**Project Initialization and Planning Phase**

|  |  |
| --- | --- |
| Date | 18 June 2025 |
| Project Title | Power BI Inflation Analysis – Journeying Through Global Economic Terrain |
| Maximum Marks | 3 Marks |

**Project Proposal**

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 analyze global inflation patterns across countries and regions using Power BI, enabling interactive visualizations and comparative insights to aid households, policymakers, and businesses in understanding economic pressures. |
| Scope | The project focuses on collecting, cleaning, modeling, and visualizing historical global and country-level inflation data sourced from Kaggle. The analysis will cover year-wise and region-wise inflation trends through dashboards and scenario analysis. The scope excludes live inflation feeds and macroeconomic forecasting beyond available historical datasets. |
| **Problem Statement** | |
| Description | Stakeholders such as citizens, analysts, and policymakers lack a consolidated platform to visualize and compare inflation data across countries and over time. This gap leads to fragmented understanding and ineffective response strategies to inflationary pressures. |
| Impact | Addressing this problem will enable better financial planning, informed policy design, and improved business forecasting through accessible and interactive inflation analytics. |
| **Proposed Solution** | |
| Approach | Use Power BI for visualizing global inflation trends. Collect historical inflation datasets (e.g., Consumer Price Index) from Kaggle, clean and model the data to support multi-country and year-wise analysis, and create a user-friendly dashboard. Incorporate real-world scenario narratives—household budgeting, economic policy framing, and global business planning—to enrich insights. |
| Key Features | * Interactive Power BI dashboard with filters (year, country, inflation index) * Visual comparison of inflation trends across countries and time * Scenario-based insight cards for household, policymaker, and business perspectives * Clean, dynamic interface with exportable reporting features * Custom visuals for top inflation hotspots and stable economies |

**Resource Requirements**

|  |  |  |
| --- | --- | --- |
| **Resource Type** | **Description** | **Specification/Allocation** |
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | Standard personal computer (Intel i7 or equivalent CPU) |
| Memory | RAM specifications | 8 GB RAM or higher |
| Storage | Disk space for data, models, and logs | 1 TB HDD or 256 GB SSD minimum |
| **Software** | | |
| Frameworks | Power BI Desktop | Power BI Desktop |
| Development Environment | version control | Power BI, GitHub (for version control) |
| **Data** | | |
| Data | Source, size, format | Kaggle Datasets (e.g., Global Inflation / CPI by Country),  ~50 MB, CSV/Excel format |