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

Date	31 January 2025
Team ID	PNT2025TMID02638
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	User Registration	Registration through Form
		Registration through Gmail
		Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email
		Confirmation via OTP
FR-3	Data Visualization and	Visualize inflation trends by country, region, and time
	Dashboard	Interactive charts and graphs using Power BI
		Drill-down features for detailed exploration of data
FR-4	Report Generation and Export	Generate downloadable reports on inflation data
		Include visualizations (charts, graphs) in reports
		Export reports in multiple formats (PDF, Excel, etc.)
FR-5	User Profile and Preferences	Ability for users to update profile details
		Set data filtering preferences (e.g., countries, years)
FR-6	Data Search and Filtering	Search for inflation data by country, year, and region
		Filter inflation data based on specific economic
		indicators (e.g., CPI, PPI, etc.)

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The system should be easy to navigate, with an
		intuitive UI/UX for data visualization.
NFR-2	Security	The system must ensure user data protection
		through secure authentication methods (e.g.,
		OAuth, 2FA) and data encryption.
NFR-3	Reliability	The application should maintain consistent
		performance, ensuring no crashes or data loss
		under normal use conditions.
NFR-4	Performance	The system should load large datasets quickly
		(especially in Power BI dashboards) and deliver
		minimal latency for real-time interactions.

NFR-5	Availability	The application should be available 99.9% of the
		time, with a reliable backup and disaster recovery
		plan.
NFR-6	Scalability	The solution should be scalable to accommodate
		an increasing number of users and handle
		expanding datasets without performance
		degradation