country.

Link: <https://people.rit.edu/as3833/activity2/chart.html>