

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

Date	7 February 2026
Team ID	LTVIP2026TMIDS77691
Project Name	Empowering India: Analysing the Evolution of Union Budget Allocations for Sustainable Growth
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 Integration and Preparation	<ul style="list-style-type: none"> <li>-Import Union Budget dataset into the database (MySQL).</li> <li>-Clean and format dataset fields for analysis (rename columns, verify data types).</li> <li>-Validate data accuracy and remove missing or duplicate entries.</li> <li>-Prepare dataset for Tableau connection.</li> </ul>
FR-2	Budget Allocation Analysis	<ul style="list-style-type: none"> <li>-Analyze ministry-wise healthcare budget allocations.</li> <li>-Analyze scheme-wise healthcare funding distribution.</li> <li>-Compare budget allocations across financial years (2021–2024).</li> <li>-Identify top funded healthcare schemes and ministries.</li> </ul>
FR-3	Visualization Dashboard Development	<ul style="list-style-type: none"> <li>-Create category-wise and ministry-wise allocation charts.</li> <li>-Build scheme-level comparison visualizations.</li> <li>-Develop KPI cards showing total investment and top funding indicators.</li> <li>-Design an interactive Tableau dashboard integrating all visualizations.</li> </ul>

### **Non-functional Requirements:**

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

<b>FR No.</b>	<b>Non-Functional Requirement</b>	<b>Description</b>
NFR-1	<b>Usability</b>	The dashboard should provide an intuitive and user-friendly interface with clear visualizations, filters, and navigation so users can easily explore healthcare budget insights.
NFR-2	<b>Security</b>	Access to the database and dashboards should be protected using authentication and role-based permissions to ensure data confidentiality and integrity.
NFR-3	<b>Reliability</b>	The system should consistently produce accurate calculations, visualizations, and reports without data loss or processing errors.
NFR-4	<b>Performance</b>	Queries, dashboard loading, and visual updates should execute within acceptable response times to ensure smooth user interaction.
NFR-5	<b>Availability</b>	The analytics dashboard and database should be accessible whenever required, minimizing downtime during analysis or reporting.
NFR-6	<b>Scalability</b>	The system should support future expansion, allowing additional datasets, financial years, or sectoral information to be integrated without major redesign.