COVID-19 Cases Analysis using IBM Cognos

Phase 1: Problem 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.

Action Plan:

- Collaborate with stakeholders to clearly define the analysis objectives, ensuring alignment with their needs and expectations.
- Specify the metrics and parameters for measuring mean values and standard deviations.
- Document the objectives in a concise and actionable manner.

2. Data Collection:

- Obtain the provided data file containing COVID-19 cases and deaths information per day and by country in the EU/EEA.

Action Plan:

- Identify the source of the provided data file and verify its credibility and completeness.
- Ensure that the data is up-to-date and consistently formatted for easy integration into IBM Cognos.
- Develop a data collection process that can be automated for future updates.

3. Visualization Strategy:

- Plan how to visualize the mean values and standard deviations using IBM Cognos to create informative charts and graphs.

Action Plan:

- Explore the capabilities of IBM Cognos for data visualization, including chart types, customizations, and interactivity.
- Decide on the most suitable visualization techniques for presenting mean values and standard deviations over time and by country.
- Create a visual design guideline to maintain consistency and clarity in all visualizations.

4. Insights Generation:

- Identify potential insights from the comparison of mean values and standard deviations of cases and deaths.

Action Plan:

- Conduct exploratory data analysis (EDA) to uncover trends, anomalies, and patterns in the COVID-19 data.
- Perform statistical analyses to compare mean values and standard deviations, using appropriate tests and methodologies.
- Collaborate with domain experts to contextualize findings and derive actionable insights.
- Document insights in a clear and concise manner, with recommendations for further action.

Timeline: Outline a project timeline, including milestones and deadlines, to ensure a structured and efficient workflow. Consider factors such as data collection, analysis, visualization, and reporting.

Resources: Identify the team members and their roles in the project, as well as any external resources or tools that may be required for successful execution.

Risks and Mitigations: Anticipate potential challenges or risks that may arise during the project and develop strategies to mitigate them. This may include data quality issues, technical limitations, or unexpected delays.

Communication Plan: Establish a communication plan to keep stakeholders informed of project progress, including regular updates, meetings, and reporting mechanisms.

Conclusion: This design document provides a comprehensive overview of the approach to analyzing COVID-19 data using IBM Cognos. By defining clear objectives, ensuring data quality, planning effective visualization strategies, and generating actionable insights, we aim to provide valuable information for decision-makers in the

EU/EEA region. This document serves as a roadmap for the successful execution of the project.