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(Task A1, using D3)

The Bangladesh Crime Statistics Set (<https://www.kaggle.com/datasets/firozkabir1/crime-statistics-of-bangladesh-2010-2019?resource=download>), released by the Bangladesh Police Bureau of Statistics in 2020, provides data on various crimes from 2010 to 2019. This comprehensive dataset covers every province/region in Bangladesh and different crimes, including murder, rape, kidnapping, theft, robbery, and more. Key fields in the dataset include province, crime type, year, and the number of cases reported. However, the data for 2019 is incomplete and not included in the statistics by year chart.

Visualizations created from this dataset can help researchers and policymakers better understand Bangladesh's crime trends and distribution. They can also assist police, government, and other relevant authorities develop effective crime prevention and combat strategies. Additionally, individuals and organizations can use these visualizations to better assess crime levels in specific areas and periods to understand the risks. For example, producing a provincial crime map based on a Bangladesh map can help identify high-risk areas by clearly showing each province's crime level. Pie charts of crime data from different provinces can provide a concrete picture of the province's impact on the country's total crime. A broken line chart of the total crime volume of the country each year can reflect the overall security situation in Bangladesh. These analyses and visualizations provide valuable insights into crime prevention and combat in Bangladesh and are helpful for anyone seeking to understand the crime situation in the country better.

It's a brief view of the visualizations, and details come later:

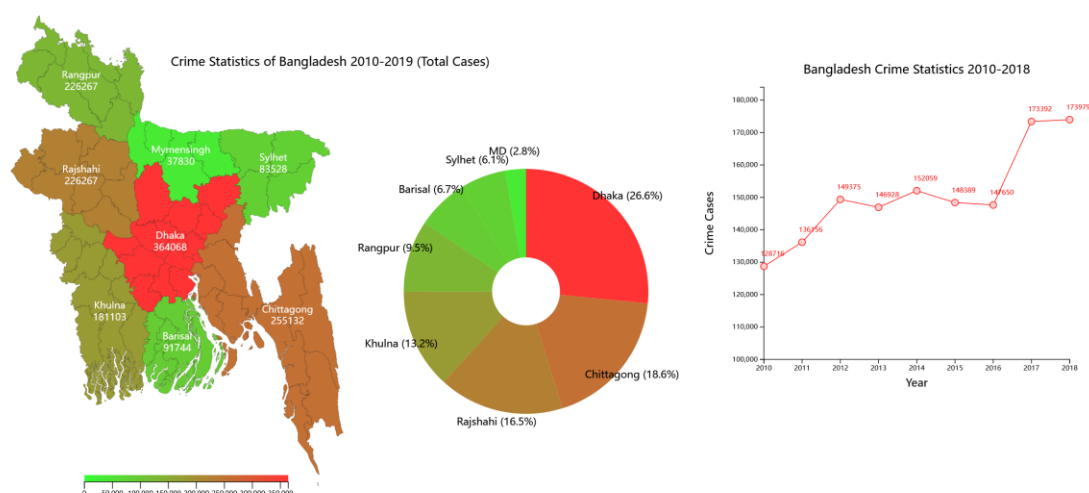


Figure 1: overview of the visualizations

The map and the pie are shown in Figure 2. The left one is the crime map of Bangladesh using the total crime case data from 2010 to 2019. Crime cases go from low to high

from green to red. And the name of each province and the number of crime cases are labeled at the center of each province. This gives a visual indication of how safe each province is. And the legend is located at the bottom. The right side pie chart shows the proportion of each province's crime in the national total.

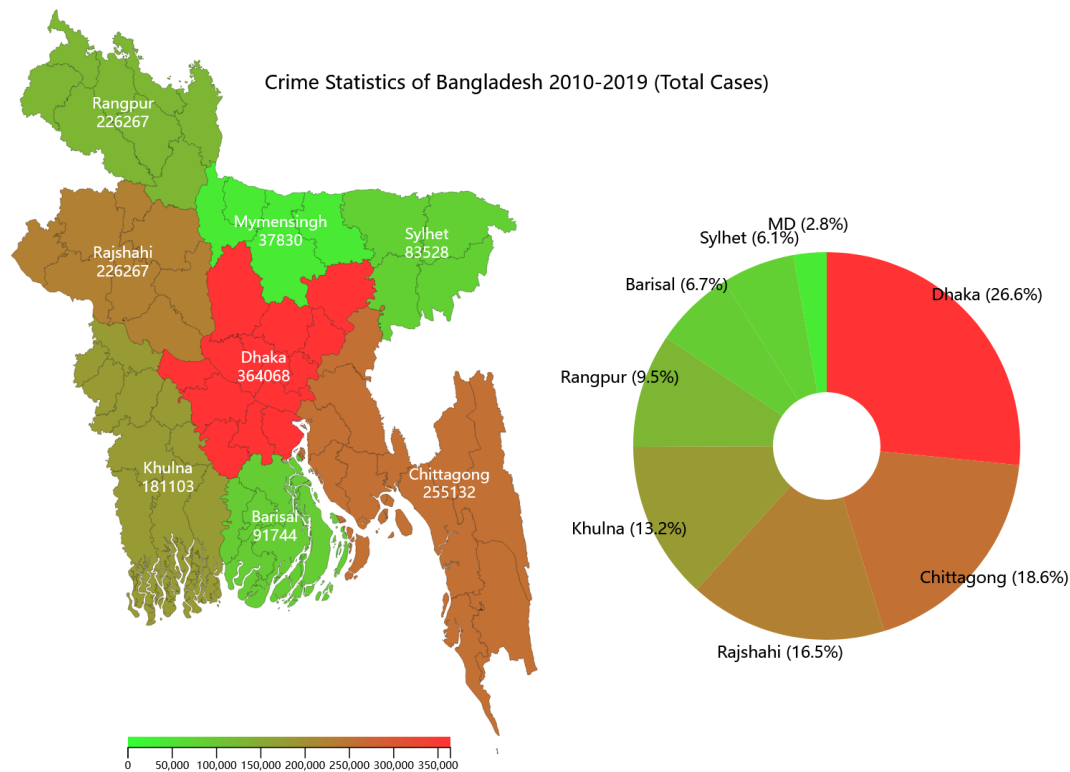


Figure 2: the crime map and pie chart

The line chart is shown in Figure 3. The x-axis is the year, and the y-axis represents the crime cases. And the total number of criminal cases each year is shown with each point. The line chart clearly shows that the number of crimes in Bangladesh has been on the rise in recent years.

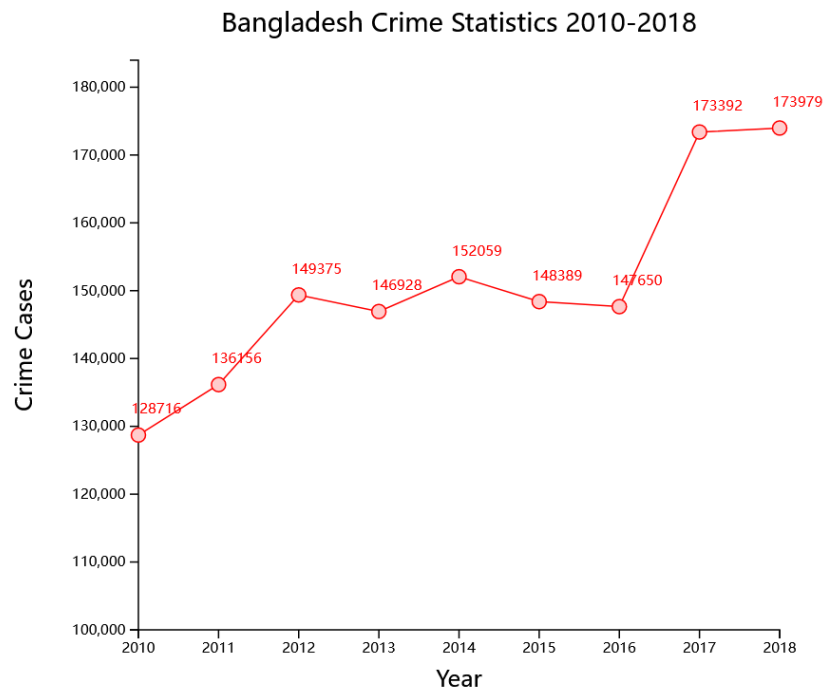


Figure 3: the line chart of total crime cases

The link: https://github.com/JasonLeeJSL/CS5346_23sp_OTOT/tree/main/OTOT_A1