**Project Title:** COVID-19 using Cognos

**Phase 1: Project Definition and Design Thinking**

**Project Definition:** The project involves analyzing COVID-19 cases and deaths data using IBM Cognos. The objective is to compare and contrast the mean values and standard deviations of cases and associated deaths per day and by country in the EU/EEA. This project encompasses defining analysis objectives, collecting COVID-19 data, designing relevant visualizations in IBM Cognos, and deriving insights from the data.

**Design Thinking:**

1. Analysis Objectives: Define the specific objectives of analyzing COVID-19 cases and deaths data, such as comparing mean values and standard deviations.
2. Data Collection: Obtain the provided data file containing COVID-19 cases and deaths information per day and by country in the EU/EEA.
3. Visualization Strategy: Plan how to visualize the mean values and standard deviations using IBM Cognos to create informative charts and graphs.
4. Insights Generation: Identify potential insights from the comparison of mean values and standard deviations of cases and deaths.

**1.Analysis Objectives:**

When defining the specific objectives of your analysis, consider the following points:

* Comparing Mean Values: Specify what you aim to achieve by comparing mean values of COVID-19 cases and deaths per day and by country. Are you looking for trends over time, differences between countries, or something else?
* Standard Deviation Comparison: Clarify the purpose of comparing standard deviations. Are you interested in assessing the variability in cases and deaths data? Is it to identify countries or time periods with particularly high or low variability?
* Hypotheses or Research Questions: If applicable, outline any hypotheses or research questions that you intend to address through your analysis. For example, "Is there a significant difference in the standard deviation of COVID-19 cases between EU/EEA countries?"

**2.Data Collection:**

Ensure a smooth data collection process by following these steps:

* Data Source: Clearly specify where you will obtain the COVID-19 cases and deaths data. Mention the source, such as a government health agency, a reliable dataset repository, or a research organization.
* Data Scope: Define the scope of the data you'll collect, including the time period (start and end dates) and the specific countries within the EU/EEA you intend to analyze. Ensure that the data is regularly updated to maintain accuracy.
* Data Format: Describe the format in which the data is available (e.g., CSV, Excel, API). Ensure that you have the necessary permissions or licenses to access and use this data.

**3.Visualization Strategy:**

To effectively visualize mean values and standard deviations, consider these points:

* Choice of Visualization Types: Decide on the most suitable types of charts or graphs for your data. For example, line charts for time series data, bar charts for country comparisons, and error bars for standard deviations.
* Visual Design: Consider the visual design principles to make your charts informative and easy to understand. Pay attention to color choices, axis labels, legends, and titles.
* Interactivity: Explore the interactive capabilities of IBM Cognos to allow users to explore the data and gain insights interactively. This might involve drill-down features, filters, or tooltips.

**4.Insights Generation:**

Identifying potential insights is a crucial part of your project:

* Key Metrics: Outline the specific metrics or indicators you'll use to generate insights. For instance, you may focus on daily case growth rates, hotspots, or the relationship between cases and deaths.
* Trends and Anomalies: Consider what trends, patterns, or anomalies you expect to find in the data. These could include spikes in cases, regional disparities, or changes in trends over time.
* Implications: Think about the implications of your findings. How might these insights be useful for public health decision-makers or the general public? Are there any actionable recommendations that can be derived from your analysis?
* Data Storytelling: Plan how you will communicate your insights effectively. This might involve creating a narrative that guides readers or viewers through the data story, highlighting key findings along the way.

Teammates: Gayathri S

Nithyasree G

Aarthi K

Deepa K