Global Covid-19 analysis

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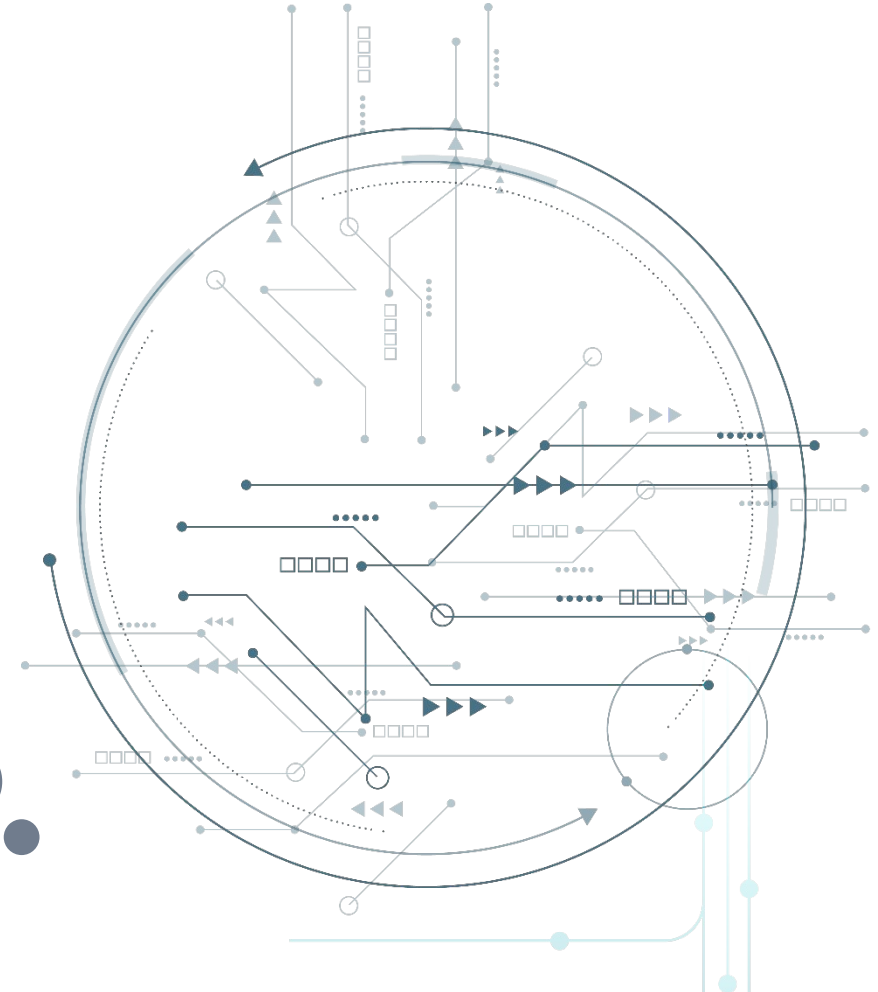

Dataset Introduction

Why did we choose this?

COVID-19 has spread rapidly worldwide since the end of 2019, which has caused a severe economic loss and population death. Therefore, we want to choose data that is related to COVID-19 as our analysis target for this project. Being a serious pandemic event, the only solution tend to be vast vaccination. We want to look at both COVID cases data and the vaccination data to not only let us know the global progress of treating the disease, but also give potential suggestions for accelerating the pace.

Where did you get this from?

This dataset came from the following website:

https://raw.githubusercontent.com/datasets/covid-19/master/data/countries-aggregated.csv

The dataset contains five Attributes: Date, Country, Confirmed, Recovered and Deaths.

And it has 65896 rows in total.

```
Date,Country,Confirmed,Recovered,Deaths
2020-01-22,Afghanistan,0,0,0
2020-01-23,Afghanistan,0,0,0
2020-01-24,Afghanistan,0,0,0
2020-01-25,Afghanistan,0,0,0
2020-01-26,Afghanistan,0,0,0
2020-01-27,Afghanistan,0,0,0
2020-01-28,Afghanistan,0,0,0
2020-01-29,Afghanistan,0,0,0
2020-01-30,Afghanistan,0,0,0
2020-01-31,Afghanistan,0,0,0
2020-02-01,Afghanistan,0,0,0
```

Where did you get this from?

This dataset came from the following website:

https://www.kaggle.com/gpreda/covid-world-vaccination-progress

	country	iso_code	date	total_vaccinations	people_vaccinated	people_fully_va
0	Algeria	DZA	2021-01-29	0.0	NaN	
1	Algeria	DZA	2021-01-30	30.0	NaN	
2	Argentina	ARG	2020-12-29	700.0	NaN	
3	Argentina	ARG	2020-12-30	NaN	NaN	
4	Argentina	ARG	2020-12-31	32013.0	NaN	
...	...	...	...	...	...	
1929	Wales	NaN	2021-01-27	336745.0	336071.0	
1930	Wales	NaN	2021-01-28	362970.0	362253.0	
1931	Wales	NaN	2021-01-29	378950.0	378200.0	
1932	Wales	NaN	2021-01-30	404249.0	403463.0	
1933	Wales	NaN	2021-01-31	417147.0	416306.0	

The dataset contains 16 Attributes and 1934 rows:

- Country
- Country ISO Code
- Date
- Total number of vaccinations
- Total number of people vaccinated
- Total number of people fully vaccinated
- Daily vaccinations (raw)
- Daily vaccinations
- Total vaccinations per hundred
- Total number of people vaccinated per hundred
- Total number of people fully vaccinated per hundred
- Number of vaccinations per day
- Daily vaccinations per million
- Vaccines used in the country
- Source name
- Source website

Interests

Interests

In this dataset, it contains the global information of the covid-19, which could tell us the distribution of this disease for each country.

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Also, this dataset is very useful for those people who come from different countries, which could let us keep abreast of the disease in our country.

Visual Techniques & Principle

Vis Techniques & Principle

1. Interactive Scatter Plot on Global Map
   - Visual encoding
     - Hue -- vaccine type
     - Size -- # of people vaccinated
   - Brush and Select
     - Highlight selected area
2. Line graph with prediction (Global and Country)
   - Gestalt Principle
     - Continuity
     - Proximity

Vis Techniques & Principle cont.

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Choropleth Map Compare Cases and Vaccinations

- Visual Encoding
  - Hue
- Gestalt Principle
  - Compare

Insights

Insights

1. Overall trend of COVID-19
2. Identify area that are highly affected
3. Identify area that need more vaccine
4. Potential date to reopen stores
5. Potential date to end travel ban
6. More regulations...

Thank you!

Any Question?