**Project Design Phase-II**

**Solution Requirements (Functional & Non-functional)**

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| Date | 18 April 2025 |
| Team ID | SWTID1743603827 |
| Project Name | Book - Store |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

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| --- | --- | --- |
| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| FR-1 | User Registration | * Registration with email and password * Validation of required fields * Password strength check |
| FR-2 | User Confirmation | * User confirmation via database verification * Status update after successful registration |
| FR-3 | Product Browsing & Cart | * Browse product listings * Add products to cart * View and update cart |
| FR-4 | Checkout & Order | * Checkout flow * Order confirmation * Store order details in database |

**Non-functional Requirements:**

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| **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. |