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

Date	25 June 2025
Team ID	LTVIP2025TMID47679
Project Name	Toy Craft 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	Registration through Form
		Registration through Gmail
		Registration through Linked IN
FR-2	User Confirmation	Confirmation via Email
		Confirmation via OTP
FR-3	Toy Customization	3D Builder Tool (Drag-and-Drop Parts)
		Story-Based Themes (Pre-Designed Kits)
		Save/Share Designs
FR-4	Order Management	Cart System (Add/Remove Items)
		Bulk Order Discounts (Schools/Educators)
		Order Tracking (Shipping Status)
FR-5	Payment Processing	Secure Checkout (Stripe/PayPal)
		Gift Wrapping Options
FR-6	Feedback & Community	Review System (Ratings + Photos)
		User-Generated Design Gallery

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Intuitive UI for children/parents (e.g., simple 3D
		builder, clear navigation).
NFR-2	Security	PCI-DSS compliance for payments; encrypted user
		data (GDPR/COPPA).
NFR-3	Reliability	99.9% uptime for order processing; backup systems
		for customization tool.
NFR-4	Performance	<2s load time for product pages; handle 10K
		concurrent users during holidays.
NFR-5	Availability	Multi-region cloud hosting (AWS/GCP) to reduce
		latency.
NFR-6	Scalability	Modular backend to support 5x traffic spikes (e.g.,
		Black Friday).