**E-commerce Requirements**

**Functional Requirements:**

**For Users :**

**Login or Registration:**

**Users should be able to log in using their registered credentials** (email/username and password).

New users should be able to create accounts by providing necessary information (name, email, password, etc.).

Search Product:

Users should be able to search for products based on various criteria (name, category, price range, etc.).

View Product:

Users should be able to view detailed information about a specific product (description, price, images, etc.).

Add to Cart:

Users should be able to add desired products to their shopping cart.

Quantity selection and cart management (edit, remove items) should be available.

Checkout:

Users should be able to proceed to payment for items in their cart.

Secure payment gateway integration should be implemented.

Order confirmation and summary should be provided after successful checkout.

**For Admin :**

Manage Client:

Admins should have the ability to view, modify, or delete customer accounts.

Account management should include actions like view details, deactivate, or modify customer information.

Manage Products:

Admins should be able to add, edit, or remove products from the system.

Product management includes adding new products, updating details, managing stock, and removing items.

Manage Orders:

Admins should have access to view, update, or cancel orders.

Order management includes tracking orders, updating status, and managing customer order history.

**Non-Functional Requirements:**

**Performance:**

The system should respond within a reasonable time for user interactions (e.g., login, search, checkout).

Scalability to handle a growing number of users and products without significant performance degradation.

**Security:**

Secure encryption methods should be implemented for storing user passwords and sensitive information.

Role-based access control should be enforced, limiting access to sensitive admin functionalities.

User-Friendly Interface

Intuitive and easy-to-navigate user interfaces for both users and admins.

Consistent layout and design across all pages for a seamless user experience.

**Reliability**:

The system should be available and operational for a significant portion of time (high uptime).

Regular backups and data integrity checks to ensure minimal data loss in case of failures.

**Scalability:**

The system should be designed to accommodate future growth in terms of users, products, and transactions.