Team Name	: **DataMinds**

Team Size	: 2

Bussiness Challenge	: Malnutrition: A Disease That no one cares about

General Description

The proposed solution is to use the Cognos analytics platform to create a comprehensive malnutrition analysis that can help stakeholders understand the causes, effects, and trends of malnutrition in different regions and populations. The analysis will use data from various sources, such as health surveys, food security assessments, and nutrition indicators, to provide a holistic view of the nutrition situation and identify the most vulnerable groups and areas. The solution will enable stakeholders to visualize and explore the data and insights through interactive dashboards and reports, which can help them communicate the findings and recommendations to decision-makers and partners.

The solution will address the business challenge by providing evidence-based guidance and support for designing, implementing, and monitoring nutrition programs that can effectively reduce malnutrition and improve health outcomes. The solution will also help stakeholders align their strategies and actions with the global and national nutrition goals and targets, as well as track their progress and impact over time. By using the Cognos analytics platform, stakeholders can leverage the power of data and analytics to make informed decisions and optimize their resources for tackling malnutrition.

Novelty / Uniqueness:

The uniqueness of the proposed solution lies in the specific application of the Cognos analytics platform to address the challenge of malnutrition.
Customized Data Models: Develop customized data models in Cognos analytics specifically tailored for malnutrition analysis. These models can consider the unique factors and variables related to malnutrition, enabling more accurate insights and predictions.
Geospatial Analysis: Incorporate geospatial analysis into the solution to visualize malnutrition trends and hotspot areas on maps. This geospatial approach can aid in identifying regions that

require immediate attention and intervention.
Behavioral Analytics: Utilize behavioral analytics to assess the impact of nutrition programs on individuals and communities, helping to refine and optimize interventions based on behavioral patterns.

Business / Social Impact:

The proposed solution has the following benefits:

- It requires a multidisciplinary team with expertise in data analytics, nutrition, public health, and technology. This ensures that the solution is comprehensive and covers all aspects of the problem.

- It uses a data-driven approach to design and implement more effective and targeted nutrition programs. This allows for the customization of interventions based on the specific factors influencing malnutrition in different regions and populations.

- It provides insights and visualizations that can inform evidence-based policy decisions. This enables decision-makers to allocate resources where they are most needed and to adopt policies with a higher likelihood of success.

- It identifies high-risk areas and populations through geospatial analysis and deploys timely and targeted interventions to reduce malnutrition prevalence. This leads to improved health outcomes and a decrease in vulnerability to diseases, especially in children.

- It facilitates communication and collaboration among stakeholders, including policymakers, NGOs, and healthcare providers, through visualizations and interactive dashboards. This fosters coordinated efforts and mobilizes resources to combat malnutrition more effectively.

- It generates valuable insights and evidence on malnutrition trends and interventions' effectiveness over time. This contributes to the accumulation of knowledge that can inform future strategies and lead to sustained improvements in nutrition and overall health.

Technology Architecture:

Customized Data Models: Develop customized data models within the Cognos analytics platform tailored for malnutrition analysis. Cognos allows for the creation of data models using its Framework Manager.

Data Analysis and Visualization: Perform data analysis using Cognos analytics tools, including Cognos Report Studio and Cognos Dashboard. Create interactive and visually appealing dashboards and reports to present the analyzed data.

Scope of the Work:

Data Collection and Integration Module:
Gather relevant data from various sources, including health records, nutrition surveys, socioeconomic data, and climate information.
Data Preparation and Cleansing Module:
Preprocess and clean the data to ensure data quality and consistency. Handle missing values, outliers, and other data quality issues. Transform the data into a format suitable for analysis.
Customized Data Models Development Module:
Design and develop customized data models within the Cognos analytics platform, tailored for malnutrition analysis. Define relationships between different data elements for accurate insights.

Data Analysis and Visualization Module:
Use Cognos analytics tools, such as Cognos Report Studio and Cognos Dashboard, for data analysis. Create interactive and visually appealing dashboards and reports to present analyzed data. Generate visualizations to identify malnutrition trends, prevalence rates, and disparities.

Solution Document Link (Optional from Team):

No link uploaded