

Functional Requirements

FR01: Authentication & Onboarding

FR01-01: User Registration (Sign Up)

FR01-01-01	The system shall allow users to register by providing their email, password, and basic account information.
i	The system shall validate the user information before creating an account to ensure a valid email format and a strong password policy.
ii	The system shall send an email verification link to the user after successful registration to confirm the email address
iii	The registration process shall ensure secure data handling by encrypting passwords using industry-standard encryption methods.

FR01-02: User Login (Sign In)

FR01-02-01	The system shall allow registered users to log in using their email and password.
i	The system shall validate user credentials to ensure that only registered users can access their accounts.
ii	The system shall provide options for password recovery through email, which includes sending a reset link to the registered email address.
iii	The login system shall protect against brute force attacks by implementing a lockout mechanism after multiple failed attempts.

FR01-03: User Onboarding

FR01-03-02	The system shall guide the user through the onboarding experience to create their first store.
i	The onboarding process shall include interactive tutorials and prompts to assist users in setting up their store.
ii	The system shall offer templates and quick-start configurations to streamline the onboarding experience.

FR02: Payment Integration

FR02-01	The system shall integrate with popular payment systems to facilitate transactions.
i	The system shall support integrations with PayPal, Stripe, and major credit card providers.
ii	The payment integration shall ensure secure processing by complying with PCI DSS (Payment Card Industry Data Security Standard).
iii	Users shall be able to configure their preferred payment gateways through an admin dashboard.

FR03: Authentication & Onboarding

FR03-01: Real-time Stock Updates

FR03-01-01	The system shall automatically update product stock levels from drop-shipping suppliers.
i	The system shall connect with supplier APIs to receive real-time inventory data.
ii	Stock updates shall reflect in the store's inventory dashboard within seconds of a change from the supplier.
iii	The system shall handle stock discrepancies and notify the user of any synchronization issues.

FR03-02: Low Stock Alerts

FR03-02-01	The system shall notify store owners when stock for certain products is running low.
i	The system shall allow users to set a threshold for low stock alerts
ii	Notifications shall be sent via email and displayed in the store dashboard.
iii	The system shall prioritize low stock alerts for high-demand products.

FR04: Order Management

FR04-01: Order Processing

FR04-01-01	The system shall automatically forward order details to the drop-shipping supplier for fulfillment.
I	The system shall send order details to the supplier via secure API integration.
ii	Order processing shall include customer details, shipping preferences, and product information.
iii	The system shall confirm successful transmission of order data to the supplier.

FR04-02: Order Status Tracking

FR04-02-01	The system shall track the status of orders within the dashboard.
i	Users shall be able to view order statuses, including pending, shipped, and delivered.
ii	The system shall provide real-time status updates by syncing with supplier systems.
iii	Users shall receive notifications for status changes, such as shipping updates.

FR04-02: Automatic Invoice Generation

FR04-02-01	The system shall generate and email invoices to customers automatically after order confirmation.
i	Invoices shall include product details, pricing, and customer information.
ii	The system shall format invoices to comply with standard accounting practices.
iii	Invoices shall be stored in the user's account for future reference

FR05: Product Management

FR05-01: Product Sourcing

FR05-01-01	The system shall automatically fetch product data from drop-shipping suppliers.
i	The system shall support integration with suppliers like AliExpress, Oberlo, Sadadropshipping, and hrdropshipping.
ii	Product data shall include descriptions, images, and pricing.
iii	Users shall have the option to review and modify fetched product data before listing it in their store.

FR05-02: AI-Enhanced Product Descriptions

FR05-02-01	The system shall use AI to generate SEO-optimized product titles, descriptions, and tags.
i	AI-generated content shall be customizable to fit different marketing strategies.
ii	The system shall evaluate product keywords and trends to improve search engine visibility.
iii	Users shall have the option to edit AI-suggested descriptions before publishing.

FR05-03: Bulk Products Upload

FR05-03-01	The system shall allow users to upload multiple products at once.
i	Users shall be able to use CSV or Excel file formats for bulk uploads.
ii	The system shall validate the data in the upload file and notify users of any errors.
iii	Bulk uploads shall be processed efficiently, with progress tracking available.

FR06: Store Creation & Setup

FR06-01: AI-Assisted Store Setup

FR06-01-01	The system shall use AI to assist users in creating a fully functional e-commerce store.
i	AI shall generate product listings, descriptions, and images based on user preferences.
ii	The setup wizard shall include prompts for branding elements, such as logos and themes.
iii	Users shall receive recommendations for optimizing their store layout and content.

FR06-02: Template Selection

FR06-02-01	The system shall provide users with a range of pre-designed store templates.
i	Templates shall be categorized by industry and design style.
ii	Users shall preview templates before selecting them for their store.
iii	Templates shall be customizable after selection.

FR06-03: Customization Options

FR06-03-01	The system shall allow users to modify the layout, colors, fonts, and overall design.
i	Customization tools shall include a user-friendly interface for real-time changes
ii	Users shall save changes and revert to previous versions if needed.
iii	The system shall support custom CSS and HTML for advanced users.

FR06-04: Domain Integration

FR06-04-01	The system shall offer an option for users to use a custom domain or a subdomain provided by DroPilot.
i	Domain setup shall include step-by-step instructions for connecting external domains.
ii	The system shall provide SSL certificates for secure browsing.
iii	Users shall receive domain management support.

FR07: Analytics & Reporting

FR07-01: Sales Report

FR06-01-01	The system shall generate reports on daily, weekly, or monthly sales performance.
I	Sales data shall include metrics such as total revenue, best-selling products, and average order value.
li	Users shall have the option to export reports in standard file formats (e.g., PDF, Excel).
lii	Reports shall include visual representations like charts and graphs for better comprehension.

FR07-02: Product Profitability Analysis

FR06-02-01	The system shall offer detailed insights into product profitability, including costs and margins to help users understand financial performance.
I	Profit analysis shall include metrics such as gross and net profit calculations.
li	The system shall automatically highlight the most profitable products and suggest potential areas for reducing costs or optimizing product margins.
lii	Users shall be able to access a detailed cost breakdown that includes product prices, shipping fees, supplier fees, and overall revenue to help them make informed decisions.

Non-Functional Requirements

NFR01: Performance

NFR01-01	Home page must load within 10 seconds.
NFR01-02	System must respond within 10 seconds on user request.

NFR02: User Friendly

NFR02-01	Display of our application will be very user friendly.
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NFR03: Portability

NFR03-01	Our web application can be operating on any platform. (Mac, Windows, Linux)
NFR03-02	Our mobile application can be operating on Android platform.

NFR04: Accuracy

NFR04-01	Our application will generate results that will be reasonably accurate.
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NFR05: Disaster Recovery

NFR05-01	If system crashes, all data should be recoverable within 30 minutes of the crash.
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NFR06: Defect Maintenance

NFR06-01	Post release bug fixing should not take more than 4 hours.
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NFR07: Security

NFR07-01	No user can access database except the Admin.
NFR07-02	System must provide access only through login module to authorized users.

