Project Initialization and Planning Phase

Date	01 October 2025
Team ID	SWUID20250181698
Project Title	Global Inflation Dynamics (1980-2024): A Comparative Time-Series 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, Includes data cleaning and transformation, Exploratory Data Analysis (EDA), visualization of global, regional, and country-level inflation trends, and development of an interactive dashboard.

Project Overview	
Objective	To analyze historical global inflation trends and provide data-driven comparative insights between developed and emerging economies.
Scope	Includes data cleaning and transformation, Exploratory Data Analysis (EDA), visualization of global, regional, and country-level inflation trends, and development of an interactive dashboard.
Problem Statement	
Description	The global inflation dataset is in a raw, **wide format** that is unsuitable for direct time-series analysis and contains noise (missing data, hyperinflation outliers), making macroeconomic comparisons difficult for decision-makers.
Impact	Solving this provides a **cleaned, reliable, and visualized data asset** that enables quick, evidence-based policy and investment decisions regarding global economic stability and risk.
Proposed Solution	
Approach	1. **Data Engineering:** Use Power Query to Unpivot the data and filter for quality. 2. **2. Analysis:** Define robust DAX Measures (Median Inflation)

	for accurate trend analysis. 3. **3. Dashboarding**: Deliver a professional, interactive dashboard (Power BI).
Key Features	1. **Data Transformation Pipeline** (M Language in Power Query). 2. **Comparative Time-Series Visualizations** (G7 vs. BRICS). 3. **Hyperinflation Mitigation** using the Median DAX Measure. 4. **Interactive Power BI Dashboard**.

Resource Requirements

Resource Type	**Description**	**Specification/Allocation**
Hardware		
Computing Resources	Standard Laptop/Desktop CPU (no GPU required)	Intel Core I5
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
Software		
Software	Core Tool	**Power BI Desktop** (Essential for transformation and visualization)
Software	Data Transformation Language	**Power Query (M Language)** for Unpivoting and Cleaning
Software	Data Analysis Language	**DAX** (Data Analysis Expressions) for creating measures/KPIs
Data		
Data	Data	global_inflation_data.csv (Annual CPI Inflation, 1980-2024)