TEAM TROJAN

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Topic: Making a visualisation of coronavirus spread along latitudes.

Problem Statement:
To make a visualization of the Corona spread along with latitudes to see if there's a correlation between the weather/ latitudes for the virus to spread.

Platforms to be used:
Google Colaboratory, GitHub, Tableau

Dataset source and description:
Datasets:
- CoVID-19 cases across the world, sourced from Kaggle: https://www.kaggle.com/imdevskp/corona-virus-report
- Data on latitudes/ longitudes of countries around the world: https://www.kaggle.com/paultimothymooney/does-latitude-impact-the-spread-of-covid-19/data

Data preprocessing template, libraries and modules:
Will be using python scientific libraries to preprocess the data, clean it using libraries like pandas, numpy etc.

Objectives/ guidelines to keep in mind:
- Segregate all data region-wise.
- Replace the regions column with the corresponding latitudes from the latitudes dataset.
- Find the covariance matrix between the spread and latitudes and try to check if the insights make any sense in the correlation.
- Visually determine the rates of growth in cases in the most-hit and the least-hit regions.
- Predict the growth of cases and check if latitudes and growth are correlated; whether latitudes behave as a deciding factor in prediction.

Data Analysis techniques and Visualisation:
We may use python libraries like folium, matplotlib, seaborn etc. for producing good visualizations according to the problem statement and data availability. Also, visualization on maps and on Tableau will be carried out.