

COVID Visualization Dashboard

The dashboard is hosted on shinyapps.io, please click the link here

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Welcome!

Thank you for visiting our repository! This document (README.md) will have all the general information you need to know about our dashboard. You can either scroll down or click from the links below to jump to a specific section:

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Overview {

This repository hosts the dashboard for COVID-19 data released by *Our World in Data* which is present in this repository and are completely open access under the Creative Commons BY license. The motivation, purpose, description of data and research question can be found in our proposal.

Project Motivation

This R-based dashboard is designed to provide travelers with COVID-19 information for them to assess their risk of contracting the disease while traveling to different countries. We have designed our dashboard to give the user flexibility to compare the number of cases, deaths and vaccinations percentage from different countries using the drop-down menus on the left. If users are interested to know if countries with similar characteristics have similar COVID-19 statistics, they can use the slider to filter countries based on their GDP and population density. There is also a date slider in the bottom of the dashboard to allow users to select a date interval if they are interested in knowing the progress of the pandemic in its earlier stages.

We are aiming to create 3 types of visualizations for within the dashboard. The first type is line graphs showing the progression of COVID-19 cases, deaths and vaccinations percentages according to the filters applied. The second type is a heatmap of the world map showing the travel stringency index of the world which reflects the strictness of government response due to the pandemic. The last type of visualization is number boxes showing the number of COVID-19 cases, deaths and vaccinations percentages according to the filters applied.

The brief questions answered by this dashboard would be: - As a traveler one would want to know the current COVID stringency situation at the destination country. - Study the impact of COVID on different countries based on GDP and population density. - Study a particular country based on timeline to see how it was impacted over the months due to COVID.

Dashboard Sketch

Get involved

How to run the app locally and make contributions

If you would like to contribute to our project, please read the CONTRIBUTING.md file and then follow these steps: - Ensure that you have R and Rstudio installed on your computer - Fork our repository and clone it onto your computer - Create a new branch (named according to the specifications in the CONTRIBUTING.md file)

To run the app locally: - Open the project (i.e., the app.R file) in Rstudio - Ensure all the necessary packages are installed

```
install.packages(c("shiny", "bslib", "shinythemes", "shinydashboard", "ggplot2", "leaflet", "jsonlite",
```

- Click “Run App”

To propose new changes: - Make your changes to the code in Rstudio - Commit your changes (with an informative commit message) - Push your changes to your fork - Submit a pull request

Places for improvement - Build upon the current map plot and add interactive elements to the plot. - Help in accumulating the missing data on country level and add text box widget for the cases, vaccination percentage and deaths according to the user selection.

Contributing

Interested in contributing? Check out the contributing guidelines. Please note that this project is released with a Code of Conduct. By contributing to this project, you agree to abide by its terms.

License

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