Project Initialization and Planning Phase

Date	20 June 2025
Team ID	xxxxxx
Project Title	Global Food Production Trends and Analysis: A Comprehensive Study from Data-driven insights on production trends can help optimize crop planning, distribution, and food reserves—ensuring communities have stable access to nutritious food. 1961 to 2023 Using Power BI
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	Build an interactive Power BI solution to visualize and analyze trends in global food production
Scope	**Objectives**: Clear goals the project aims to achieve. **Tasks**: Specific activities required to complete the project. **Deadlines**: Timelines for completing tasks and deliverables.
Problem Statement	
Description	o Rising Global Food Demand vs. Production Challenges o Need for Data-Driven Insights Across Regions
Impact	o Data-driven insights on production trends can help optimize crop planning, distribution, and food reserves—ensuring communities have stable access to nutritious food. o Identifying underperforming regions and timing production peaks enables farmers and policymakers to adopt precision farming techniques, boosting yield while minimizing resource waste.

Proposed Solution	

Approach	o Data Collection & Extraction from Database
	o Data Preparation
	    ✓ Data loading
	    ✓ Data cleaning
	o Data Visualization

Key Features	☐ Connects different data sources (like CSVs, web, SQL server..) in one Power BI dashboard. ☐ Organizes data clearly using key categories—country, year, and food item—for fast reporting.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	intel core (i5-10400) 2 x NVIDIA V100 GPUs
Memory	RAM specifications	16.0 GB
Storage	Disk space for data, models, and logs	9.97 MB SSD
Software		
Frameworks	-	-
Libraries	-	-
Development Environment	Microsoft power BI	e.g., Power BI Desktop
Data		
Data	Source, size, format	e.g., Kaggle dataset, 2.60 GB, csv file