Project Development Phase
Model Performance Test

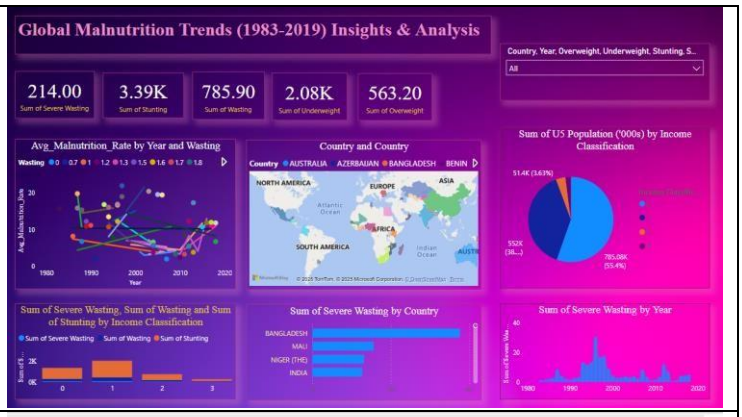
Date	10 March 2025
Team ID	PNT2025TMID02999
Project Name	Global Malnutition trends:A Power BI Analysis(1983-2019)
Maximum Marks	

Model Performance Testing:

S.No.	Parameter	Screenshot / Values
1.	Data Rendered	The dataset consists of global malnutrition records from 1983 to 2019, collected from sources like: WHO – World Health Organization reports UNICEF – Child nutrition data World Bank – Economic & development indicators National Health Surveys – Regional malnutrition statistics Key Attributes in the Dataset Country/Region – Geographic classification Year (1983-2019) – Time-based trends Malnutrition Types: Undernourishment (%) Child Stunting (%) Child Wasting (%) Obesity (%) Malnutrition Deaths (Count) Socioeconomic Indicators: GDP per capita Healthcare access (%) Food security index Literacy rate (%)

2.	Data Preprocessing	Before building the Power BI dashboard, we clean and process the data: Handling Missing Values: Replacing empty fields with mean/median valuesDropping irrelevant columns Data Transformation: Standardizing year formatsConverting categorical variables

		Data Normalization: Scaling GDP, literacy, and health indicators for uniform comparison Merging Multiple Data Sources: Combining WHO, UNICEF, and World Bank datasets
3.	Utilization of Data Filters	Power BI provides interactive filters for better analysis: Year-Based Filters: Users can select a specific year or range to observe malnutrition changes. Country/Region Filters: Compare malnutrition rates across different countries or continents. Malnutrition Type Filters: Users can focus on child malnutrition, obesity, or food security indicators. Economic Factor Filters: Assess malnutrition trends in relation to GDP, healthcare access, and food security.
4.	DAX Queries Used	Power BI DAX (Data Analysis Expressions) is used for calculated columns & measures: Average Malnutrition Rate per Decade: Average_Malnutrition = AVERAGEX(FILTER(Data, Data[Year] >= 1980 && Data[Year] <= 1990), Data[Malnutrition Rate]) Cumulative Malnutrition Cases Over Time: Cumulative_Cases = CALCULATE(SUM(Data[Malnutrition Cases]), FILTER(ALL(Data), Data[Year] <= MAX(Data[Year])))

5.	Dashboard design	
6	Report Design