Interactive Data Visualization

Corona-virus Pandemic-Data Visualization

Assignment 5

Shashank, Shreyas, Guru, Vivek, Seena

Presenters:

- Shashank kanakapura Srivatsa
- Shreyas Kottur Shivananda
- Guru Prasad Savandaiah
- Vivek Jaganath
- Seena Mathew

Overview

Introduction:

- o In the month of January 2020, most of the European countries were affected by COVID-19.
- o Due to lack of information, there was much confusion amongst European territory on prevention.
- o German government took the lead and came up with many measures to counter COVID-19.
- o In this project, we are comparing the response of Germany with its European counterparts.

Data Sets:

○ **Data-set 1:**
Name: "Dataset1.csv" From this data-set we infer data to compare the various restriction imposed by the governments in Europe with German government.

○ **Data set 2:**
Name: "owid-covid-data.csv"
This data-set provides information on the total affected cases and total deaths due to corona virus across Europe.

Data Sets:

o **Data set 3:**
   Name: "time_series_covid19_recovered_global.csv"
   From this data-set information regarding the recovered
   COVID cases across Europe is retrieved.

o **Data set 4:**
   Name:
   "acaps_covid19_government_measures_dataset_0.xlsx"
   From this data-set we infer policy milestones information
   regarding the various restrictions imposed by European
   government.

Users and Tasks:

Users:

- o COVID-19 affected patients across Europe.
- o European Travellers
- o Government authorities.
- o Individuals wanting to compare Germans actions vs its European counter-parts.
- o European citizens looking forward for end of the pandemic.

Users and Tasks:

Tasks:

- ○ View information regarding corona cases in European nations.
- ○ View information public life accessibility across Europe.
- ○ Compare COVID-19 response of Germany with other EU nations.

Visualisation:

- o plotly.express has been used to generate the choropleth map of Europe.
- o Line graph representing the affected, death and recovered cases of Germany and the selected European country.
- o Bar graph between dates and chosen policy restriction.
- o Data Table provides information about different measures taken by the government of the selected country.

Interaction:

- Navigation - Zoom, Hoover cursor to display data etc.
- Filter - Select subset of data based on certain factors like date.
- Encoding - Switch from line graph to bar graph and vice-versa.
- Range Slider - TO select the date range for which the data needs to be displayed.

Interaction:

Interaction Operand

- Screen space will be used in accordance with Navigation.
- Data value space will be used in accordance with Filtering.

The End