



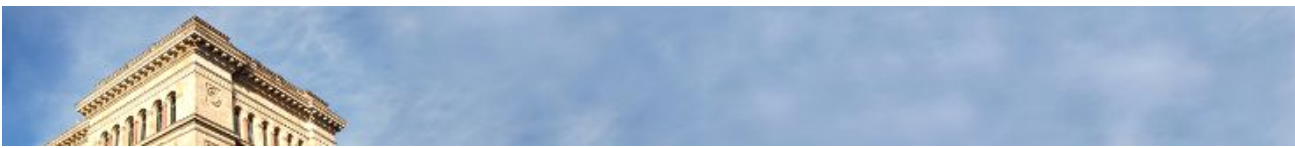
Corona Virus and its Impact on the global Economy

First Presentation | Programming Project: Data Science in Python and R | SS 2020



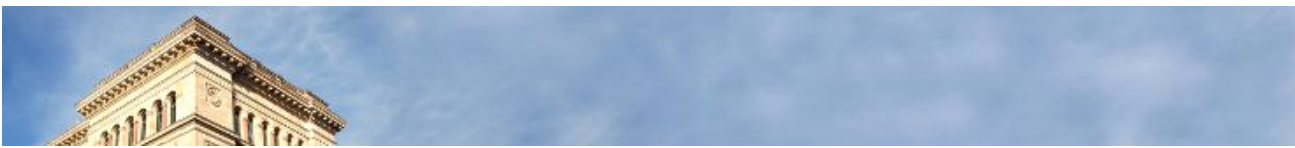
Background

- Not Just a virus
- Lockdown and its effect on the Economy
- Avoiding an economic Crisis and still save lives



Not just a virus

- What started as a virus outbreak in December 2019 in a small Food Market in China turned out to be global Crisis .
- The Governments around the World started Lockdowns.
- After a few Weeks in the Lockdown the Economies started getting worse .



Lockdown and its Impact on the Economy

- As the Governments started with the Lockdowns, a lot of People felt that they might find themselves soon unemployed .
- A lot of Business Owners could not afford to still pay their Employees without help from the Governments
- The Governments found that a lot of Companies would not survive for long time this way.

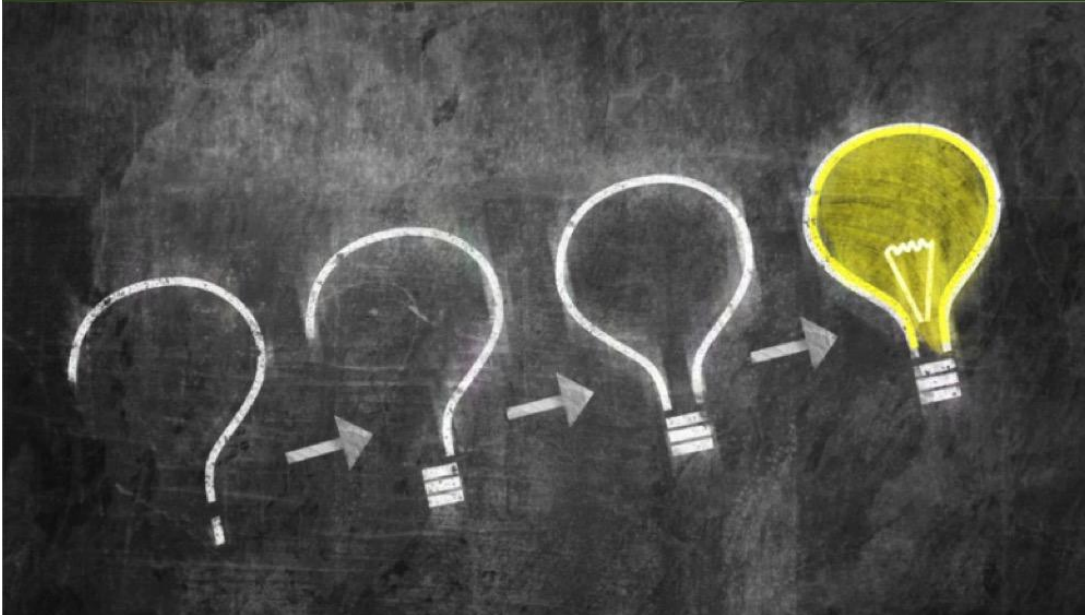


Avoiding an economic Crisis and still save Lives

- The Governments started doing steps to bring the Life of its People normal as soon as the number of Infections started to drop
- Each Government had to decide for itself depending on how long Lockdown can it's Economy "afford".
- From a complete long Lockdown to a short one the impacts on the Economy and the number of fatalities differ.



The research question





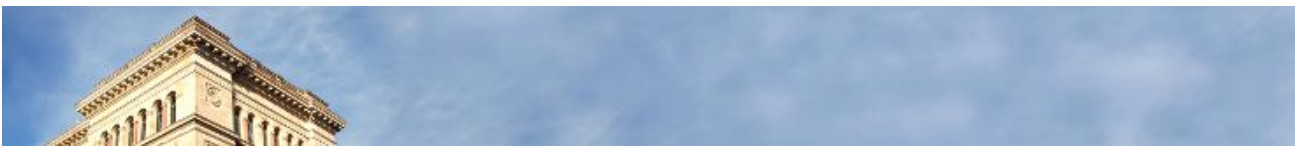
Research Question

“Which country..



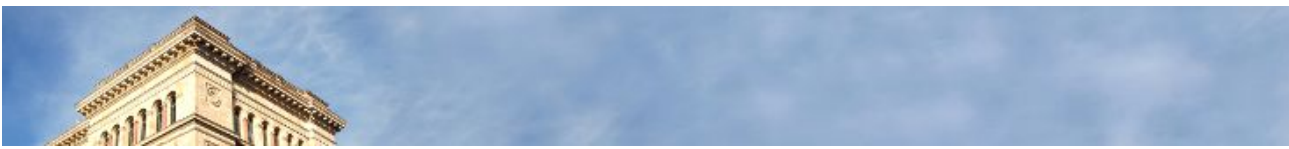
Research Question

“Which country could reach the lowest coronavirus mortality rate..



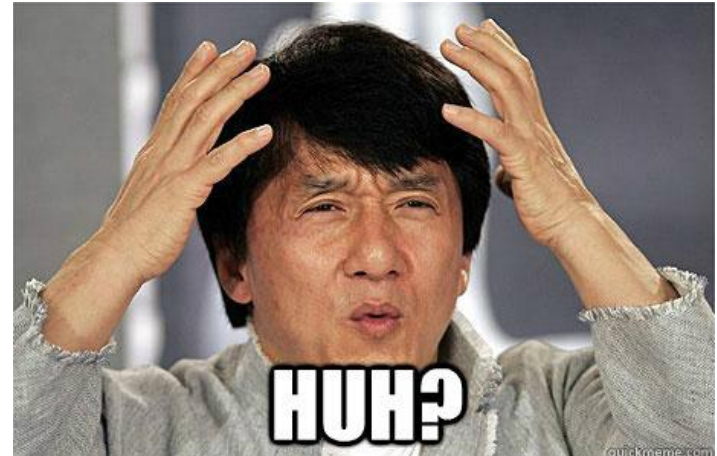
Research Question

“Which country could reach the lowest coronavirus mortality rate, while remaining economically stable(highest GDP growth rate)?”



Research Question

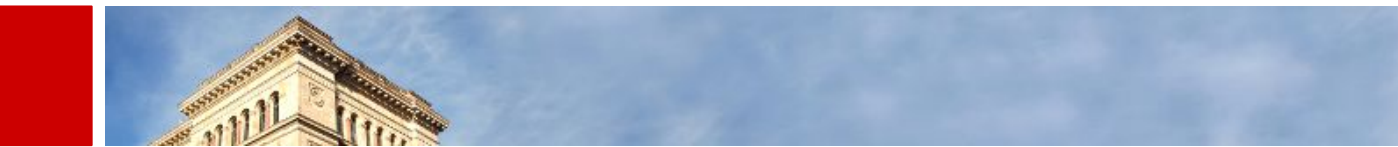
“Which country could reach the lowest coronavirus mortality rate, while remaining economically stable(highest GDP growth rate)?”





Research Questions





Research Question

Who “played it better”..?



Research Question

Who “played it better”..

..in the game of saving the most human lives?

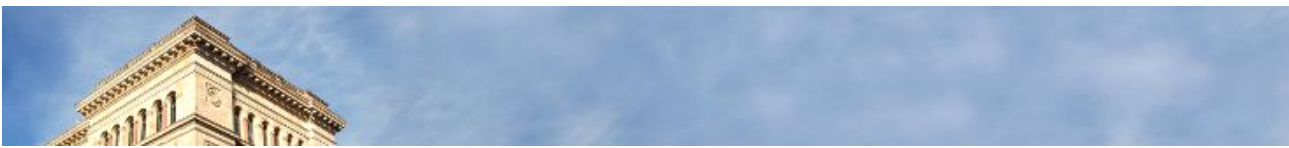


Research Question

Who “played it better”..

..in the game of saving the most human lives?

**..in the game of maintaining their economical
state (GDP)?**



Research Question

Who “played it better”..

..in the game of saving the most human lives?

..in the game of maintaining their economical state (GDP)?

..in both games?





Research Question

Problem:

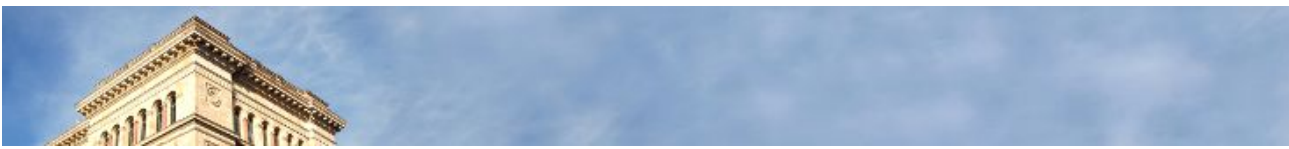




Research Question

Problem:

-Two different aspects.



Research Question

Problem:

-Two different aspects.

Idea: define a factor

Ex: GDP Growth in %
Percentage of death cases

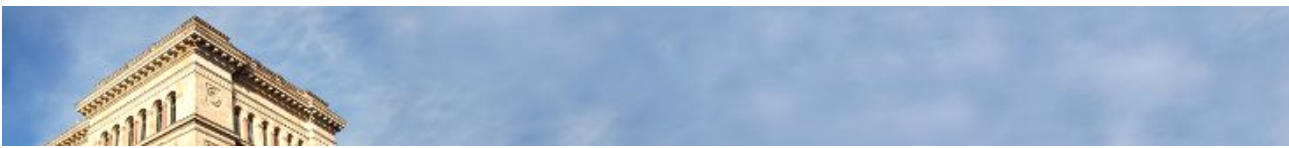




Research Question

Problem:

- Two different aspects. ✓
- How to fairly pick a winner?



Research Question

Problem:

- Two different aspects. ✓
- How to fairly pick a winner?

Country with the highest factor wins.

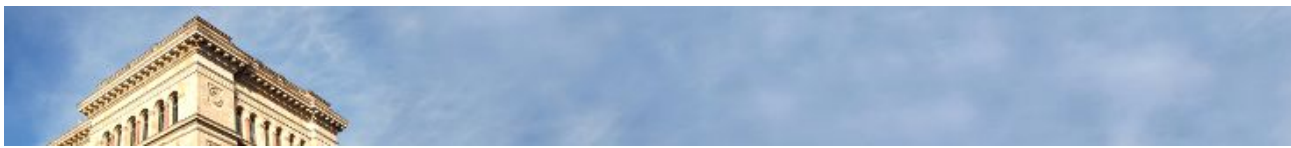




Research Question

Problem:

- Two different aspects. ✓
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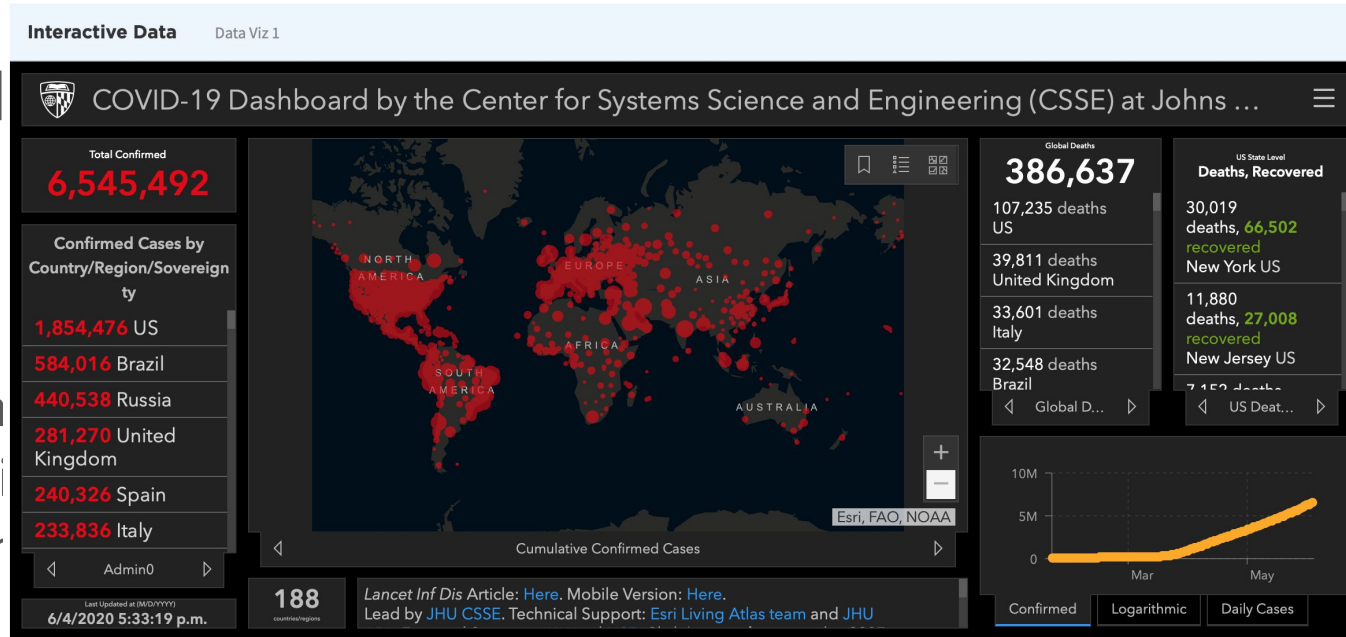


Datasets

Covid



- Goal
- Design
- Marketing



Cases
ring

Datasets

GDP GR

→ So
[http://](#)

- Provide
the IM



[CHN/IRN](#)

practices at
nity



Covid-19 Dataset



time_series_covid19_confirmed_global.csv

Updated: March 24, 2020

Original wide form (new column for each day)

▼ DOWNLOAD

MORE



time_series_covid19_deaths_global.csv

Updated: March 24, 2020

Original wide form (new column for each day)

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MORE



time_series_covid19_recovered_global.csv

Updated: March 27, 2020

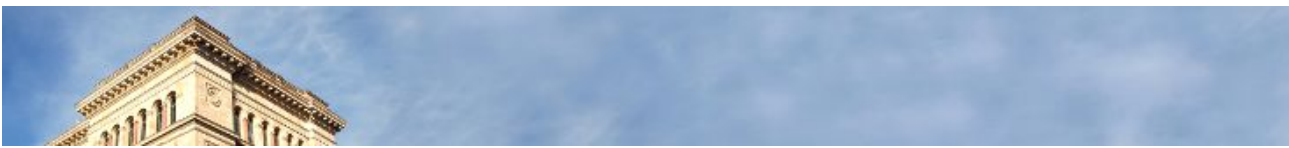
Original wide form (new column for each day)

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MORE

Province/State	Country/Region	Lat	Long	1/22/20	1/23/20	1/24/20	1/25/20	1/26/20	1/27/20	1/28/20	1/29/20	1/30/20
	Afghanistan	33.0	65.0	0	0	0	0	0	0	0	0	0
	Albania	41.1533	20.1683	0	0	0	0	0	0	0	0	0
	Algeria	28.0339	1.6596	0	0	0	0	0	0	0	0	0
	Andorra	42.5063	1.5218	0	0	0	0	0	0	0	0	0
	Angola	-11.2027	17.8739	0	0	0	0	0	0	0	0	0
	Antigua and Barbuda	17.0608	-61.7964	0	0	0	0	0	0	0	0	0
	Argentina	-38.4161	-63.6167	0	0	0	0	0	0	0	0	0
	Armenia	40.0691	45.0382	0	0	0	0	0	0	0	0	0
Australian Capital Territory	Australia	-35.4735	149.0124	0	0	0	0	0	0	0	0	0
New South Wales	Australia	-33.8688	151.2093	0	0	0	0	0	0	0	0	0
Northern Territory	Australia	-12.4634	130.8456	0	0	0	0	0	0	0	0	0
Queensland	Australia	-28.0167	153.4	0	0	0	0	0	0	0	0	0
South Australia	Australia	-34.9285	138.6007	0	0	0	0	0	0	0	0	0
Tasmania	Australia	-41.4545	145.9707	0	0	0	0	0	0	0	0	0
Victoria	Australia	-37.8136	144.9631	0	0	0	0	0	0	0	0	0
Western Australia	Australia	-31.9505	115.8605	0	0	0	0	0	0	0	0	0
	Austria	47.5162	14.5501	0	0	0	0	0	0	0	0	0
	Azerbaijan	40.1431	47.5769	0	0	0	0	0	0	0	0	0

3 Datasets : Daily updates



GDP Growth Dataset

Real GDP growth (Annual percent change)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	
Afghanistan	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Albania	2,7	5,7	2,9	1,1	2	-1,5	5,6	-0,8	-1,4	9,8	-10	
Algeria	-5,4	3	6,4	5,4	5,6	5,6	-0,2	-0,7	-1,9	4,8	0,8	
Angola	2,4	-4,4	0	4,2	6	3,5	2,9	4,1	6,1	0	-3,5	
Antigua and Barbuda	8,2	3,8	-0,1	5,4	10,2	7,6	11,5	6,6	5,2	5,3	3	
Argentina	0,7	-5,7	-3,1	3,7	2	-7	7,1	2,5	-2	-7	-1,3	
Armenia	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Aruba	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Australia	2,9	4,1	0,1	-0,5	6,3	5,5	2,4	4,9	4,3	4,6	1,5	
Austria	2,3	-0,1	1,9	2,8	0,3	2,2	2,3	1,7	1	3,9	4,3	
Azerbaijan	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data	no data
Bahamas, The	7,1	-2,9	6,3	6,8	2,4	4,1	2,6	3,7	2,3	2,3	1,1	
Bahrain	7,5	2,8	6,4	7	4,2	10,0	0,5	1,2	6	1	3,5	

From 1980 - 2021

Represent a country's economic activity

PROJECT PIPELINE

1

Finding Datasets

We have chosen the Covid-19 Dataset which will provide the data for infection, mortality and recovery rate. Along with the GDP Dataset that will provide the necessary data for calculating the effect on the GDP

2

Country sampling

We will then sample some countries which have managed to #FlattenTheCurve and compare how long was their lockdown period and when did they start it.



3

Data Inspection

From these sampled countries, we will then start inspecting the death rate, lockdown period, and the change that happened in their GDP



4

Define the Factor

Based on the previous analysis, we will then start proposing factors to measure the relationship between lockdown period, death rates and how the GDP was affected in 2020



5

Who won the Game ?

Finally, using the proposed factor we will be able to determine which country has managed to reduce the effect of Covid-19 in regards of mortality rates along with saving their GDP from a drastic hit

