

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

Date	20 June 2025
Team ID	LTVIP2025TMID48991
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 Collection & Extraction	Import data from external databases Perform SQL queries for data extraction Schedule automated data refresh
FR-2	Data Preparation	Clean and transform data for Tableau visualization Handle missing values and data type conversions Create calculated fields and hierarchies
FR-3	Data Visualization	View dashboards with interactive charts and graphs Access stories showing market trends and insights Filter visualizations by region, year, category
FR-4	Data Upload & Integration	Upload new datasets to the system Integrate with external database (e.g., SQL DB) Connect Tableau dashboards to live data
FR-5	Web Embedding	Embed Tableau dashboard in web app (Flask UI) Provide responsive UI for dashboard interaction
FR-6	Report & Export	Download reports as PDF or Excel Export specific visualizations

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 easy-to-navigate interface for both administrators and end users. Users should be able to interact with dashboards, filters, and reports without extensive training.
NFR-2	Security	All data must be secured through encryption, with robust authentication and authorization mechanisms. The system should protect against unauthorized access and ensure data privacy.
NFR-3	Reliability	The solution should perform consistently without unexpected failures or downtime. It must deliver accurate visualizations and data outputs at all times.
NFR-4	Performance	Dashboards and reports should load quickly, ideally within 3 seconds for normal queries. The system

		should handle complex visualizations efficiently without lag.
NFR-5	Availability	The platform should ensure 99.9% uptime, making dashboards and data accessible at all times except during scheduled maintenance. This helps maintain user trust and continuous data access.
NFR-6	Scalability	The system should support growing data volumes and increased user load without performance degradation. It should be easy to scale horizontally or vertically as demand grows.