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

| Date | 31 January 2025 |
|---------------|---|
| Team ID | PNT2025TMID03037 |
| Project Name | Power BI Inflation Analysis: Journeying Through Global Economic Terrain |
| Maximum Marks | 4 Marks |

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 be easy to navigate, with an intuitive UI/UX for data visualization. |
| NFR-2 | Security | The system must ensure user data protection through secure authentication methods (e.g., OAuth, 2FA) and data encryption. |
| NFR-3 | Reliability | The application should maintain consistent performance, ensuring no crashes or data loss under normal use conditions. |
| NFR-4 | Performance | The system should load large datasets quickly (especially in Power BI dashboards) and deliver minimal latency for real-time interactions. |

| NFR-5 | Availability | The application should be available 99.9% of the time, with a reliable backup and disaster recovery plan. |
|-------|--------------|--|
| NFR-6 | Scalability | The solution should be scalable to accommodate an increasing number of users and handle expanding datasets without performance degradation |

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 | Registration through Form Registration through Gmail Registration through LinkedIN |
| FR-2 | User Confirmation | Confirmation via Email Confirmation via OTP |
| FR-3 | Data Visualization and Dashboard | Visualize inflation trends by country, region, and time Interactive charts and graphs using Power BI Drill-down features for detailed exploration of data |
| FR-4 | Report Generation and Export | Generate downloadable reports on inflation data Include visualizations (charts, graphs) in reports Export reports in multiple formats (PDF, Excel, etc.) |
| FR-5 | User Profile and Preferences | Ability for users to update profile details Set data filtering preferences (e.g., countries, years) |
| FR-6 | Data Search and Filtering | Search for inflation data by country, year, and region Filter inflation data based on specific economic indicators (e.g., CPI, PPI, etc.) |