**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 30 june 2025 |
| Team ID | LTVIP2025TMID60614 |
| 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.

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| **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 | |  | | --- | | Display country-wise economic freedom index  Show graphs (bar charts, line charts, heatmaps)  Filter by year, region, or category | |
| FR-4 | Data Analysis | |  | | --- | | Calculate custom index  Generate insights and trends  Compare multiple countries | |
| FR-5 | Search and Filter | Keyword search for countries/indicators  Apply filters (e.g., region, income level, etc.) |
| FR-6 | Export Functionality | Exporting charts as PNG or PDF  Downloading reports as Excel or PDF |

**Non-functional Requirements:**

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

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| --- | --- | --- |
| **FR No.** | **Non-Functional Requirement** | **Description** |
| NFR-1 | **Usability** | The system should provide an intuitive, user-friendly interface for users to easily navigate dashboards, interact with visualizations, and understand the economic data without requiring technical knowledge. |
| NFR-2 | **Security** | Data access must be secured. If hosted online, the application should use secure protocols (e.g., HTTPS), and access to raw data should be restricted to authorized users only. |
| NFR-3 | **Reliability** | The system should provide consistent performance and accurate analysis under all conditions. Charts, calculations, and insights must remain correct despite user or data variations. |
| NFR-4 | **Performance** | The solution should respond to user interactions quickly (within 2 seconds for data loads or chart rendering), even for large datasets. |
| NFR-5 | **Availability** | he system (if web-based) should have at least 99% uptime. All features and visualizations must be accessible at all times. |
| NFR-6 | **Scalability** | The solution should be scalable to accommodate additional countries, new years of data, or more indicators in the future, without significant redevelopment. |