Project Design Phase-II

Technology Stack

Date	25 june 2025
Team ID	LTVIP2025TMID51634
Project Name	ToyCraft Tales: Tableau's Vision into Toy Manufacturer Data
Maximum Marks	2 Marks

Technical Architecture Guidelines

- User interface to display dietary patterns and health insights.
- Scripts and data logic to clean and analyze food behavior data.
- Integration with external survey tools or APIs if needed.
- Secure storage and sharing of data visualizations.
- Local/cloud deployment of dashboards for student and admin access.

Table-1: Components & Technologies

S.No	Component Description	Technology
1	User Interface to visualize food data (charts, dashboards)	Tableau Public, HTML, CSS
2	Data Cleaning & Preparation logic	Python (Pandas, NumPy), Excel
3	Analytical logic (trends, top products, defects, regions)	Tableau Calculated Fields, Python
4	Data sources (production logs, sales data, feedback surveys)	CSV Files, Google Forms, Excel Sheets
5	Optional backend database for inventory/tracking	SQLite / Google Sheets (optional for scaling)
6	Cloud storage for datasets and Tableau workbooks	Google Drive, IBM Cloud Object Storage
7	File Storage for reports and screenshots	Local File System
8	External API-1 (toy safety/standards integration)	USDA FoodData API / Nutritionix API
9	External API-2 (market/mood trends, optional)	OpenWeatherMap / Google Fit API (optional)
10	Infrastructure for hosting and visualization	Local Systems, Tableau Public Cloud

Table-2: Application Characteristics

S.No	Characteristics	Description & Technology
1	Open-Source Frameworks	Python (Pandas, NumPy), Tableau Public
2	Security Implementations	File Protection, Google Drive Access Control
3	Scalable Architecture	Tableau Public (scalable), Cloud Storage (optional)
4	Availability	Tableau Public Cloud, Local Storage