Project Initialization and Planning Phase

Date	29 July 2025
Team ID	xxxxxx
Project Title	Global Food Production Analysis (1961-2023)
Maximum Marks	3 Marks

Project Proposal (Proposed Solution)

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 main goal of this project is to study global food production patterns from 1961 to 2023 using Power BI. The project helps us understand how different countries and crops have contributed over time, and what trends are visible in food production.
Scope	This project focuses on data cleaning, transformation, and visualization using Power BI. It includes analysis of various crops like wheat, rice, and maize, across multiple years and countries. Interactive charts and dashboards will help users explore trends and comparisons.
Problem Statement	
Description	With the growing global population, food production is a major concern. There is a need to analyze how different countries have been producing food and which crops are leading over time.
Impact	Solving this problem can help policymakers, researchers, and even students to understand the global food supply system. The findings might help in making better decisions for food sustainability.
Proposed Solution	
Approach	I am using Power BI for this project. First, I cleaned the data and then unpivoted it to make it suitable for analysis. I created DAX measures

	and visuals like bar charts, line charts, and maps to represent different food production scenarios.
Key Features	1. Interactive dashboards with filters by year and country 2. Different visual types to show trends and comparisons 3. A final summary page showing latest crop production share 4. Easy-to-understand visuals for decision-making

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	Intel i5 13gen(h Processor,10 cores) Nvidia Rtx 4050
Memory	RAM specifications	16 GB
Storage	Disk space for data, models, and logs	e.g., 512 GB SSD
Software		
	Tool Used	Microsoft Power BI
	Supporting Tools	Excel, DAX Studio
Data		
Data	Source, size, format	Kaggle Dataset(World Food Production),11000 rows,csv