COVID-19: The Global Case Study

Proposal Document

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**Proposal**

In December 2019, an outbreak of pneumonia was detected in Wuhan (Hubei, China) whose cause was not detected initially. The cause was quickly determined to be novel coronavirus, namely SARS-CoV-2 [1]. The virus has spread worldwide causing death to huge number of people around the globe. In this project, we will analyze the pandemic characteristics of all cases reported in the world as up-to the date and derive the conclusion on how long it takes to recover from the pandemic.

We will obtain the required data from the end-point: <https://api.statworx.com/covid>. We will import these data into a data-frame using Pandas in python. We will store the data into our own database from which we will process and execute the program. This will consume less execution time for the user. We intend to use the various library functions from python to process and analyze the data. The python scripts will be executed every 24 hours using the task scheduler. We will use the matplotlib module of python in order to plot the line graph. We will derive the conclusion based on the line graph. We will generate the graphs by desktop app built in python which will have the options to choose among the variables for the graph plots. Fig [1] represents the model of our project.

StatWorks WebService

A close up of a computer

Description automatically generatedUse Python  
Script to   
Import Data to  
SQL Server

MS SQL Server

Application made in Python to plot the graphs using different variables to visualize data to derive the conclusion and make decision.

Fig [1]

Reference

[1]WHO. WHO statement regarding cluster of pneumonia cases in Wuhan, China. Jan 9, 2020. <https://www.who.int/china/news/> detail/09-01-2020-who-statement-regarding cluster-of-pneumonia-cases in-Wuhan-china (accessed April 16, 2020)