Preliminary Report

Group Members

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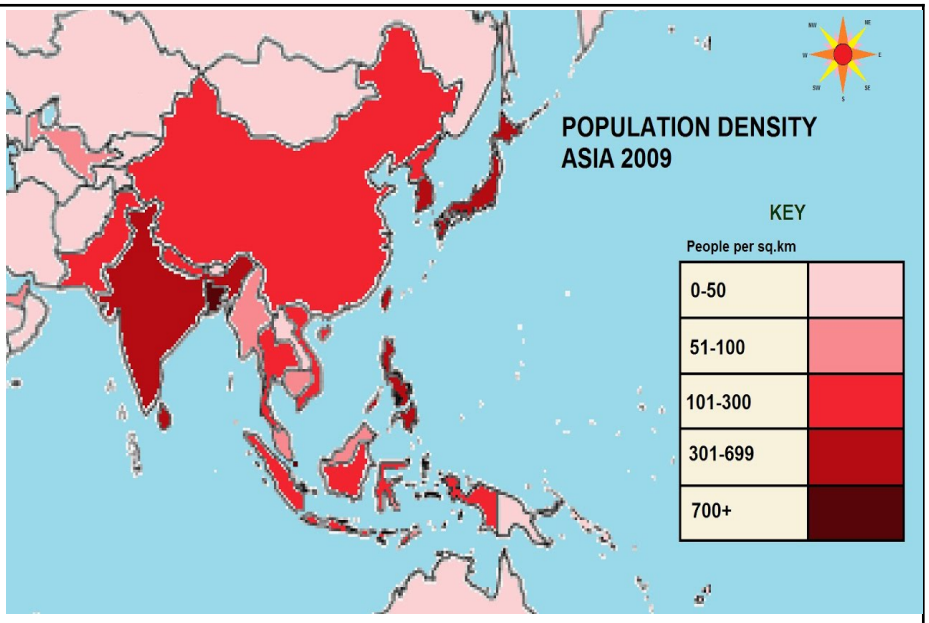
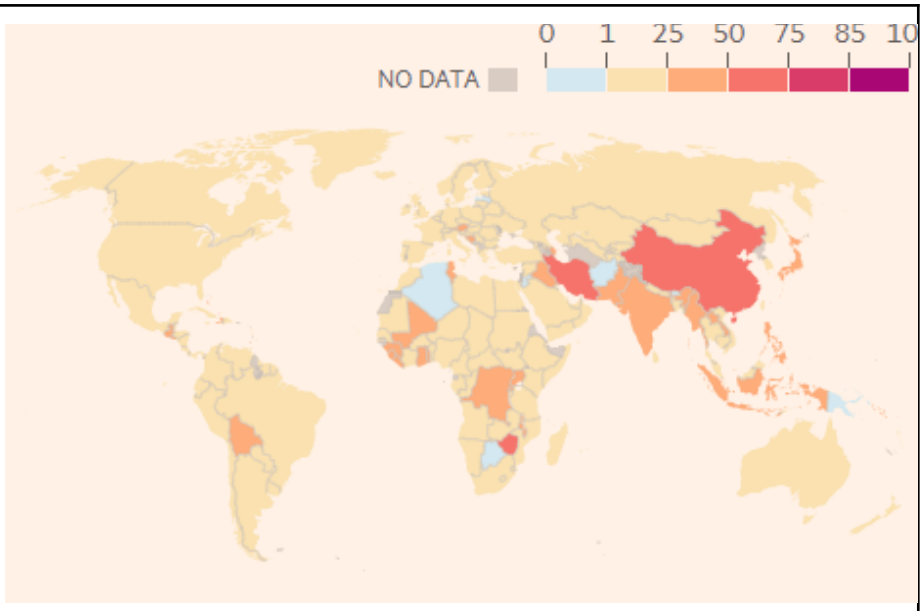
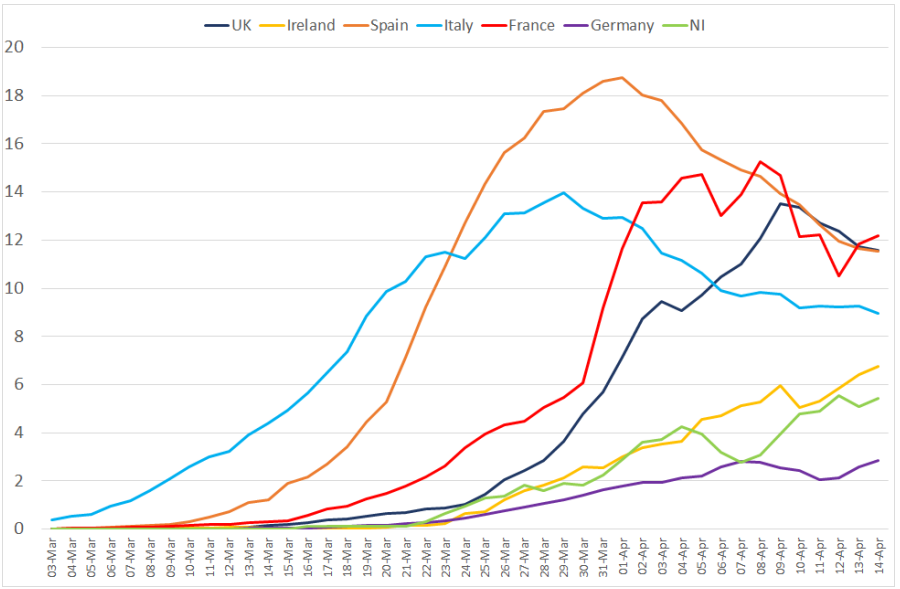
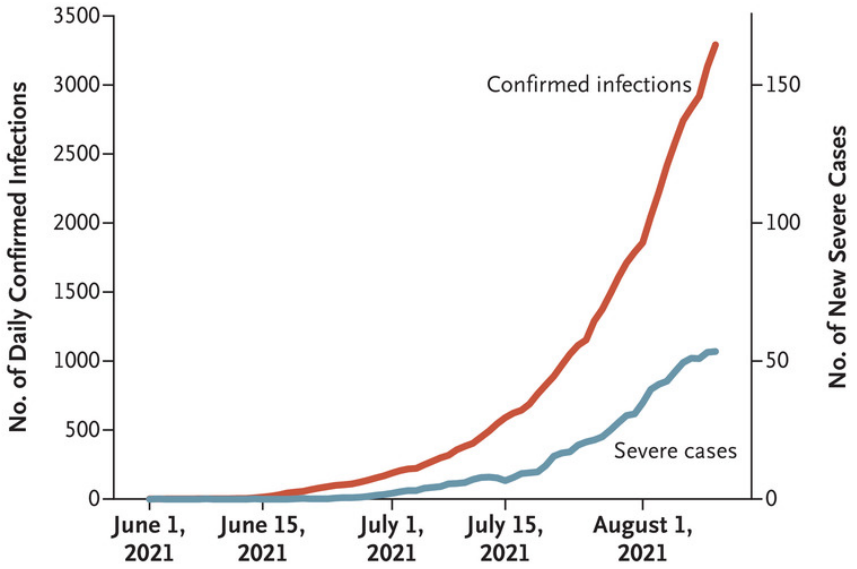
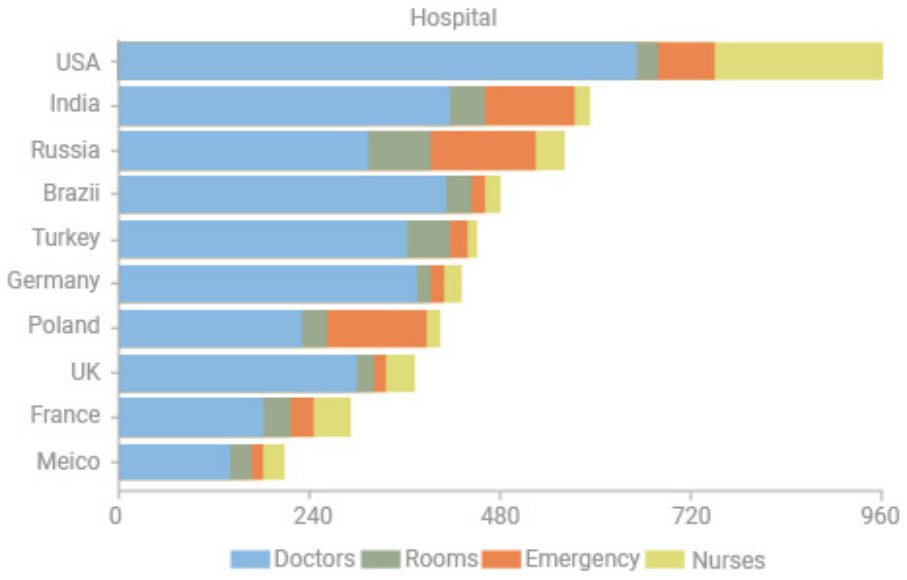
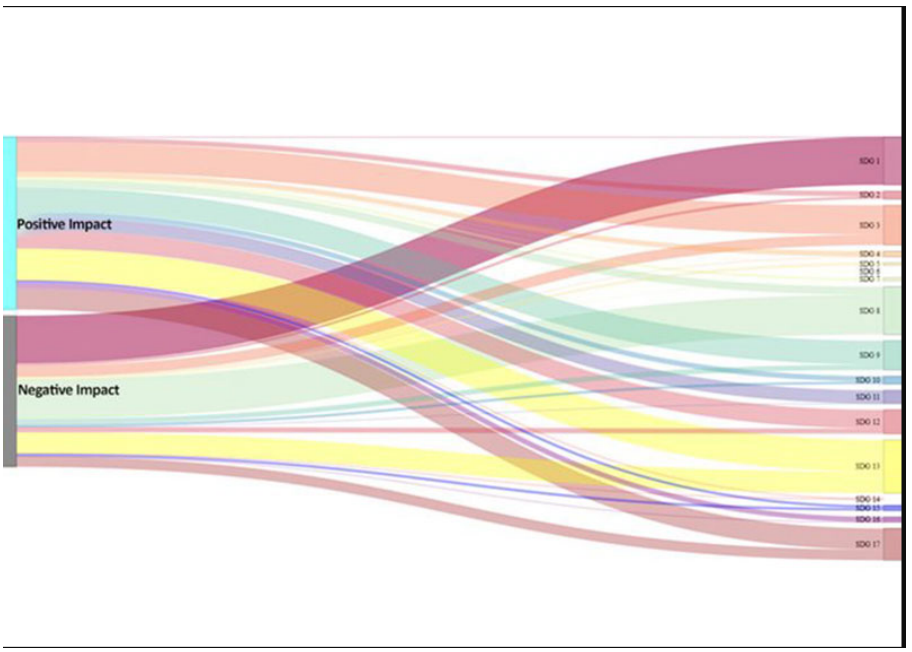
Abstract

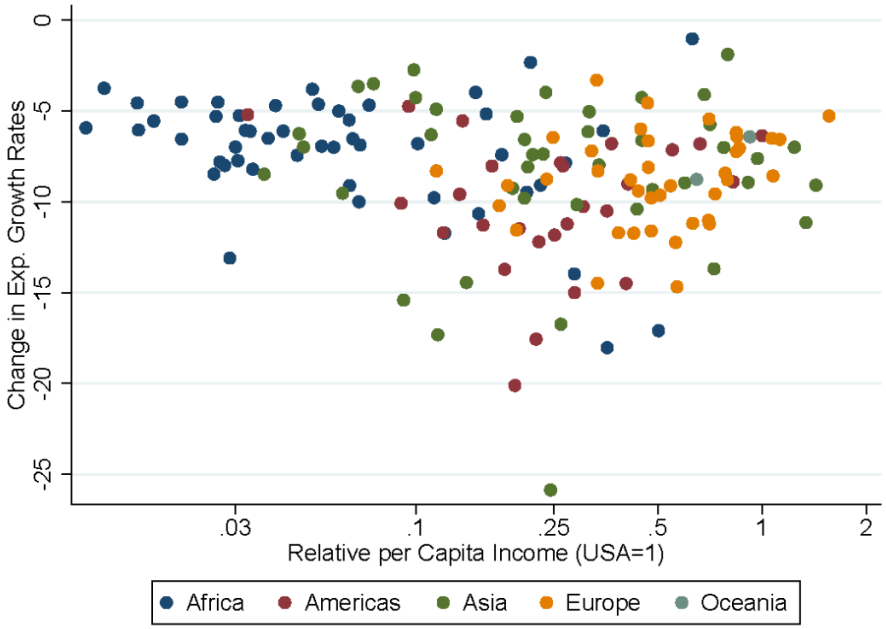
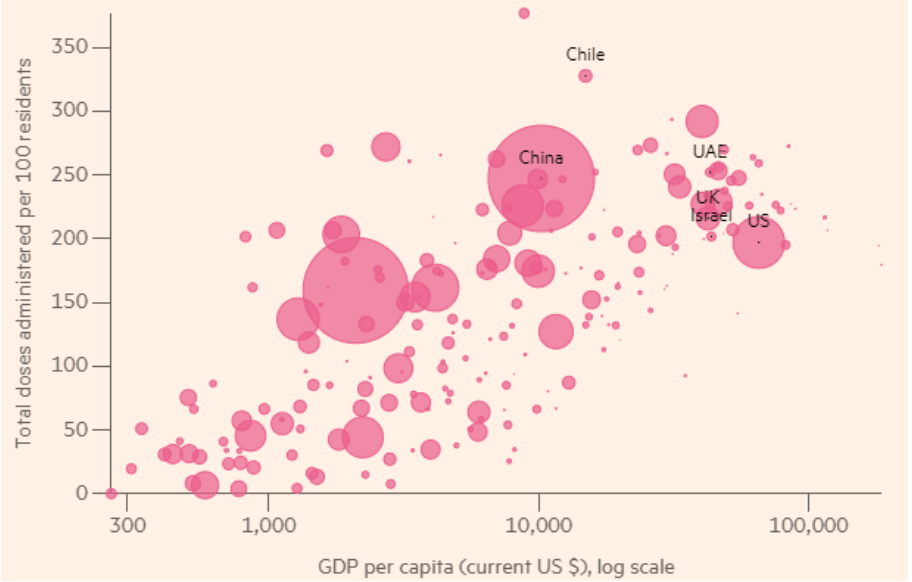
There are 48 countries in Asia and we want to visualise how fast COVID-19 was spread around these countries. We will try to find variables that affect most population density, gdp or etc. Also, we want to depict the impact of vaccination to the spread of COVID-19. Below are the ideas we want to explore with the dataset of COVID-19. As there are already challenges about the availability of data in the past three years we are focusing on cleaning the data accordingly.

Choropleth map Asian countries Showing the geographical distribution with different colours representing different levels of intensity Input selection option that allows the user to pick for the 3 years: **a)** vaccinated cases **b)** deaths reported per country **c)** ratio of death/vaccination An animated slider that governs time over the monthly basis	

Choropleth map for Lockdowns around the Asian countries by mapping the stringency index of each country. The nine metrics used to calculate the Stringency Index are: ● school closures; ● workplace closures; ● cancellation of public events; ● restrictions on public gatherings; ● closures of public transport; ● stay-at-home requirements; ● public information campaigns; ● restrictions on internal movements; ● and international travel controls. A higher score indicates a stricter response (i.e. 100 = strictest response) It can either be a **line chart** as well. Not sure which one to prefer.	

Line chart for COVID-19 progress in all the Asian countries. By default top 5 countries with the most cases would be highlighted and the rest would be greyed. User would be able to select all the countries and will have mouse interactivity to see the specific country	
Line chart for correlation between new cases and vaccinated people for all the Asian countries but by default we will highlight 5 countries with lowest gdp. Users would have the option to select all the countries as well and be able to have hovering interactivity.	

Stacked bar chart For total population in terms of percentage with categories showing total vaccinations, people vaccinated, people fully vaccinated and total boosters Link for data reference	
Sankey Diagram of Flow of cases and deaths by country: Show how cases and deaths are flowing by country, this will help to identify the countries that are most affected by the pandemic. This can also be used to identify the countries that have managed to control the spread of the virus better.	

Scatter plots showing the relationship between different variables, such as the number of cases and the number of deaths of a countries with most death with categories vaccinated, population density, gdp per capita, handwashing facilities, hospital beds per thousand, life expectancy User will be able to select among the variables on x and y axis to see these relationships Or change the values to some other parameters like GDP, etc.	
Bubble charts showing the relationship between three variables, such as the number of cases, deaths, and the population size of a country	

Datasets

1. https://github.com/owid/covid-19-data/tree/master/public/data
   Dataset that was collected during the pandemic consists of data about confirmed cases and deaths, hospitalisation and intensive care unit (ICU) admissions, vaccination, etc. Dataset covers almost all countries and it is updated on a daily basis.
2. https://gist.github.com/hrbrmstr/94bdd47705d05a50f9cf?short_path=a2899d2
   Geojson file of countries located in Asia.

Style Guide

We found the following guideline to better represent visualisations for the web. We intend to follow that in our project.
https://github.com/amycesal/dataviz-style-guide/blob/master/Sunlight-StyleGuide-DataViz.pdf

Resources

https://ig.ft.com/coronavirus-vaccine-tracker/
https://ig.ft.com/coronavirus-chart/
https://ig.ft.com/coronavirus-lockdowns/
https://www.theguardian.com/world/coronavirus-outbreak
https://coronavirus.jhu.edu/map.html
https://www.adda247.com/school/how-many-countries-in-asia/