Project Initialization and Planning Phase

Date	15 March 2025
Team ID	**SWUID20250172189**
Project Title	**Power BI Inflation Analysis**
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 inflation trends across different countries from 1980 to 2024 using Power BI. By transforming and visualizing the inflation data, the goal is to identify patterns, compare inflation rates between countries and regions, and gain insights into economic shifts over time
Scope	The project involves cleaning, transforming, and analysing global inflation data from 1980 to 2024 using Power BI. It includes creating visual dashboards to explore trends by country and year. The scope excludes forecasting or policy analysis and is limited to the data provided.
Problem Statement	
Description	Analyzing global inflation trends is challenging due to inconsistent data formats, missing values, and lack of interactive tools for comparison across countries and years. The current dataset is in a wide format, making it unsuitable for time-series analysis and visualization. Without proper transformation and visualization, it's difficult for users to identify patterns, compare inflation rates, or derive meaningful insights.
Impact	Solving this problem will enable clear and accurate analysis of global inflation trends over time. By cleaning and transforming the data and presenting it through an interactive Power BI dashboard This improved visibility helps in making informed decisions,

	identifying economic patterns, and assessing the impact of inflation on global markets. Ultimately, it enhances data-driven planning and supports strategic economic insights.
Proposed Solution	
Approach	The project follows a structured methodology using Power BI and Power Query to transform and analyse the inflation dataset: 1. Data Import: 2. Data Cleaning: 3. Data Transformation: 4. Data Modelling: 5. Calculated Columns and DAX Measures: 6. Visualization: 7. Analysis and Interpretation:
Key Features	Interactive Dashboard: Cleaned & Transformed Data Custom DAX Measures Comparative Analysis Time-Series Visuals

Resource Requirements

Resource Type	**Description**	**Specification/Allocation**
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	Standard CPU, Quad-core (Intel i5)
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	500 GB SSD
Software		
Frameworks	Data transformation and dashboard tool	Power BI Desktop
Libraries	Not applicable	Built-in M and DAX language
Development Environment	Power BI environment for	Power BI Desktop, Power

	queries and visuals	Query Editor
Data		
Data	Source, size, format	Kaggle dataset, CSV/Excel, ~100 MB