**Project Initialization and Planning Phase**

| Date | 27 July 2025 |
| --- | --- |
| Team ID |  |
| 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 trends from 1980 to 2024 using Power BI and provide interactive dashboards for comparative insights across countries and regions. |
| Scope | The project covers inflation data from multiple countries and regions over the span of 44 years.It includes data cleaning, transformation, visualization, and dashboard creation using Power BI. |
| **Problem Statement** | |
| Description | Users face difficulty in understanding long-term inflation patterns across the globe due to unstructured or raw datasets. Furthermore, issues like missing data, incorrect data types, and lack of interactivity limit insights. |
| Impact | Solving these problems will help users—especially beginners and analysts—easily explore, filter, and interpret global inflation data. This improves data literacy and supports informed economic decisions. |
| **Proposed Solution** | |
| Approach | The data is cleaned and transformed in Power BI Query Editor. DAX measures are used for key metrics. Interactive dashboards with slicers, filters, and visuals like line graphs, bar charts, and maps are created for analysis. |
| Key Features | - Year-wise inflation trend visualization  - Country-wise filter with slicers  - Handling of missing or text-formatted numeric data  - Region-wise aggregation and comparison  - User-friendly and responsive UI |

**Resource Requirements**

| **Resource Type** | **Description** | **Specification/Allocation** |
| --- | --- | --- |
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | Intel Core i5 12th Gen, 10 cores (6P + 4E) / NVIDIA RTX 3050 |
| Memory | RAM specifications | 16 GB DDR4 |
| Storage | Disk space for data, models, and logs | 512 GB SSD |
| **Software** | | |
| Frameworks | Python frameworks | Python |
| Libraries | Additional libraries | Nil |
| Development Environment | IDE, version control | Microsoft Power BI, Excel |
| **Data** | | |
| Data | Source, size, format | <https://www.kaggle.com/datasets/sazidthe1/global-inflation-data>, 197 rows and 47 columns, CSV format |