Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	31 January 2025
Team ID	PNT2025TMID00596
Project Name	**Power BI Inflation Analysis Journeying Through Global Economic Terrain**
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Data Collection & Ingestion	Fetch real-time inflation data from IMF, World Bank, and national statistical agencies.
		Allow manual data uploads for custom datasets.
FR-2	Data Processing & Cleaning	Perform data transformation, handling missing values, and normalizing currency values.
		Store processed data in structured databases.
FR-3	Analytical Insights & Forecasting	Apply statistical and machine learning models for inflation trend prediction.
		Compare inflation trends across different regions and time periods.
FR-4	Data Visualization & Dashboards	Develop Power BI dashboards with dynamic filtering and interactive visuals.
		Provide graphical representations such as line charts, heat maps, and bar charts.
FR-5	User Interaction & customization	Allow users to export reports in Excel, PDF, and PowerPoint formats.
		Enable users to set custom alerts for inflation rate thresholds.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The dashboard should be user-friendly and provide an intuitive interface for non-technical users.
NFR-2	**Security**	Data access should be secured using authentication and role-based permissions.
NFR-3	**Reliability**	The system must ensure accurate and up-to-date inflation data retrieval without downtime.
NFR-4	**Performance**	Power BI reports should load within **5 seconds** for a seamless experience.
NFR-5	**Availability**	The system should be accessible 24/7 with **99.9% uptime**.
NFR-6	**Scalability**	The solution must handle an increasing volume of data and support new data sources in the future.