

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

Date	26June 2025
Team ID	LTVIP2025TMID53236
Project Name	shopsmart: your digital grocery store experience
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
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Product Management	View Products Search Products Filter by Category View Product Details
FR-4	Shopping Cart	Add/Remove Products Update Quantity View Cart Summary
FR-5	Order Processing	Place Order Apply Discount Codes Select Address
FR-6	Payment Integration	Online Payment via Razorpay Display Order Confirmation
FR-7	User Dashboard	View Orders Track Order Status Edit Profile
FR-8	Admin Panel	Add/Edit/Delete Products Manage Orders View User Info

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Simple UI with category-wise browsing and search.
NFR-2	Security	JWT-based auth, password hashing, HTTPS, CORS policy.
NFR-3	Reliability	Cloud deployment with auto-restart on crash (Render).
NFR-4	Performance	Fast rendering using React, backend optimization with Express.
NFR-5	Availability	Deployed on cloud platforms: Netlify (frontend), Render (backend).
NFR-6	Scalability	Frontend-backend separation with scalable MongoDB Atlas cluster.