

FUNCTIONAL REQUIREMENTS

User Interface

- A user should be able to reset their password through an email verification process.
- A manager should be able to generate monthly sales reports in PDF format.
- Users must have the ability to upload files up to 50MB in size.
- A customer should be able to track their order status in real-time.
- An administrator should be able to create, update, and delete user accounts.
- A product search must return relevant results within 2 seconds of input.

Data Management

- Customer data must be stored for at least five years to comply with legal regulations.
- The system must maintain a log of all user activities for auditing purposes.

Third-Party Integration

- The platform must support integration with third-party payment gateways, such as PayPal and Stripe.

Notifications

- Notifications must be sent to users 24 hours before their subscription expires.
- Users should receive an alert if they attempt to delete an item permanently.

Access Control

- The application must provide role-based access control for different user groups.

Reporting

- Reports must include visual charts to summarize data trends.

NON-FUNCTIONAL REQUIREMENTS

Performance

- The system must support 10,000 concurrent users without performance degradation.
- The application must load the dashboard within 3 seconds under normal conditions.
- The software must be operational for at least 99.9% of the time each month.
- A product search must return relevant results within 2 seconds of input.
- The system should recover from power outages within 1 minute without losing data.

Security

- All data must be encrypted both in transit and at rest.
- The platform must support multi-factor authentication for login.

Scalability

- The software must be deployable on both cloud-based and on-premise environments.

Usability

- The user interface must support English, Spanish, and French languages.
- The web portal must adhere to the WCAG 2.1 AA accessibility standards.

Legal

- Customer data must be stored for at least five years to comply with legal regulations.

Maintainability

- Developers must use Python 3.10 or later for back-end services.

Supportability

- The system should provide a 24/7 online helpdesk feature for users.

Compatibility

- The mobile app must be compatible with iOS 14 and later.