

COVID-19 Interactive Analysis Dashboard

Inspired by youtuber "Data Science with Harshit"

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Introduction

What is COVID-19? Coronaviruses are a large family of viruses that may cause respiratory illnesses in humans ranging from common colds to more severe conditions such as Severe Acute Respiratory Syndrome (SARS) and Middle Eastern Respiratory Syndrome (MERS).¹ 'Novel coronavirus' is a new, previously unidentified strain of coronavirus. The novel coronavirus involved in the current outbreak has been named SARS-CoV-2 by the World Health Organization (WHO).³ The disease it causes has been named "coronavirus disease 2019" (or "COVID-19").⁴

COVID-19 Confirmed/Death/Recovered cases by countries

After cleaning the data on COVID-19 on all the countries in the world and arrange them by Confirmed/Death/Recovered we find the table in fig1 where the US is the most affected by this pandemic.

country	last update	lat	long	confirmed	deaths	recovered	active	hospitalized	mortality rate	act
US	2021-05-20 08:25:04	38.000000	-95.000000	1,042,141,000	107,000	217,000,000	825,000	100,000	0.01	1,042,141,000
Spain	2021-05-20 08:25:04	40.000000	0.000000	1,042,141,000	107,000	217,000,000	825,000	100,000	0.01	1,042,141,000
Italy	2021-05-20 08:25:04	41.900000	12.500000	1,042,141,000	107,000	217,000,000	825,000	100,000	0.01	1,042,141,000
France	2021-05-20 08:25:04	46.000000	2.000000	1,042,141,000	107,000	217,000,000	825,000	100,000	0.01	1,042,141,000
Germany	2021-05-20 08:25:04	50.000000	10.000000	1,042,141,000	107,000	217,000,000	825,000	100,000	0.01	1,042,141,000

FIGURE 1 – Cleaning Data and arrange them by countries

Manipulating The Data

The worst hit countries

- x = "countries".
- y = "confirmed cases".
- n = number of countries to display

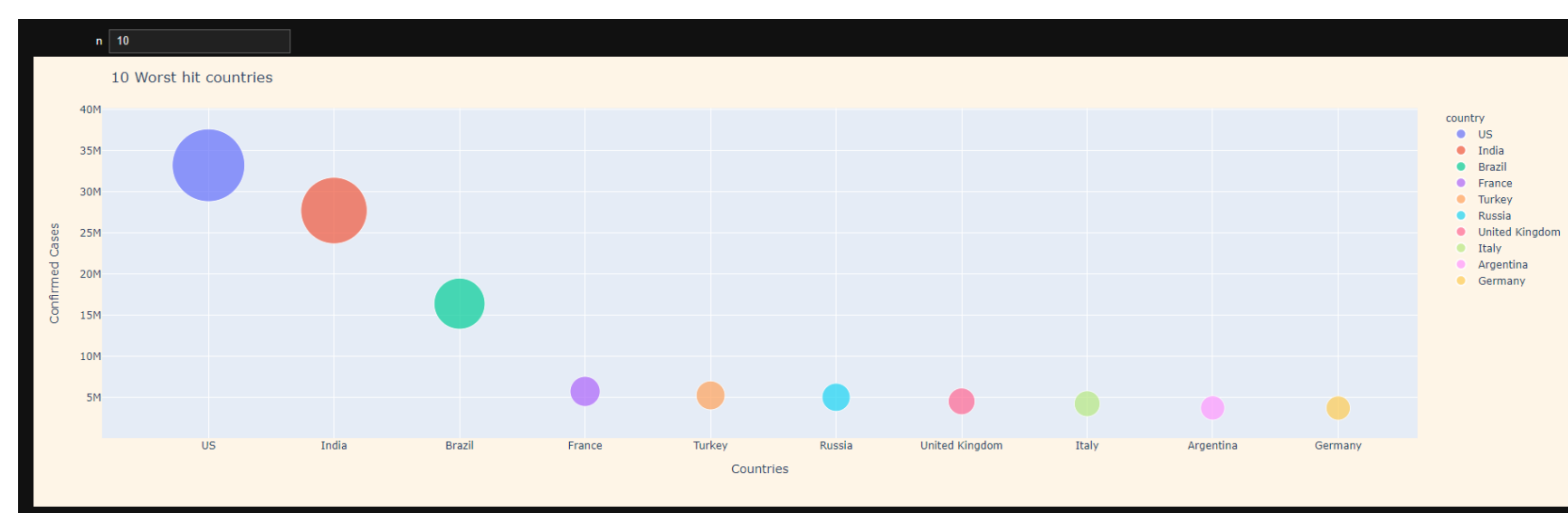


FIGURE 2 – Slide to check for the worst hit countries

Check the details of your country or the World

By using this graph we can check the details on the world or any country in it by typing its name in the variable country and choosing whether to see the confirmed, death or recovered cases

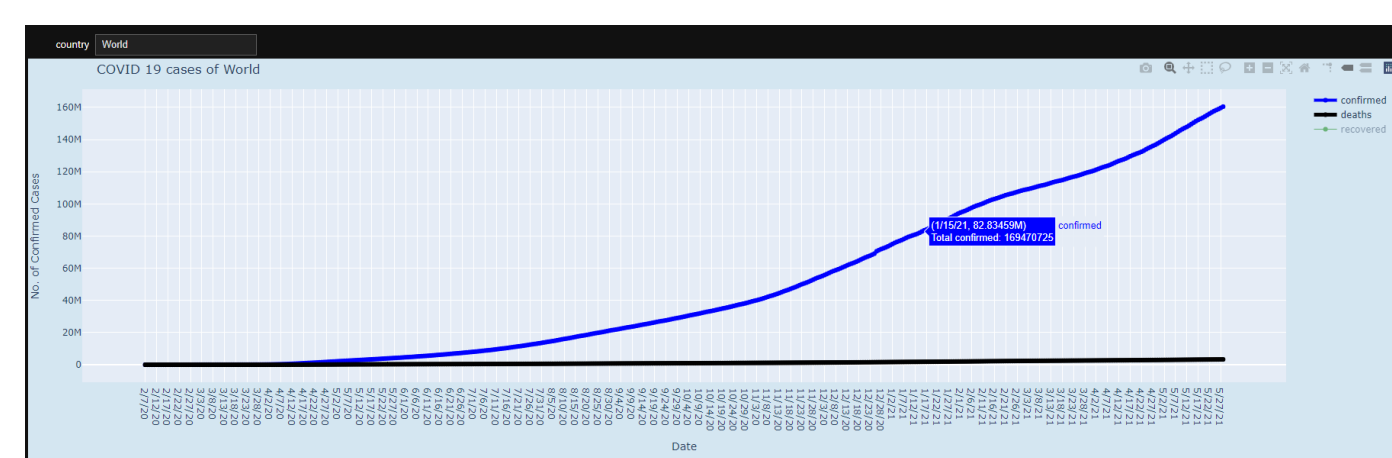


FIGURE 3 – Check the details of your country or the World

Top worst hit countries

Through these graphs we can check the n worst hit countries by this pandemic and how much it has affected and compare it to other countries.

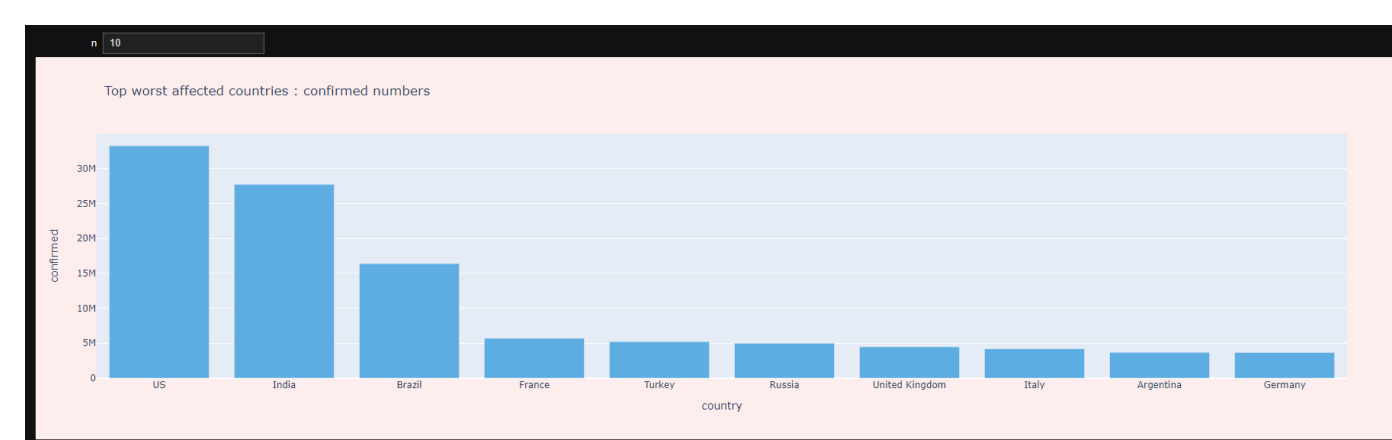


FIGURE 4 – Top worst hit countries - Confirmed cases

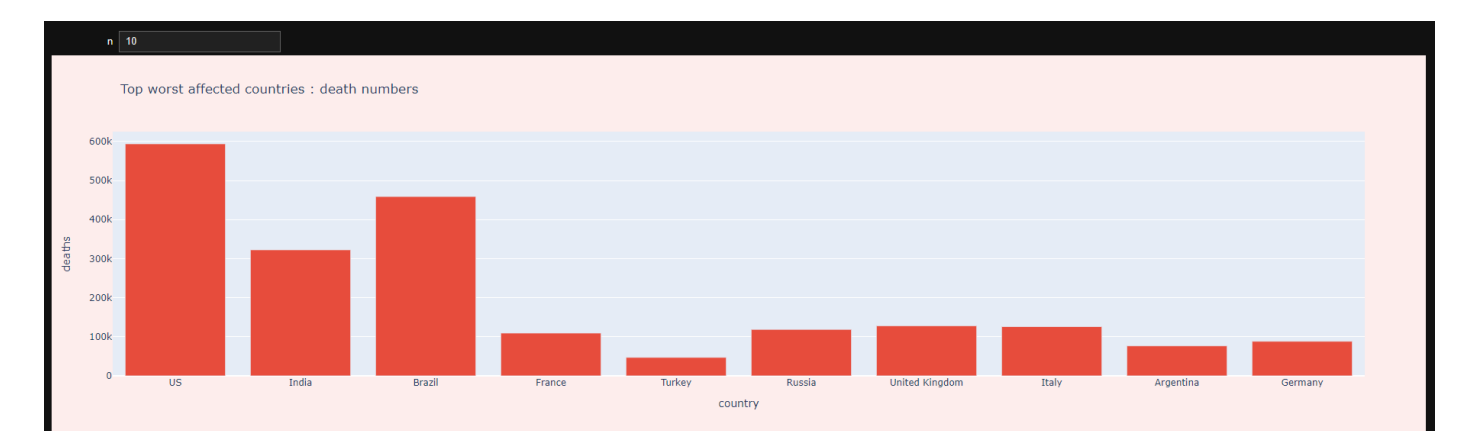


FIGURE 5 – Top worst hit countries - Death cases

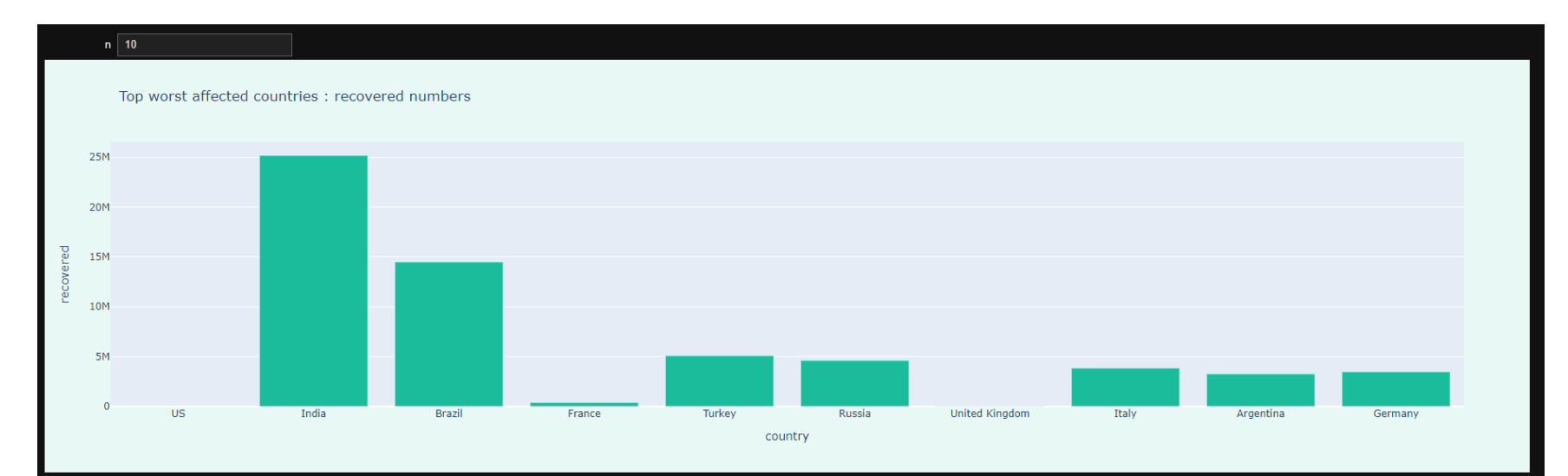


FIGURE 6 – Top Worst hit countries - Recovering cases

Conclusion

This dashboard helps us see how much this pandemic has affected the world and how many lives we lost to it and even see how it has affected each and every one of the 193 countries and predict whether this pandemic is about to come to an end or is it going to keep rising.

Perspectives

To complete this dashboard i used youtube as a reference to complete the code and datacamp to understand the librairi pandas and i used VOILA as a way to presente the dashboard in jupyter notebook. The libraries used in this project are : ipywidgets , IPython , numpy , pandas , matplotlib , plotly , folium , seaborn.

Bibliography

<https://github.com/CSSEGISandData/COVID-19>