

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

Date	18 February 2026
Team ID	LTVIP2026TMIDS83223
Project Name	Shopez-one stop shop for Online Products
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 (Name, Email, Password)
		Password encryption using bcrypt
		Email & password validation
		Store user data in MongoDB
FR-2	User Login & Authentication	Login using email & password
		JWT token generation
		Token verification using middleware
		Role-based login (User / Admin)
FR-3	Admin Login	Predefined admin credentials (stored securely in backend)
		Admin authentication using JWT
		Admin authorization middleware
FR-4	Product Management (Admin)	Add new product
		Edit product details
		Delete product
		Manage stock quantity
		Upload product image URL
FR-5	Product Browsing (User)	View all products
		Filter products by category (sports, fashion, electronics, groceries, mobiles)
		Search products by name
		View product details page
FR-6	Cart Management	Add product to cart
		Update quantity

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
		Remove item from cart
		Calculate total price
FR-7 Order Management	Place order	
	Save order details in database	
	View user order history	
	Admin can view all orders	
	Admin can update order status	
FR-8 Authorization & Security	Protect routes using JWT middleware	
	Role-based access control	
	Secure password storage	
FR-9 Reports & Admin Control	View order reports	
	Export order data (if implemented)	