PROJECT : COVID-19 USING COGNOS

PROBLEM DEFINITION

The COVID-19 pandemic has caused a significant loss of life and economic disruption around the world. Accurate and timely data on COVID-19 cases and deaths is essential for tracking the spread of the virus, identifying trends, and making informed decisions about how to respond to the pandemic. However, there are a number of challenges to collecting and reporting COVID-19 data, including:

- **Inconsistent data collection and reporting practices.** Different countries and regions use different methods for collecting and reporting COVID-19 data. This can make it difficult to compare data across different locations and identify global trends.
- **Delayed reporting.** In some cases, COVID-19 data may not be reported for several weeks or even months after the cases and deaths occurred. This can make it difficult to track the spread of the virus in real time and respond quickly to outbreaks.
- **Data quality issues.** COVID-19 data may be incomplete or inaccurate due to factors such as limited testing capacity, misclassification of cases, and underreporting of deaths.

DESIGN THINKING APPROACH:

Design thinking is a problem-solving approach that emphasizes understanding the needs of users, generating creative solutions, and iteratively refining those solutions. Here's how it can be applied to the COVID-19 cases and deaths data problem:

- **Empathize:** Understand the needs and concerns of various stakeholders, including public health officials, healthcare workers, policymakers, and the general public. Conduct surveys, interviews, and focus groups to gather insights into their challenges and expectations regarding COVID-19 data.
- **Define:** Clearly define the problem by synthesizing the information gathered during the empathize stage. For example, identify specific data gaps, challenges in data collection, or issues in data communication that need to be addressed.
- **Ideate:** Brainstorm innovative solutions to the defined problem. Encourage cross-functional teams to generate ideas, such as developing user-friendly data dashboards, improving data sharing among healthcare facilities, or using AI for predictive modeling.
- **Prototype:** Create prototypes or mock-ups of the proposed solutions. This could involve designing user interfaces for data dashboards, outlining data collection protocols, or creating data visualization prototypes for better public understanding.

- **Test:** Test the prototypes with real users and stakeholders to gather feedback. Adjust and refine the solutions based on this feedback. Ensure that the data solutions are user-friendly, accurate, and meet the needs of the end-users.

- **Implement:** Once a viable solution has been refined through testing, implement it in real-world settings. This may involve collaborating with relevant authorities, healthcare institutions, and technology providers to deploy data collection, analysis, and dissemination tools.

- **Iterate:** Continuously gather feedback and monitor the performance of the implemented solutions. Use this feedback to make iterative improvements, especially as the COVID-19 situation evolves.

HERE ARE SOME EXAMPLES OF HOW DESIGN THINKING CAN BE APPLIED TO IMPROVE COVID-19 CASES AND DEATHS DATA:

- **Empathize**: Interview public health officials, researchers, and the general public to understand their needs for COVID-19 data. What data do they need? How do they use the data? What are the challenges they face in accessing and using the data?

- **Define:** Identify the specific problems that need to be solved with COVID-19 data. For example, some common problems include inconsistent data collection and reporting practices, delayed reporting, and data quality issues.

- **Ideate:** Generate a variety of ideas for how to improve COVID-19 data collection and reporting. For example, one idea could be to develop a global standard for COVID-19 data collection and reporting. Another idea could be to develop a system for real-time reporting of COVID-19 data.

- **Prototype:** Develop and test prototypes of the proposed solutions. For example, if one of the proposed solutions is to develop a global standard for COVID-19 data collection and reporting, a prototype could be developed by working with a group of countries to implement the standard.

- **Test:** Implement the solutions and monitor their effectiveness. For example, if a global standard for COVID-19 data collection and reporting is implemented, it would be important to monitor its effectiveness to ensure that it is being followed consistently and that the resulting data is accurate and timely.

By applying design thinking to COVID-19 cases and deaths data, we can develop innovative solutions to improve the collection, reporting, and use of this critical data. This will help us to better track the spread of the virus, identify trends, and make informed decisions about how to respond to the pandemic.