

## Project Design Phase-II

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

|               |                     |
|---------------|---------------------|
| Date          | 17 Feb 2026         |
| Team ID       | LTVIP2026TMIDS42169 |
| Project Name  | BookNest            |
| Maximum Marks | 4 Marks             |

### Functional Requirements

Following are the functional requirements of the BookNest Project.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task)  |
|--------|-------------------------------|---|
| FR-1   | User Authentication           | Sign up, Login, Password Reset<br>OAuth login using Google / GitHub       |
| FR-2   | Book Browsing & Searching     | Search books by title, author, genre<br>Advanced filter and sort features |
| FR-3   | Book Purchase & Checkout      | Add to cart, Buy now, Order tracking<br>Cancel and return orders          |
| FR-4   | Admin Management              | Add/edit/delete book records<br>Manage categories and inventory           |
| FR-5   | Review & Rating System        | Users can rate and review books   |
| FR-6   | Order History                 | View past purchases and order status                                      |

### Non-functional Requirements

Following are the non-functional requirements of the BookNest Project.

| NFR No. | Non-Functional Requirement | Description  |
|---------|----------------------------|--|
| NFR-1   | Usability                  | The platform should have an intuitive UI/UX for both desktop and mobile users. |

|       |              |  |
|-------|--------------|--|
| NFR-2 | Security     | All transactions and user data should be encrypted. Role-based access control and secure login must be enforced. |
| NFR-3 | Reliability  | Book listing, order placement, and user sessions must function without frequent failures.                        |
| NFR-4 | Performance  | The system should load catalog pages within 2 seconds and process transactions efficiently.                      |
| NFR-5 | Availability | The system should ensure 99.9% uptime, especially during peak sale hours.  |
| NFR-6 | Scalability  | Capable of handling increasing number of books, users, and transactions without performance drop.                |