Project Initialization and Planning Phase

Date	05 October 2025
Team ID	**SWUID20250214632**
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 primary objective of this project is to analyze global malnutrition data and create an interactive Power BI dashboard that highlights trends ,patterns, and country-wise comparisons for better decision-making and awareness.
Scope	Focus only on the dataset provided by Kaggle (malnutrition-estimates.csv). Build a Power BI dashboard with interactive filters (country, age group, gender, year). Highlight key insights such as countries with highest malnutrition, gender/age differences, and trend analysis. Does not include prediction or machine learning models — only descriptive and diagnostic analytics using Power BI.
Problem Statement	
Description	Malnutrition is a critical global issue, and policymakers, researchers, and organizations need easy-to-understand insights about its patterns across different countries, age groups, and genders. Raw datasets are difficult to interpret without visualization.
Impact	By solving this problem, organizations, NGOs, and governments can quickly identify the most affected regions and vulnerable groups, enabling better decision-making, targeted policies, and efficient allocation of resources.
Proposed Solution	

Approach	Import and clean the dataset in Power BI. Build relationships and calculated measures using DAX. Create interactive visualizations (maps, bar charts, line charts, KPIs).Design an end-to-end Power BI dashboard for analysis and reporting.
Key Features	Interactive slicers for country, year, and gender. Map visualization to show global malnutrition distribution. Trend analysis across years. KPI cards highlighting most affected countries/groups. Exportable dashboard/report for stakeholders.

Resource Requirements

Resource Type	**Description**	**Specification/Allocation**
Hardware		
Computing Resources	Standard Laptop/PC	2 x NVIDIA V100 GPUs
Memory	8GB RAM Minimum	8 GB
Storage	1 TB HDD/SSD (sufficient for dataset & Power BI files)	1 TB SSD
Software		
Frameworks	Microsoft power BI Desktop	Power BI
Libraries	Built-in Power BI visual libraries ,DAX functions	Data Visualization
Development Environment	Power BI Desktop and optional Excel	Power BI Desktop ,Excel
Data		
Data	Kaggle dataset : Malnutrition across the Globe (CSV format)	Kaggle dataset