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

Date	20 June 2025
Team ID	LTVIP2025MID52043
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	Data collection	Collect the dataset or create the dataset
FR-2	Database /Spreadsheet Connection	Understand the dataset Import Dataset into the database Connect Tableau Desktop to Database server.
FR-3	Visualizing and analysing data	Understand the Data and the Business Questions Based on the Business questions develop the different visualizations
FR-4	Dashboard	Develop the Dashboard Build an interactive dashboard for comparing countries and regions Allow dynamic filtering by category, year, or indicator
FR-5	Story	Develop the Storyboard Add a visual data story summarizing key insights Highlight patterns, top countries, and interesting shifts in scores
FR-6	Publishing to the Tableau Public & Web Application Integration	Developed Visualizations, Dashboard and story will be published to Tableau Public Account. Once it is published, we will get the shareable links Develop a web application using HTML, CSS or Using Bootstrap Integrate the Visualizations, Dashboard and Story with the Web Application

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 have an intuitive and accessible interface for non-technical users such as policy analysts and students. Clear visual design and tooltips should guide user actions.
NFR-2	Security	The platform should ensure secure handling of uploaded data using HTTPS encryption. User accounts (if implemented) must use secure login protocols.
NFR-3	Reliability	The system should consistently process, analyze, and display data without crashing. In case of failure, the system should recover the latest state .
NFR-4	Performance	Visualizations should load within 2–3 seconds for datasets of up to 200 countries. Data operations like filtering or scoring must respond instantly.
NFR-5	Availability	The solution should be accessible 24/7 with 99.9% uptime, ensuring minimal disruption during usage.
NFR-6	Scalability	The system should handle larger datasets (e.g., 10 years of data across 200+ countries) without performance degradation.
NFR-7	Maintainability	The backend codebase should be modular, clean, and well-documented for easy future updates or integration with new data sources.
NFR-8	Compatibility	The system should work seamlessly across all major web browsers (Chrome, Firefox, Safari) and be mobile responsive.
NFR-9	Exportability	Users must be able to export visualizations and filtered datasets in standard formats (PDF, Excel, PNG).