**Project Initialization and Planning Phase**

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| Date | 15 March 2024 |
| Team ID | SWUID20240103675 |
| 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.

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| **Project Overview** | |
| Objective | To analyze and visualize global inflation trends using Power BI, providing insights into economic patterns, regional variations, and inflation impacts over time through an interactive, data-driven dashboard. |
| Scope | The project covers data collection, preprocessing, visualization, and dashboard creation for global inflation rates across countries from 2000 to 2024. It focuses on delivering a Power BI solution that enables users to interactively explore inflation behavior and trends. |
| **Problem Statement** | |
| Description | Inflation data across countries is scattered and difficult to visualize effectively. There is no single platform that allows easy exploration of global inflation trends and comparisons across regions. |
| Impact | Developing a centralized, interactive Power BI dashboard will empower analysts, policymakers, and students to make data-driven economic assessments, improving transparency and understanding of global inflation behavior. |
| **Proposed Solution** | |
| Approach | Use Power BI for connecting, transforming, and visualizing inflation data collected from reliable global sources such as the World Bank or IMF. Implement Power Query for data cleaning, DAX for calculations, and design an interactive dashboard with KPIs, maps, and charts for comparative analysis |
| Key Features | ·Interactive dashboard for exploring inflation by region, year, and country  ·Real-time visuals including KPIs, bar charts, and world maps  · Data transformation with Power Query  · Analytical insights derived from calculated measures using DAX |

**Resource Requirements**

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| **Resource Type** | **Description** | **Specification/Allocation** |
| **Hardware** | | |
| Computing Resources | CPU/GPU specifications, number of cores | e.g., 2 x NVIDIA V100 GPUs |
| Memory | RAM specifications | e.g., 8 GB |
| Storage | Disk space for data, models, and logs | e.g., 1 TB SSD |
| **Software** | | |
| Frameworks | frameworks | Microsoft Power BI Desktop |
| Libraries | libraries | Power Query, DAX functions |
| Development Environment | IDE, version control | Power BI Service, GitHub for versioning |
| **Data** | | |
| Data | Source, size, format | Kaggle dataset, 10,000 images |