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

Date	25 June 2025
Team ID	LTVIP2025TMID48377
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	User Registration	<ul><li>Registration through Form</li><li>Registration via Gmail</li><li>Registration via LinkedIn</li></ul>
FR-2	User Confirmation	- Confirmation via Email - Confirmation via OTP
FR-3	Data Integration	- Connect Tableau to Manufacturer Database - Integrate with Excel, ERP Systems - API Support
FR-4	Data Cleaning & Preparation	<ul><li> Handle missing/null values</li><li> Standardize dates and times</li><li> Categorize product data</li></ul>
FR-5	Dashboard Development	- Sales Performance Dashboard - Inventory Tracking Dashboard - Regional Performance Dashboard
FR-6	User Role Management	- Define Admin, Analyst, and Viewer roles - Control access to dashboards based on roles
FR-7	Export and Sharing Features	- Export dashboards as PDF/PNG - Share dashboards via secure links or email
FR-8	Feedback Collection	- User feedback forms for dashboard usability - Rating system for visualizations
FR-9	Real-Time Data Refresh	- Support scheduled refreshes - Allow manual data refresh options

FR-10	Security & Compliance	<ul><li>Data encryption during transmission</li><li>Ensure GDPR/industry compliance</li></ul>

## 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 provide an intuitive and userfriendly interface that allows users (e.g., manufacturers, analysts) to navigate dashboards and retrieve insights without prior technical training.
NFR-2	Security	Data must be secured through role-based access controls, encryption in transit and at rest, and integration with secure authentication mechanisms (e.g., OAuth for Gmail/LinkedIn logins).
NFR-3	Reliability	The solution should ensure consistent performance with minimal errors or crashes, including errorhandling and data recovery mechanisms.
NFR-4	Performance	Dashboards and visualizations should load within 3 seconds for optimal user experience, even with large datasets. Backend processes (ETL, data refresh) must complete within defined SLAs.
NFR-5	Availability	The application should be available at least 99.5% of the time, excluding planned maintenance, to ensure continuous access for stakeholders.
NFR-6	Scalability	The system must support growth in data volume, user traffic, and dashboard complexity without degradation in performance or reliability. It should be deployable in scalable environments (e.g., cloudbased Tableau Server).