Project Initialization and Planning Phase

Date	17 June 2025
Team ID	SWUID20240005242
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 the challenges of interpreting global malnutrition data. With a clear objective, defined scope, and a concise problem statement, the proposed solution details a dashboard-driven approach, highlights key visualization features, and identifies essential resources, including data, software, and system requirements.

Project Overview	
Objective	To build a centralized Power BI dashboard that visualizes global malnutrition trends from 1983 to 2019, highlighting regional and economic disparities for better decision-making and research insight.
Scope	The project uses the Kaggle dataset. It includes data modeling, data transformation, and the creation of interactive Power BI visuals across underweight, overweight, stunting, and wasting indicators by country, year, and income classification.
Problem Statement	
Description	Malnutrition data is available but scattered across regions, years, and indicators, making it difficult for users to extract meaningful insights from traditional static reports.
Impact	Researchers, students, and public health professionals are unable to track trends or draw effective comparisons without a dynamic visual solution.
Proposed Solution	
Approach	Import and clean the malnutrition-estimates.csv and country-wise-average.csv dataset in Power BI, preprocess key metrics (like underweight, overweight, stunting), and design an interactive dashboard. The dashboard will include country-level comparisons,

	income group filters, and trend analysis visuals.
Key Features	• Dynamic slicers (Year, Region, Income Group) • KPIs for nutrition indicators • Country-wise trend graphs • Demographic-based comparisons (e.g., gender) • Insight cards and summary panels

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	Laptop or desktop with moderate processing power	Dual-core processor or higher
Memory	For smooth Power BI and dataset handling	Min 8GB RAM
Storage	Space for dataset files and PBIX reports	At least 2-5GB free storage
Software		
Frameworks	Data visualization and BI platform	Microsoft Power BI Desktop
Libraries	For any optional data cleaning in Excel	Preprocessing and import
Development Environment	Dataset prep and model previewing	Power BI Desktop, Excel, Notebook.
Data		
Data	Source-Raw datasets used for analysis Size-Approximate combined size of both datasets	Source-Malnutrition-estimates.csv, country-wise-average.csv from Kaggle Size- ~3-5MB(csv format)