**Supermarket system**

1. **Functional Requirements**

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| **Requirement ID** | **Description** | **Type** | **Subtype** | **Priority** |
| FR01 | The database shall store product information, including names, prices, and categories. | Functional | Product Management | Must Have |
| FR02 | The database shall store customer details such as names, addresses, and contact information. | Functional | Customer Management | Must Have |
| FR03 | The database shall record sales transactions with details on products sold, date, and time. | Functional | Sales Management | Must Have |
| FR04 | The database shall maintain stock levels for all products. | Functional | Inventory Management | Must Have |
| FR05 | The database shall track supplier details and contact information. | Functional | Supplier Management | Should Have |
| FR06 | The database shall maintain employee records with roles and shift times. | Functional | Employee Management | Must Have |
| FR07 | The database shall store customer orders, including details about products ordered and order status. | Functional | Order Management | Must Have |
| FR08 | The database shall support tracking customer loyalty points. | Functional | Customer Management | Could Have |
| FR09 | The database shall manage promotions and discounts applied to products. | Functional | Promotion Management | Should Have |
| FR10 | The database shall store payment methods linked to customer purchases. | Functional | Payment Management | Must Have |
| FR11 | The database shall support online orders and track the status of deliveries. | Functional | Order Management | Should Have |
| FR12 | The database shall provide an interface for querying product availability in real-time. | Functional | Inventory Management | Must Have |
| FR13 | The database shall track returns and refunds for purchased products. | Functional | Refund Management | Could Have |
| FR14 | The database shall store daily, weekly, and monthly sales reports. | Functional | Reporting and Analytics | Should Have |
| FR15 | The database shall ensure product barcode scanning is linked to inventory and pricing. | Functional | Sales and Inventory | Must Have |
| FR16 | The database shall enable tracking of expired or near-expiration products. | Functional | Inventory Management | Could Have |
| FR17 | The database shall manage special customer requests (e.g., bulk orders). | Functional | Order Management | Could Have |
| FR18 | The database shall log customer feedback and reviews. | Functional | Customer Feedback Management | Should Have |
| FR19 | The database shall support the generation of tax-related reports for auditing purposes. | Functional | Compliance and Auditing | Must Have |
| FR20 | The database shall track employee performance metrics, such as sales volume. | Functional | HR and Performance Management | Should Have |

1. **Non-Functional Requirements**

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| **Requirement ID** | **Description** | **Type** | **Subtype** | **Priority** |
| NFR01 | The database shall ensure data integrity and prevent loss or corruption of customer and product data. | Non-Functional | Data Integrity | Must Have |
| NFR02 | The database should handle concurrent access by multiple users with minimal latency. | Non-Functional | Performance | Must Have |
| NFR03 | The database shall encrypt sensitive data such as customer payment details. | Non-Functional | Security | Must Have |
| NFR04 | The database shall be scalable to handle increased product, customer, and transaction data over time. | Non-Functional | Scalability | Should Have |
| NFR05 | The database should allow automated backup and recovery procedures to prevent data loss. | Non-Functional | Backup and Recovery | Must Have |