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

Date	1 march 2025
Team ID	PNT2025TMID02999
Project Name	Global Malnutrition Trends: A Power BI Analysis
	(1983-2019)
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	Fetch data from global health databases (WHO, UNICEF, FAO)
		Allow user-uploaded datasets (CSV, Excel)
FR-2	Data Pre-processing	Handling missing values
		Standardizing data formats
		Data transformation (Normalization, Aggregation)
FR-3	Data Storage	Storing raw and processed data in a database
		Ensuring efficient indexing for retrieval
FR-4	Data Analysis	Generating statistical insights
		Performing trend analysis
FR-5	Power BI Dashboard	Creating interactive visualizations
		User-defined filters and drill-down options
		Exporting reports in various formats
FR-6	User Access & Authentication	Login through Email & Password
		Social media authentication (Google, LinkedIn)
FR-7	System Notifications	Email notifications for updates
		Alerts for data inconsistencies
FR-8	Report Generation	Generating country-wise malnutrition reports
		Comparative analysis over different years
FR-9	User Feedback Collection	Collecting user suggestions
		Storing and analysing feedback

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	User-friendly interface with intuitive navigation
NFR-2	Security	Secure authentication, encrypted data storage
NFR-3	Reliability	Ensuring system uptime and fault tolerance
NFR-4	Performance	Optimized data queries for fast dashboard performance
NFR-5	Availability	System accessible 24/7 with minimal downtime
NFR-6	Scalability	Ability to handle increasing data load and users