

Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	04 February 2026
Team ID	LTVIP2026TMIDS89201
Project Name	ToyCraft Tales: Tableau's Vision into Toy Manufacturer Data
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: Order processing during pandemics for offline mode

Reference: <https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/>

Guidelines:

- Include all the processes (As an application logic / Technology Block)
- Provide infrastructural demarcation (Local / Cloud)
- Indicate external interfaces (third party API's etc.)
- Indicate Data Storage components / services
- Indicate interface to machine learning models (if applicable)

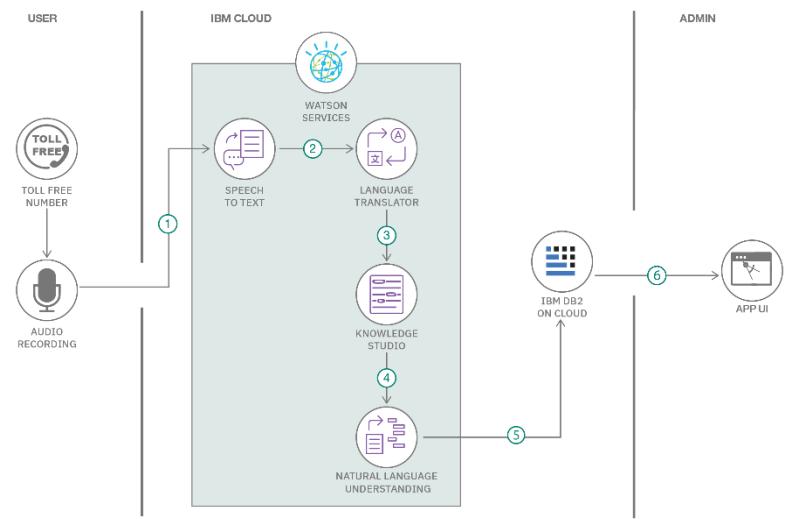


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Dashboard Interface	Visual interface to explore toy sales trends, regional stats, seasonal patterns	Tableau Public/Desktop
2.	Data Storage	Stores toy manufacturing and sales data for analysis	Excel / Google Sheets / CSV
3.	Data Processing	Prepares and cleans datasets before visualization	Tableau Prep / Excel
4.	Survey Collection	Captures user preferences or toy feedback	Google Forms / Typeform
5.	Survey Visualization	Displays user feedback as charts on the dashboard	Tableau Embedded Charts
6.	User Access Control	Allows admin to manage user login, access, and data usage	Manual / Google Auth Dashboard

7.	Data Export Function	Lets users download charts and graphs for reports or analysis	Tableau Export (PDF/PNG)
8.	Notifications/Follow-up	Sends updates to users about new dashboards or toy trends	Email (via Gmail integration / Mailchimp)
9.	Platform Hosting	Hosts the dashboard or project for online access	Google Drive / Tableau Public / GitHub Pages

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	User-Friendliness	Simple and intuitive dashboard interface for students, parents, and analysts	Tableau (filters, tooltips, charts)
2.	Data Visualization	Clear graphical representation of toy trends by region, season, and type	Tableau Public/Desktop
3.	Data Import & Refresh	Ability to upload, clean, and update datasets	Excel / Tableau Prep
4.	Accessibility	Accessible on web and mobile for easy interaction	Tableau Public, Web Browser
5.	Survey Integration	Collects and visualizes user preferences through e surveys	Google Forms + Tableau embedded
6.	Security	Ensures secure access through authentication methods (email/Gmail)	Google Auth / Login System
7.	Exportability	Allows users to download insights for offline use	PDF/PNG Export (Tableau)
8.	Scalability	Can be expanded to include more regions, years, or toy categories	Tableau, Modular Dataset Design

References:

<https://c4model.com/> <https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/> <https://www.ibm.com/cloud/architecture>
<https://aws.amazon.com/architecture> <https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>