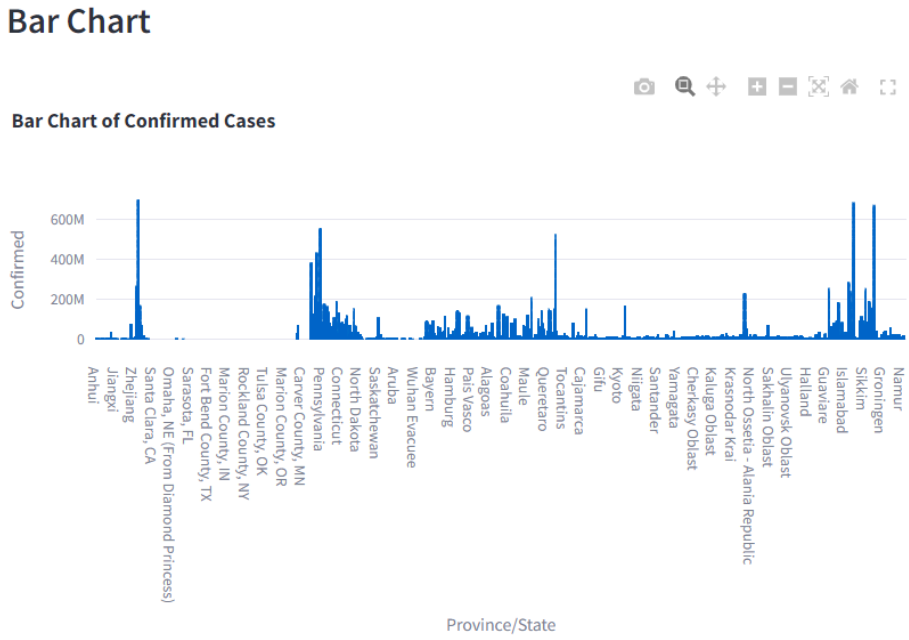
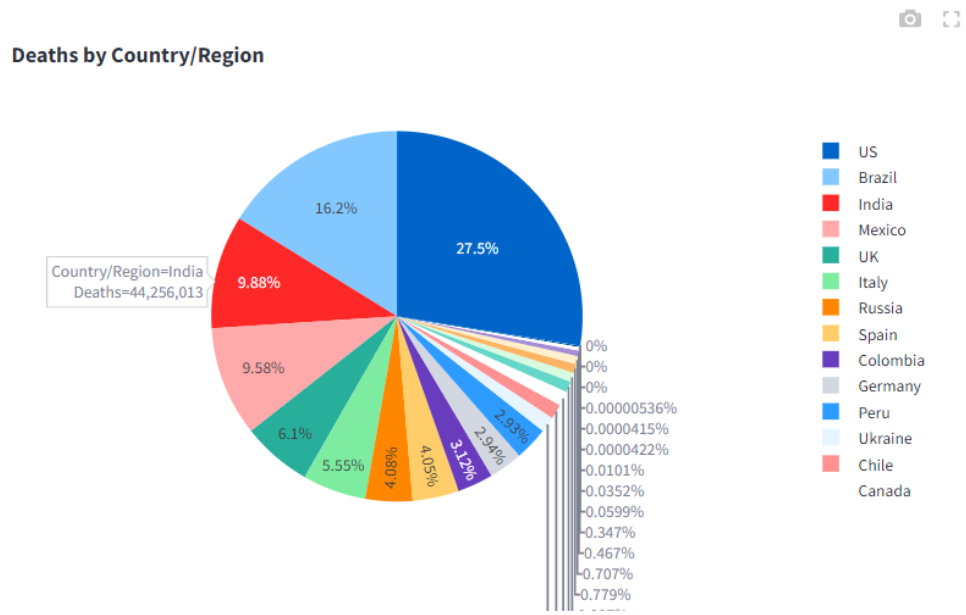
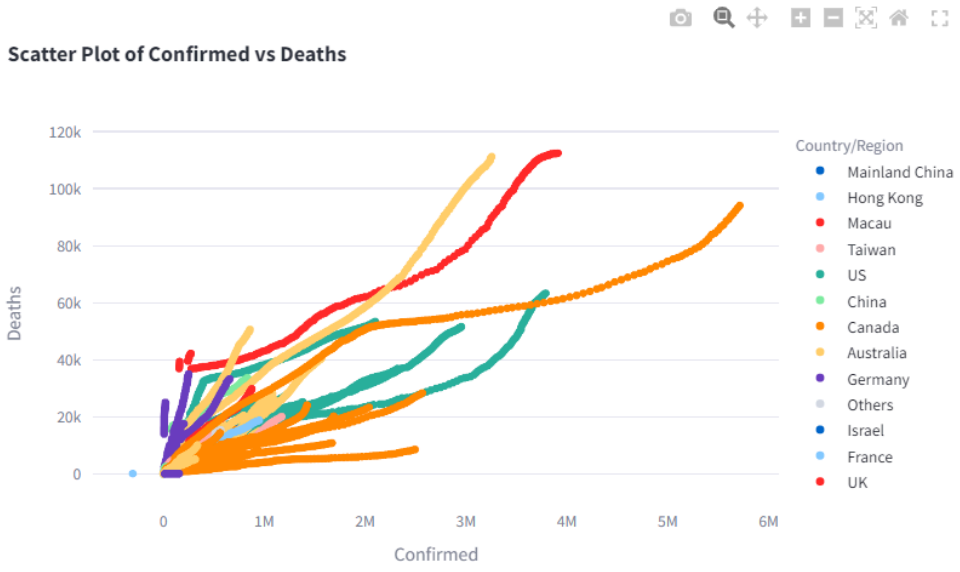
Name:	Deepraj Sujit Kadam
UID:	2021600029
Experiment No:	03
Batch:	B
Aim:	To Design a Interactive Dashboards and Storytelling using Tableau / Power BI / R (Shiny) / Python(Streamlit/Flask) / D3.js
Dataset link:	https://www.kaggle.com/datasets/sudalairajkumar/novel-corona-virus-2019-dataset?select=covid_19_data.csv
Results / Outputs	 Bar Chart: This simple bar chart compares the number of confirmed cases by province/state, making it easy to identify the regions with the highest and lowest case counts

Pie Chart



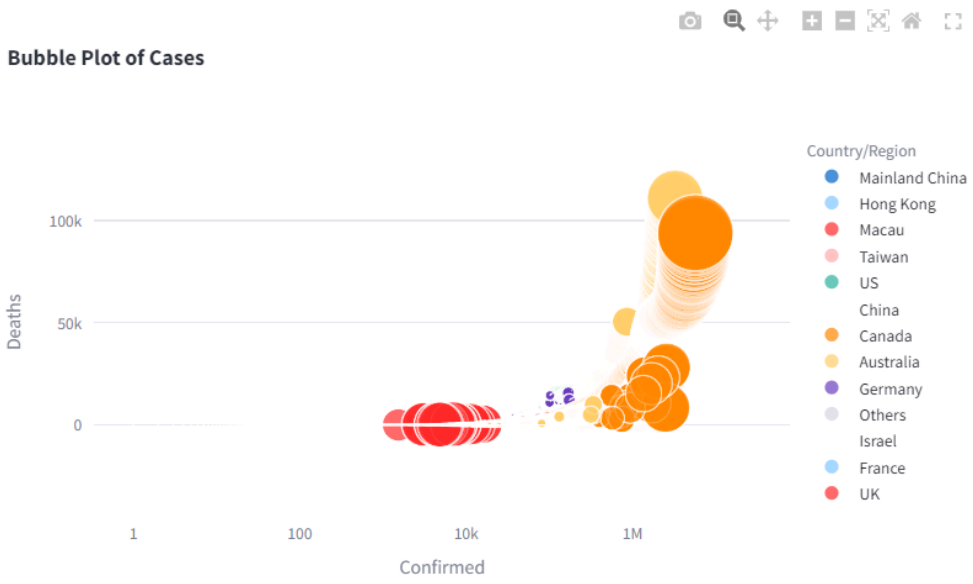
Pie Chart: The pie chart illustrates the proportion of deaths by country, helping to visualize which countries have the highest mortality rates in relation to COVID-19

Scatter Plot



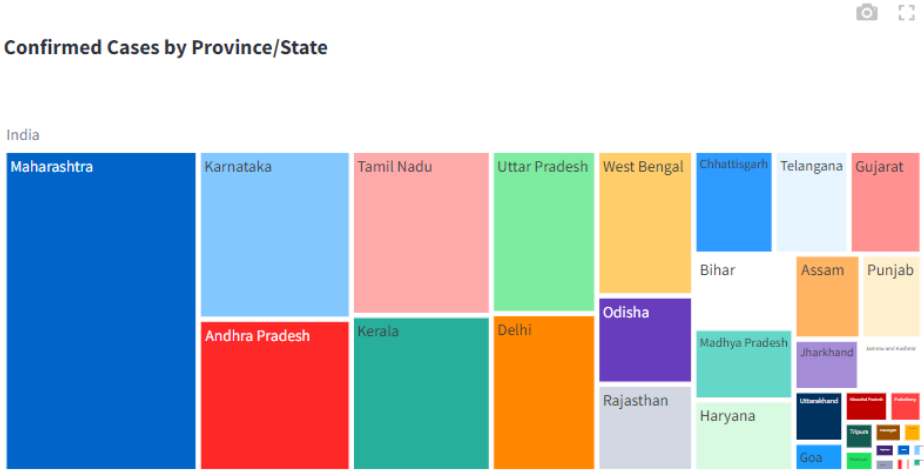
Scatter Plot: This scatter plot highlights the correlation between confirmed and death counts, showing how an increase in confirmed cases may correspond with an increase in deaths in certain regions

Bubble Plot



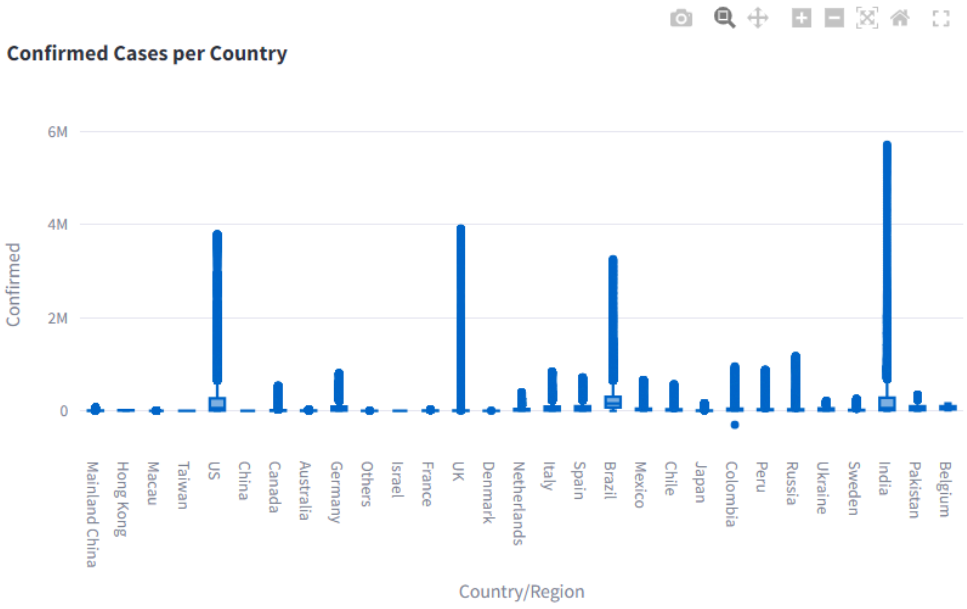
Bubble Plot: The bubble plot emphasizes the recovered cases and their distribution, allowing for a clear visual comparison between different countries or regions in terms of recovery rates

Advanced Charts



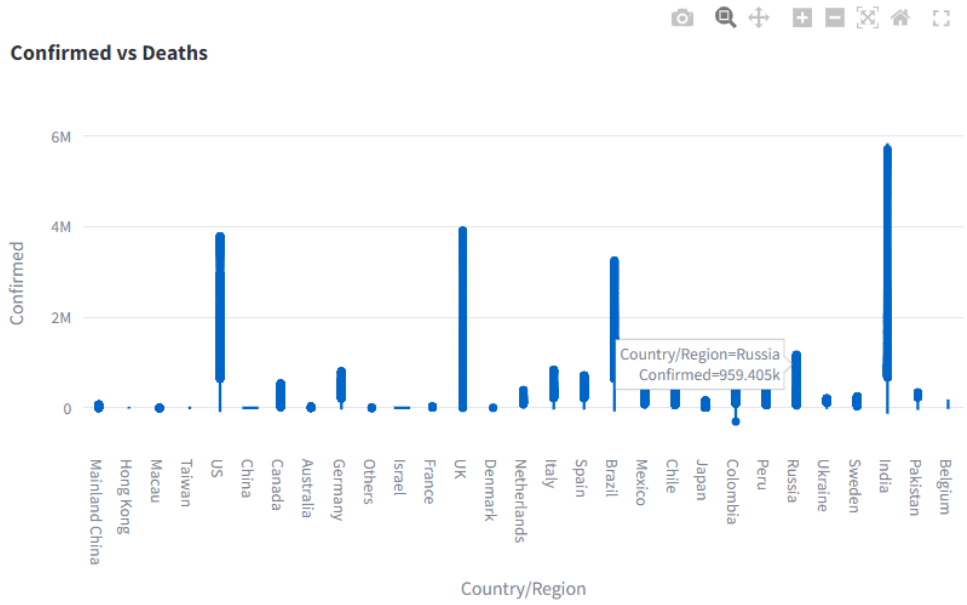
Word Chart: This chart highlights the provinces/states with the highest number of confirmed COVID-19 cases, allowing for a quick visual comparison between different regions(Considered INDIA for example)

Box and Whisker Plot



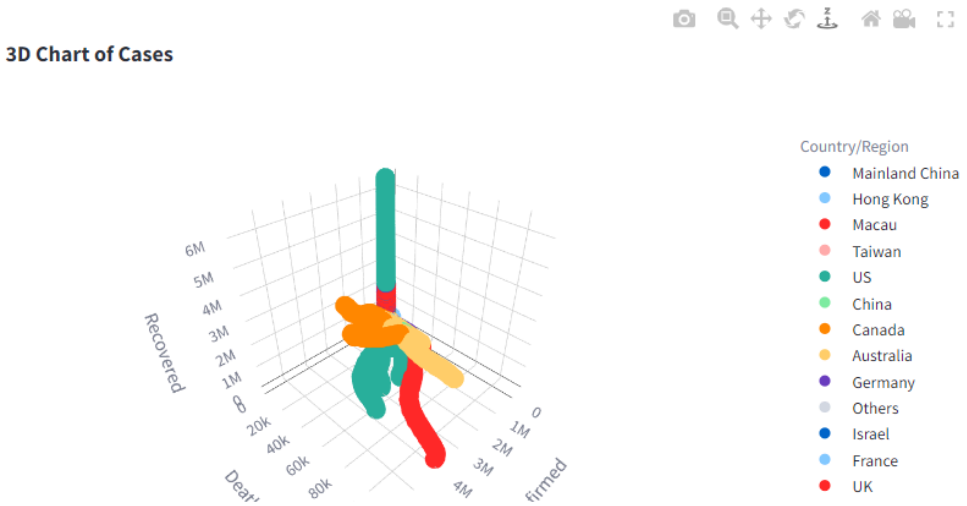
Box Plot: The box plot shows the distribution of confirmed COVID-19 cases across different countries, highlighting the range, median, and outliers in the data

Violin Plot



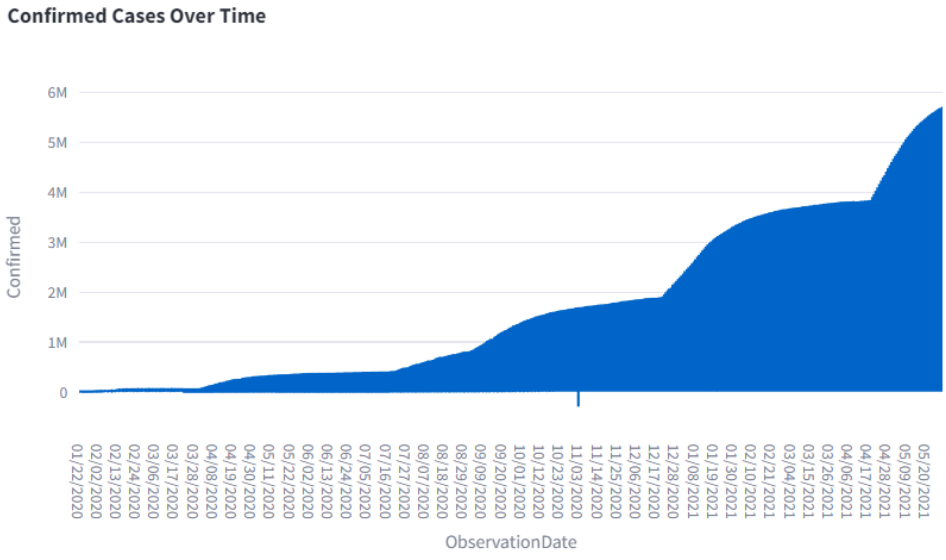
Violin Plot: This plot provides insights into the relationship between confirmed cases and deaths by comparing the density of data points, allowing for a visual understanding of how these variables vary across regions

3D Chart



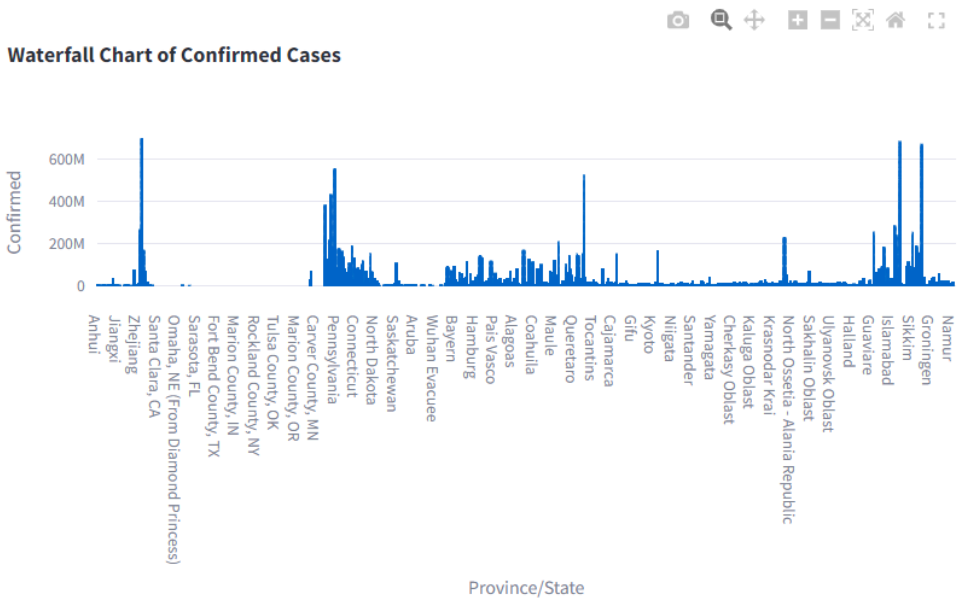
3D Chart: This 3D chart presents the relationship between confirmed, death, and recovered cases, helping to visualize how these factors interact and their proportional distribution

Line Chart



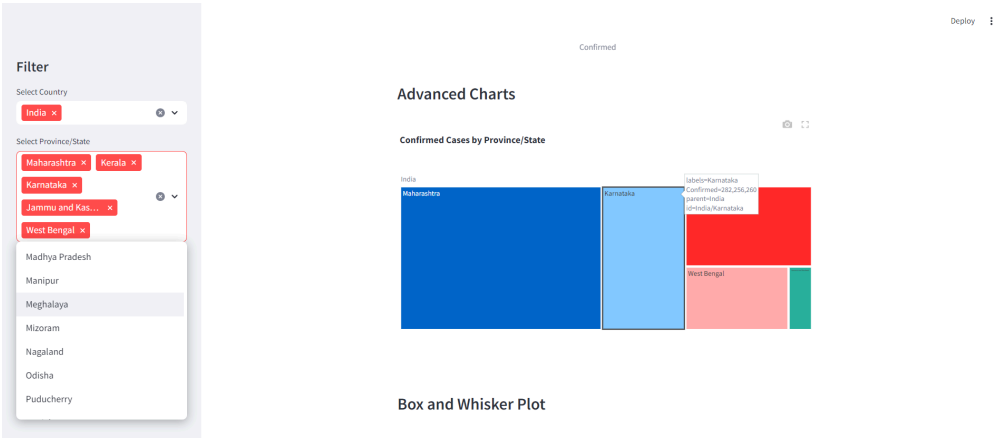
Line Chart: This chart visualizes the trend of confirmed cases over time, making it easier to see how cases have risen or fallen on a daily basis across different regions

Waterfall Chart



Waterfall Chart: The waterfall chart demonstrates the progression of confirmed cases by province/state, visually showing how each region contributes to the overall number of cases

COMPLETE DASHBOARD:



Conclusion

Through this experiment, we successfully created an interactive dashboard that visualizes COVID-19 data using various advanced and basic charts. The word chart identified regions with the highest confirmed cases, while the box and violin plots helped understand the distribution and relationship between confirmed cases and deaths across countries. The 3D chart provided a comprehensive view of confirmed, death, and recovered cases. Line and waterfall charts effectively depicted the progression of cases over time and by region. Overall, these visualizations provided valuable insights into the spread of the disease, helping to better understand its trends and patterns, crucial for healthcare decision-making and analysis.