**Project Design Phase-II**

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

| Date | 16 April 2025 |
| --- | --- |
| Team ID | SWTID1743513717 |
| Project Name | SB Foods – MERN Stack Food Ordering Web App |
| 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 (future)  Registration through LinkedIn (future) |
| FR-2 | User Confirmation | Confirmation via Email  OTP (future scope) |
| FR-3 | Food Catalog Display | View food by category  Search bar functionality  Image and pricing display |
| FR-4 | Cart & Checkout | Add item to cart  Update quantity/size  View total  Place order with simulated payment |
| FR-5 | Order History | Retrieve past orders  Display orders by date  List item details |
| FR-6 | Authentication & Session Mgmt | Login/Logout using JWT  Secure session storage |
| FR-7 | Admin Functionality (optional) | Add/edit food items  Approve restaurant listings (future) |

**Non-functional Requirements:**

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

| **NFR No.** | **Non-Functional Requirement** | **Description** |
| --- | --- | --- |
| NFR-1 | Usability | Easy-to-use interface with responsive design for mobile and desktop users |
| NFR-2 | Security | User authentication via JWT, password hashing using bcrypt |
| NFR-3 | Reliability | Ensures consistent performance and accurate order recording in MongoDB |
| NFR-4 | Performance | React.js and Express.js ensure fast rendering and API response (<2s avg.) |
| NFR-5 | Availability | Available 24/7 in local server mode; scalable to cloud deployment |
| NFR-6 | Scalability | Modular design allows expansion to new categories, users, and vendors |