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

| Date | 27 June 2025 | |
|---------------|-----------------------------------|--|
| Team ID | LTVIP2025TMID49412 | |
| Project Name | Measuring the pulse of prosperity | |
| 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 Upload | Upload Economic Freedom Index CSV files Upload GDP and HDI datasets |
| FR-2 | Data Preprocessing | Data cleaning and formatting using Python Handling missing or null values |
| FR-3 | Visualization | Create country-wise comparative dashboards Implement correlation visualizations between freedom & GDP Add dynamic filters for year, region, and economic tier |
| FR-4 | Insight Extraction | Identify top/bottom performing nations Show pattern-based insights via story dashboards |
| FR-5 | Export Options | Export dashboards to PDF or PNG Allow download of filtered datasets |

Non-functional Requirements:

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

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | Dashboards should be intuitive and easy to interpret for all stakeholders |
| NFR-2 | Security | File upload/download permissions, view-only access on dashboards |
| NFR-3 | Reliability | Data visualizations should render correctly across all filters |
| NFR-4 | Performance | Dashboards should load within 3 seconds on average |
| NFR-5 | Availability | Published dashboards must be accessible 24/7 |
| NFR-6 | Scalability | New datasets should be easily ingestible without structural changes |