

# COVID-19 ANALYSIS DESIGN DOCUMENT

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# **COVID-19 Data Analysis Dashboard Design Document**

## **1. Introduction**

**Purpose:** To Develop a dashboard to analyze COVID-19 data to track the spread and effects of the virus across different Countries over the time.

**Scope:** The system will process data entries to visualize trends, number data, and predict future outbreaks.

## **2. System Overview**

The system will include components for data ingestion, processing, storage, analysis, and visualization:

Data Sourcing: The data will be sourced from the CSV file.

Data Modelling: Will Create Data models to support queries for reports and historical analysis.

Visualization: Dashboard to display data trends, compare charts consisting of data, and show changes over time.

## **3. Data Management**

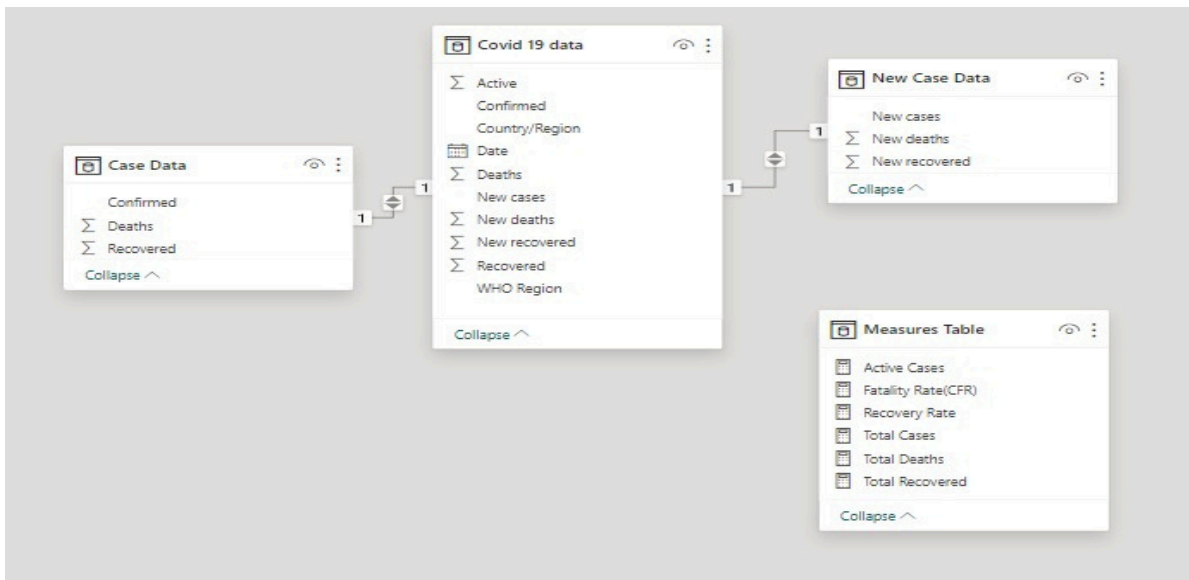
Direct use of the CSV file.

Detail the extraction, transformation, and loading processes tailored for this data.

## **4. Data Modelling**

Created different tables to differentiate the data for easy use.

Designed the ER diagram by separating different columns to the table then made a relationship between the table as you can see it in the image given below.



## 5. Visualization & User Interface

User interface layout for an analytical dashboard.

Interactive charts for total cases and deaths, filters by date and region, and charts for countries affected the most so that they can improve their system for future.

## 6. Technical Requirements

Used Power BI Query Editor for transforming the data and removing the duplicates, and Power BI for visualization.

Basic Knowledge of these tools to create the dashboard and must know how to do designing to make an interactive dashboard easy to understand.

## 7. Milestones & Timeline

Milestone is to achieve a good dashboard from which we can extract some useful information to implement it for a better future and timeline is to make it more analytical with less amount of time.

## 8. Conclusion

In Conclusion we will get a proper dashboard which will show the insights like number of cases, number of deaths, number of recovered, what is the Fatality rate, and which countries have high recovery rates so that we can use these insights to understand the data and take important steps to improve it for future scenarios.