**INNOVATION FOR COVID19 CASES ANALYSIS**

**Problem statement:**

Covid 19 cases analysis, the objective of this project is to analyze and gain insights from COVID-19 cases data, with a focus on understanding the spread, impact, and mitigation strategies related to the pandemic. The analysis will involve examining various aspects of the pandemic, including but not limited to.

#### **Summary Data Columns Description:**

* **country**: designates the Country in which the row's data was observed.
* **continent**: designates the Continent of the observed country.
* **total confirmed**: designates the total number of confirmed cases in the observed country.
* **Total\_deaths**: designates the total number of confirmed deaths in the observed country.
* **Total\_recovered**: designates the total number of confirmed recoveries in the observed country.
* **active\_****cases**: designates the number of active cases in the observed country.
* **Serious\_or\_critical**: designates the estimated number of cases in serious or critical conditions in the observed country.
* **total\_cases\_per\_1m\_population** designates the number of total cases per 1 million population in the observed country.
* **total\_deaths\_per\_1m\_population** designates the number of total deaths per 1 million population in the observed country.
* **total tests**: designates the number of total tests done in the observed country.
* **total\_tests\_per\_1m\_population** designates the number of total tests done per 1 million population in the observed country.
* **population**: designates the population count in the observed country.

#### **Daily Data Columns Description:**

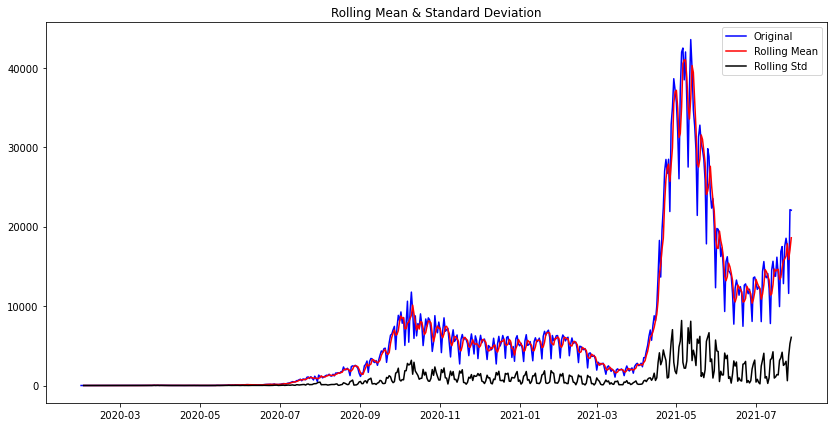
* **date**: designates the date of observation of the row's data in YYYY-MM-DD format.
* **country**: designates the Country in which the row's data was observed.
* **Cumulative\_total\_cases** designate the cumulative number of confirmed cases as of the row's date, for the row's country.
* **daily\_new\_cases**: designates the daily new number of confirmed cases on the row's date, for the row's country.
* **active\_cases**: designates the number of active cases (i.e., confirmed cases that still didn't recover nor die) on the row's date, for the row's country.
* **cumulative\_total\_deaths**: designates the cumulative number of confirmed deaths as of the row's date, for the row's country.
* **daily\_new\_deaths**: designates the daily new number of confirmed deaths on the row's date, for the row's country.

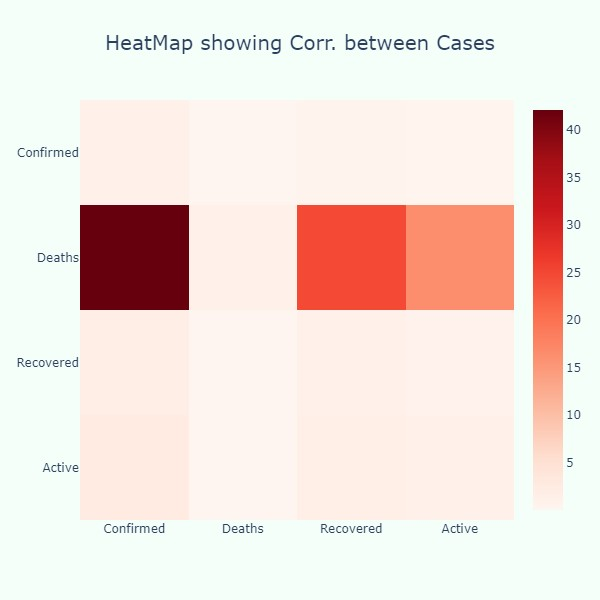
**TIME SERIES OF CASES:**

base\_stats = pd.DataFrame(columns=['Dates','Confirmed','Deaths','Recovered','Active'])  
base\_stats['Dates'] = confirmed\_df.columns[4:]  
  
base\_stats['Confirmed'] = base\_stats['Dates'].apply(lambda x: confirmed\_df[x].sum())  
base\_stats['Deaths'] = base\_stats['Dates'].apply(lambda x: deaths\_df[x].sum())  
base\_stats['Recovered'] = base\_stats['Dates'].apply(lambda x: recoveries\_df[x].sum())  
base\_stats.reset\_index(drop=False, inplace=True)  
base\_stats['Active'] = base\_stats['index'].apply(lambda x: (base\_stats['Confirmed'][x]-(base\_stats['Deaths'][x]+base\_stats['Recovered'][x])))  
base\_stats.head()

**SOURCE CODE:**

**Dataset Link:** [**https://www.kaggle.com/datasets/chakradharmattapalli/covid-19-cases.**](https://www.kaggle.com/datasets/chakradharmattapalli/covid-19-cases.)





**Overall view of Analysis**

Conclusion

The “COVID-19 Cases Analysis” project aims to provide a valuable resource for individuals, healthcare professionals, and policymakers. By offering real-time data, interactive maps, and customizable filters, this platform will empower users to make informed decisions and better understand the dynamics of the COVID-19 pandemic.