

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

Date	04 July 2025
Team ID	LTVIP2025TMID49702
Project Name	ToyCraft Tales _ Tableau's Vision into Toy Manufacturer Data
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 Acquisition & Validation	<ul style="list-style-type: none"><li>• Download dataset from Kaggle</li><li>• Check data types and structure</li><li>• Store original file securely</li></ul>
FR-2	MySQL Schema & ETL	<ul style="list-style-type: none"><li>• Design relational schema (fact &amp; dimension tables)</li><li>• Load and clean data using SQL</li><li>• Create indexes &amp; refresh jobs</li></ul>
FR-3	Tableau Data Connection & Modeling	<ul style="list-style-type: none"><li>• Connect Tableau to MySQL Server</li><li>• Define joins and relationships</li><li>• Create calculated fields and hierarchies</li></ul>
FR-4	Interactive Dashboard Design	<ul style="list-style-type: none"><li>• Build dashboards for sales, region, category, etc.</li><li>• Add filters, tooltips, and parameters</li><li>• Enable drill-down to SKU level</li></ul>
FR-5	Storytelling & Publishing	<ul style="list-style-type: none"><li>• Create story points in Tableau</li><li>• Add narrative text and flow</li><li>• Publish to Tableau Server/Cloud with access control</li></ul>

#### Non-functional Requirements:

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

NFR-1	<b>Usability</b>	Dashboards are intuitive, tooltips enabled, 3-click access to key metrics.
NFR-2	<b>Security</b>	Use role-based access, encrypted connections (TLS), and secure publishing via Tableau Server.
NFR-3	<b>Reliability</b>	Data refresh jobs monitored, backups scheduled daily, alert setup for data failures.
NFR-4	<b>Performance</b>	Dashboards load within 5 seconds; filters and visuals update with minimal delay (< 2 sec).

FR No.	Non-Functional Requirement	Description
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NFR-5	<b>Availability</b>	System accessible 24/7 with high availability Tableau deployment; no downtime during updates.
NFR-6	<b>Scalability</b>	Supports 10x data growth and 5x more users via extract partitioning and scalable server configuration.