Project Initialization and Planning Phase

Date	1 june 2025
Team ID	Chaitra V
Project Title	Global Malnutrition Trends: A Power BI Analysis (1983-2019)
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

Project Overview	
Objective	The project aims to analyze global malnutrition trends among children under five from 1983 to 2019 using Power BI. It focuses on visualizing underweight, overweight, and stunting rates to derive actionable insights.
Scope	This project focuses on analyzing historical malnutrition data (1983–2019) for children under five using Power BI. It covers data collection, cleaning, visualization, and dashboard development. The project excludes real-time data, predictive modeling, AI-driven forecasts, and mobile or web development beyond the Power BI platform.
Problem Statement	
Description	Child malnutrition remains a significant global health issue, with millions affected by underweight, overweight, and stunting. Current raw datasets lack interactive, visual insights, making it difficult for stakeholders to understand trends across countries and income groups, delaying informed decision-making.
Impact	By providing clear, interactive visualizations through Power BI, this project enables stakeholders to identify high-risk regions, prioritize interventions, and allocate resources effectively. Improved data understanding can directly contribute to reducing malnutrition rates and improving child health outcomes globally.

Proposed Solution	
Approach	The project follows a structured methodology involving data collection from trusted sources (UNICEF/WHO/World Bank), data cleaning and categorization, followed by designing interactive Power BI dashboards. Techniques include handling missing values, segmenting data by income levels, and creating visualizations such as line charts, stacked columns, ribbon charts, and KPI cards
Key Features	The project offers an interactive Power BI dashboard showcasing global malnutrition trends from 1983 to 2019. It includes visual comparisons by income groups, country-wise filters, dynamic charts, KPI indicators, and clear insights to support data-driven decision-making for reducing child malnutrition.

Resource Requirements

Resource Type	**Description**	**Specification/Allocation**
Hardware		
Computing Resources	Dell Inspiron 14 Laptop	Intel i3 processor, 4 cores
Memory	RAM specifications	8 GB RAM
Storage	Disk space for data, models, and logs	512 GB SSD
Software		
Frameworks	N/A	-
Libraries	DAX	Built into Power BI
Development Environment	BI Tools	Power BI Desktop
Data		
Data	Source, size, format	Kaggle dataset, Approximately 343 million survey records; summarized to 924 under-five data points, CSV/Excel files.