Phase 1: Problem Definition and Design Thinking

In this part you will need to understand the problem statement and create a document on

what have you understood and how will you proceed ahead with solving the problem.

Please think on a design and present in form of a document.

Problem 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.
   1. Data Collection: Obtain the provided data file containing COVID-19 cases and deaths information per day and by country in the EU/EEA.
   2. Visualization Strategy: Plan how to visualize the mean values and standard deviations using IBM Cognos to create informative charts and graphs.
   3. Insights Generation: Identify potential insights from the comparison of mean values and standard deviations of cases and deaths.
2. Analysis Objectives:
   * Clearly state what you aim to achieve through this analysis. In this case, it's comparing mean values and standard deviations of COVID-19 cases and associated deaths per day and by country in the EU/EEA.
3. Data Collection:
   * Obtain the data file containing COVID-19 cases and deaths information. Ensure that the data is reliable, up-to-date, and covers the relevant geographical area (EU/EEA).
4. Visualization Strategy:
   * Plan how to present the analysis results effectively using IBM Cognos. Consider the types of visualizations that will best convey the information (e.g., line charts, bar charts, scatter plots). Also, think about the level of granularity you'll use in the visualizations (daily, weekly, monthly).
5. Insights Generation:
   * Outline potential insights you hope to derive from the analysis. This could include trends over time, variations between different countries, patterns in the spread of the virus, etc.

In addition to the steps you've provided, you might also want to consider the following:

1. Data Preprocessing:
   * Depending on the state of the provided data, you might need to clean and prepare it for analysis. This could involve handling missing values, outliers, or any inconsistencies in the data.
2. Statistical Analysis:
   * In addition to mean values and standard deviations, consider whether there are other statistical measures or tests that could provide further insights. For example, correlation analysis, hypothesis testing, etc.
3. Narrative and Context:
   * When presenting your findings, provide context and a narrative that explains the significance of your insights. Why are certain trends or patterns important? How do they relate to the broader context of the COVID-19 pandemic?
4. Ethical Considerations:
   * Given the sensitive nature of COVID-19 data, it's important to handle it with care and consider any ethical implications. Ensure that you're following relevant data privacy and security regulations.

