Functional Requirements Document

E-Commerce Order Management System

Document Control

Item	Details
Document Title	Functional Requirements Document
Project Name	E-Commerce Order Management System
Prepared By	Business Analyst
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Introduction

This Functional Requirements Document (FRD) defines the functional behavior of the E-Commerce Order Management System. The purpose of this document is to describe how the system should operate in response to user actions and business rules.

This FRD is based on the approved Business Requirements Document (BRD) and supports downstream activities such as development, testing, and validation.

Scope

In Scope

- User order placement
- Payment processing
- Order confirmation
- Order status notifications
- Data storage related to orders and payments

Out of Scope

- UI design aesthetics
- Database schema design
- Infrastructure and deployment details

Assumptions & Constraints

Assumptions

- Users are registered and authenticated before placing orders

- External payment gateway handles payment authorization

- Notification services are available

Constraints

- Payment retries are limited by system-defined rules

- System behavior must comply with basic security standards

Functional Requirements

FR-01: Capture Order Details

The system shall allow users to select products and capture order details during checkout.
(Refer: E-Commerce Activity Diagram, Flowchart)

FR-02: Validate Payment

The system shall validate payment status through an external payment gateway before confirming an order.
(Refer: Payment Flowchart, Decision Table – Payment Logic)

FR-03: Handle Payment Failure

The system shall allow retry or cancellation when a payment attempt fails, based on retry rules.
(Refer: Decision Table – Payment Processing)

FR-04: Confirm Order

The system shall generate a unique order ID and confirm order placement upon successful payment.
(Refer: BPMN Diagram – Order Flow)

FR-05: Store Order Information

The system shall store order and payment information for future reference and tracking.
(Refer: DFD Level-1)

FR-06: Send Order Notifications

The system shall notify users about order confirmation or failure through supported notification channels.
(Refer: Flowchart, DFD)

Business Rules

- An order shall only be confirmed after successful payment validation

- Failed payments may allow retries up to a defined limit

- Orders cancelled during payment shall not be processed further

(Refer: Decision Table – E-Commerce Payment Logic)

User Interaction Reference

User interactions for order creation, preview, and result display are captured using wireframes created in Figma.
These wireframes support validation of functional requirements and user flows.
(Refer: Low- and High-Fidelity Wireframes)

Non-Functional Considerations (Reference Only)

- System response time should be within acceptable limits during checkout

- Sensitive payment information must be handled securely

Sign-Off

Role	Name	Signature	Date
Business Analyst			
Product Owner			
Stakeholder			