

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

Date	15 April 2025
Team ID	SWTID1743511993
Project Name	Shopez: E-Commerce Application
Maximum Marks	4 Marks

**Functional Requirements:**

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	<ul style="list-style-type: none"><li>Registration with email and password</li><li>Validation of required fields</li><li>Password strength check</li></ul>
FR-2	User Confirmation	<ul style="list-style-type: none"><li>User confirmation via database verification</li><li>Status update after successful registration</li></ul>
FR-3	Product Browsing & Cart	<ul style="list-style-type: none"><li>Browse product listings</li><li>Add products to cart</li><li>View and update cart</li></ul>
FR-4	Checkout & Order	<ul style="list-style-type: none"><li>Checkout flow</li><li>Order confirmation</li><li>Store order details in database</li></ul>

**Non-functional Requirements:**

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Interface should be user-friendly, responsive, and intuitive for both customers and admins.
NFR-2	Security	Implement secure authentication (JWT), password encryption, and role-based access control.
NFR-3	Reliability	System should ensure consistent uptime and functioning under expected loads.
NFR-4	Performance	Pages should load within 2 seconds and support concurrent users without lag.
NFR-5	Availability	System should maintain 99.9% uptime with failover recovery.
NFR-6	Scalability	Easily scale database, backend, and frontend to support growing users/products.