

## Project Initialization and Planning Phase

Date	06 December 2025
Team ID	SWUID20250189320
Project Title	Power BI Inflation Analysis: Journeying Through Global Economic Terrain
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	To build an interactive Power BI dashboard that visualizes and analyzes global inflation trends, enabling decision-makers to gain insights by comparing inflation rates across countries and regions.
Scope	The project will cover inflation data from 1980 to 2024 for over 180 countries, sourced from reputable international databases. The dashboard will support filtering by region, decade, and country, with visualizations including time-series charts, heatmaps, and comparative bar graphs. It will not include real-time forecasting or predictive modeling.
Problem Statement	
Description	Policymakers and economists lack a unified, visual platform to explore long-term inflation trends across countries and decades. Raw data is difficult to interpret, and existing tools offer limited interactivity or regional comparison capabilities.
Impact	Solving this problem will empower stakeholders to make data-driven decisions, understand inflation dynamics in historical context, and communicate findings effectively through interactive visualizations.
Proposed Solution	
Approach	The solution involves collecting historical inflation data from sources

	such as the World Bank and IMF, cleaning and structuring it for analysis, and building a Power BI dashboard with layered visualizations. The dashboard will include filters, drill-down capabilities, and annotations for key economic events (e.g., oil crises, recessions, pandemics).
Key Features	<p>Interactive time-series charts showing inflation trends by country and region.</p> <p>Heatmaps for visualizing inflation intensity across decades.</p> <p>Comparative bar charts for regional inflation averages.</p> <p>Annotations for major economic events affecting inflation.</p> <p>Exportable reports and shareable dashboards for stakeholders.</p>

## Resource Requirements

Resource Type	Description	Specification/Allocation
<b>Hardware</b>		
Computing Resources	CPU/GPU specifications, number of cores	4GB RTX 2050 Graphic card
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	500 GB SSD
<b>Software</b>		
Frameworks	Python frameworks	Power BI Desktop, Microsoft Excel
Libraries	Additional libraries	DAX (Data Analysis Expressions), M (Power Query)
Development Environment	IDE, version control	Windows 11, Power BI Desktop, GitHub
<b>Data</b>		
Data	Source, size, format	Kaggle dataset, Format: CSV file, Size: 45KB