Covid-19 Project Dhiman Sarkar MS Business Analytics '21 Loyola Marymount University Los Angeles, CA

- I. What information do you want to get out of the dataset on COVID 19 that would be useful?
  - Modified All State History (indicating Daily Total Tests, Daily Negative, Daily Deaths)
  - Death Ratios and Positive Ratios filtered by state and month
  - Sum of Daily Positives, Sum of Daily Negatives, Sum of Daily Total Tests filtered by state and month
  - Recovery rate
  - Total statewide positives results, and deaths categorized by specific calendar dates
- II. Who would benefit from such information and how?
  - State residents this information would give them awareness of the gravity of the situation, leading them to take appropriate safety measures.
  - Health department for each state helps when determining and enforcing regulations for residents.
  - Institutions and businesses help decide reopening dates and maximum occupancy.
  - Businesses helps make dynamic changes in the standard operating procedures.
  - Pharmaceutical and medical gear companies helps determine which and how many products to develop.
  - Pharmacies helps manage inventory and stock for the required medical supplies.
  - Supply chain companies helps project future orders in order to meet rising demands.
  - Companies suffering from delays in timeline with product and service release (e.g. Apple, entertainment industry, sporting events).
- III. What sort of visualizations (some rough ideas) would be useful for a decision maker and how would they enhance the understanding of the data that could not be gained from just the numerical representations?
  - Line graphs
  - Tree maps
  - Histograms
  - Maps
  - Side-by-side/multiple bar charts

These visualizations would aid in understanding trends in the rise and fall of the COVID cases, death rates, survival rates, and the proportion of positive to negative cases. They would also provide prescriptive measures to direct the future trajectory of events (e.g. formulating measures to minimize the spread of COVID, meeting increasing requirements of medical supplies).