**System Requirements**

**Functional requirements for user interface:**

**1. User/Admin Registration:**

1.1 system shall allow user/admin log in or sing up.

1.2 system shall collect and store user information (name, mail, password).

1.3 system shall Provide account verification through email.

**2. Product Catalog:**

2.1 System shall display top selling products and product categories available and represent each product by its image, small description, and price.

2.2 System shall include product categories for easy navigation.

2.3 System shall implement a quick view option for products.

2.4 System shall include page that represent detailed description of the product.

**3. Offers:**

3.1 System shall allow users to view active offers on the homepage and product pages.

3.2 System should allow users access a dedicated section to explore all available offers.

3.3 System shall apply discount during checkout process.

**4. Shopping Cart:**

4.1 System shall allow users to view and edit (add, change number of pieces, delete) cart contents.

4.2 System should calculate and display the total price.

4.3 System shall provide a "Continue Shopping" and “Checkout” options.

**5. Product Search:**

5.1 System should enable a search bar with suggestions after at last two letters entered by the user.

5.2 The search suggestions shall be relevant an accurate.

5.3 System shall display all relevant products based on entered search terms.

**6. Filter and sort:**

6.1 System should allow users to sort products by price popularity.

6.2 System should provide filters for size,color, category.

**7. Checkout Process:**

7.1 System shall gather shipping information and payment method with availability of multiple options.

7.2 System shall provide order confirmation with unique ID.

**8. Order History:**

8.1 System shall allow users to view his/her orders include order details, status.

**9.User Messages:**

9.1 System should allow users to send messages to administrators.

**Functional requirements for admin interface:**

**1. Product Management:**

1.1 System shall allow admin to add, edit, remove products from the catalog.

1.1 System shall allow admin to set product details such as price,descriptions,and images.

1.3 System should allow admin to assign product to relevant categories.

**2. Order Management:**

2.1 System shall allow admin to view and confirm orders.

2.2 Update order status (processing, shipped, delivered).

**3. Inventory Management:**

3.1 System shall allow admin to track and manage inventory levels.

3.2 Receive alerts for low stock or out-of-stock products.

**4. Products Sales:**

4.1 System should display top-selling products.

**5. Discount and promotions:**

5.1 System shall allow admin to Create and manage discounts or promotional offers.

5.2 Set conditions for discounts.

**6. Report generation:**

6.1 Generate reports on sales, inventory, and customer behavior.

6.1 Export reports in common formats (e.g., CSV, PDF).

**7. User messages:**

7.1 Send user messages to admin and allow admin to response to them.

**Non-functional requirements for user and admin interface:**

1.Performance

1.1 Response Time: the system provide a response time of less than 3 seconds for loading product pages and processing user actions.

1.2 Scalability: During peak periods, the system able to support up to 10,000 simultaneous connections and be scalable enough to accommodate an increase in the number of concurrent users.

1.3 Mobile Responsiveness: optimize the user interface for mobile devices to ensure a smooth shopping experience for users accessing the site from smartphones and tablets.

2.Security

2.1 Data Encryption: all sensitive user information (e.g., passwords, personal details) should be encrypted during transmission.

3.Reliability

3.1 System Availability: the system aim for 99.9% availability, allowing for scheduled maintenance windows that are communicated to users in advance.

3.2 Backup and Recovery: To reduce data loss in the event of system failures, periodically backup the database .

3.3 User Feedback: establish mechanisms for users to provide feedback on any system issues they encounter, enabling quick identification and resolution.

4.Usability

4.1 User Interface Consistency: The user interface should be consistent across all pages, ensuring a seamless user experience.

4.2 Clear Product Information: display clear and comprehensive product information, including images, descriptions, prices, and availability status, to aid users in making informed decisions.

4.3 Efficient Checkout Process: streamline the checkout process to minimize the number of steps, reduce user effort, and offer a guest checkout option for users who prefer a quicker process.