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June 29, 2020

BAN 530

Project Scope

**Determining Aid Recipients for COVID-19 Containment**

In this project, I aim to determine the regions of the world as well as the regions of the USA struggling most with the containment of the 2019 Coronavirus. This global pandemic has affected people across the globe. Due to a number of factors, including long incubation time, asymptomatic transmission, and general unpreparedness on a local level, its spread has created dire consequences for the global populace. Some countries have managed to stem the outbreak fairly well, keeping hospitals from being completely overwhelmed with COVID-19 cases [Bremmer, 2020]. Other countries, such as Brazil [Reuters, 2020] and the United States [Maxouris McLaughlin, 2020], continue to struggle with containment.

Regions with poor resource management or ineffective leadership are unlikely to have as effective of a defense against this pandemic as others. This project will identify those most deserving of support programs and outside aid in order to determine proper actions to help stop the virus’s spread. This is a decision that affects the entire world, as the virus’s lifespan is often unaffected by the weakest methods of controlling it.

Knowing which regions of the world and of the USA are failing to contain the pandemic is important. Even when quarantines are lifted, the virus can still be a danger if picked up in large numbers from these areas. Travel restrictions may be necessary, or strict quarantine measures should be mandated. Opening the entire US up once case numbers reach a reasonable amount can be catastrophic if just one area of the country is still struggling.

**Data for Analysis**

The datasets used for this project contain a variety of observations from the global level down to local regions. Data collected consists of daily records of confirmed cases, deaths, recoveries, and still-active cases from January 22 to June 23, 2020. Records for 187 countries are available, with detailed, day-by-day cases as well as cumulative totals. In addition, many countries have been separated into various counties/regions for deeper analysis, including all territories and each of the 50 states in the US.

The datasets are rather large, with 154 days of records for each observed location. There are several missing fields from the Worldometer dataset, which gives the last updated statistics for each country. It seems clear that they are meant to be zeroes. Some countries appear to be missing as well, most notably China in the cumulative dataset; China was the epicenter of the pandemic at its inception. China is included in the other datasets, but there may be other countries missing from the data. Also included in the data are a number of cruise ships that were out of home territory at the time of their own onboard outbreaks. As such, they have missing fields for location identification.

These datasets do not indicate any potential causes for cases or deaths, just the raw numbers. This would make it difficult to determine what kind of aid to provide underprepared regions for maximum effect, but further external analysis should be able to yield some helpful information in this regard once the specific regions have been identified.

US countywide data does not include recovered or new cases, only confirmed cases and deaths. This can be transformed into the proper data, but it will be additional work. Another modification will need to be the inclusion of US regions based on states. I plan to identify the worst-off regions of the US, but this data isn’t readily available like the WHO’s world regions is.

# References

Bremmer, I. (2020, June 12). The Best Global Responses to COVID-19 Pandemic. *TIME*. Retrieved from https://time.com/5851633/best-global-responses-covid-19/

Maxouris, C., & McLaughlin, E. C. (2020, June 28). Only two US states are reporting a decline in new coronavirus cases. *CNN*. Retrieved from https://www.cnn.com/2020/06/28/health/us-coronavirus-sunday/index.html

Reuters. (2020, June 20). Brazil passes 1 million coronavirus cases with no end in sight. *CNBC*. Retrieved from https://www.cnbc.com/2020/06/20/brazil-passes-1-million-coronavirus-cases-with-no-end-in-sight.html