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

Date	28 June 2025
Team ID	LTVIP2025TMID47631
Project Name	Measuring the pulse of prosperity: An Index of
	economic freedom analysis
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	User Registration Users can register through three options: a standard registration form, Gmail
		authentication, or LinkedIn login.
FR-2	User Confirmation	Once registered, users confirm their accounts either through an email verification link or via a one-time
		password (OTP) sent to their registered contact.
FR-3	Interactive Dashboards	The application offers an intuitive dashboard to view and explore economic freedom indicators. Users can apply filters based on country, year, or policy category for tailored insights.
FR-4	Policy Comparison Tools	Users can compare multiple countries across selected indicators and view side-by-side rankings or performance gaps.
FR-5	Storytelling Walkthrough	A guided dashboard experience presents high-level trends and insights using Tableau's story feature, making the data more accessible and impactful.
FR-6	Data Upload (Admin Only)	Administrators can upload new datasets, which automatically initiate backend recalculations to refresh index values and dashboards.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Features a clean dark-mode UI, tooltips, intuitive filter panels, and readable fonts to reduce user
		fatigue and confusion.
NFR-2	Security	Authentication is handled through OAuth2; all traffic is encrypted (HTTPS), and role-based access controls are in place along with activity logs.
NFR-3	Availability	The platform targets 99.9% uptime using cloud redundancy and failover mechanisms to ensure continuous access.

NFR-4	Performance	Dashboards are optimized to load in under 5 seconds, even with complex filters or calculations enabled.
NFR-5	Data Accuracy	Every index value and ranking is traceable to its source data and goes through validation checks before being published.
NFR-6	Scalability	The system is designed to scale for additional metrics, machine learning modules, and broader geographic coverage without major architectural changes.