**Project Design Phase-II**

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

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| --- | --- |
| Date | 26-05-2025 |
| Team ID | PNT2025TMID09488 |
| Project Name | Groceries Site Using MERN Stack |
| Maximum Marks | 4 Marks |

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

**Functional Requirements – Music Streaming App**

|  |  |  |
| --- | --- | --- |
| **FR No.** | **Functional Requirement (Epic)** | **Sub Requirement (Story / Sub-Task)** |
| **FR-1** | User Authentication | |  |  | | --- | --- | |  | Sign up, Login, Logout, Password Reset | |
|  |  | |  |  |  |  | | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | |  |  | Role-based login :  Customer , Seller , Admin | | |
| **FR-2** | Product Browsing & Search | |  | | --- | | Browse items by category (fruits, vegetables, staples) | |
|  |  | Search and filter by price, name, and availability |
| **FR-3** | |  | | --- | |  |   Cart & Order Management | Add to cart, update quantity, remove items |
|  |  | Place order and view confirmation , View past orders |
| **FR-4** | |  | | --- | |  |  |  | | --- | | Seller Dashboard | | Add / update / delete product listings |
| Track inventory and process customer orders |
| **FR-5** | Admin Panel | |  | | --- | |  |  |  | | --- | | Manage users, view reports, control product approvals | |
| **FR-6** | |  | | --- | |  |  |  | | --- | | Payment Integration | | Secure checkout via Razorpay / Stripe |
| **FR-7** | Notification System | |  | | --- | |  |  |  | | --- | | Order status updates (e.g., “Order Shipped”) | |

**Non-functional Requirements:**

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

|  |  |  |
| --- | --- | --- |
| **NFR No.** | **Non-Functional Requirement** | **Description** |
| **NFR-1** | **Usability** | |  | | --- | |  |  |  | | --- | | Clean and responsive UI; intuitive navigation for all age groups | |
| **NFR-2** | **Security** | |  |  |  | | --- | --- | --- | | |  | | --- | |  |  |  | | --- | | All data transfers encrypted; JWT token-based auth;  role-based access control | | |
| **NFR-3** | **Reliability** | |  | | --- | | Ensure cart, checkout, and seller features work consistently | |
| **NFR-4** | **Performance** | Pages load under 2 seconds; instant cart and order response times |
| **NFR-5** | **Availability** | |  | | --- | | 99.9% uptime for users to shop anytime | |
| **NFR-6** | **Scalability** | Capable of scaling to support thousands of users and products |