

Universidad de las Fuerzas Armadas ESPE

Members:

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Subject: Advanced Web Programming

Group #4

Minimarket ("Star Minimarket") Online Sales and Delivery Management System - Backlogs

Feature 0: Core CRUD & User Management

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-C.1, RF-C.2, RF-C.3	Secure Registration and Authentication (Login) for Customers.	Customer	Functional (User CRUD)
RF-A.1	Admin Login and Management of User Accounts.	Administrator	Functional (User CRUD)
RF-A.2, RF-D.1	Management (CRUD) of Products (Add, Edit, Remove, Update Stock, Mark 'Out of Stock').	Administrator	Functional (Product CRUD)

Feature 1: Online Sales & Catalog

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-C.4	Product Catalog Browsing and Display (including images, description, price, stock).	Customer	Functional (Display)
RF-C.5	Search and Filter System (by name, category, price, discount/popular).	Customer	Functional (Search)
RF-C.6	Shopping Cart Management (Add items, Update quantities).	Customer	Functional (Process)
RF-C.7	Online Ordering and Intuitive Checkout.	Customer	Functional (Process)
RF-C.8	Payment Processing Integration (Credit/Debit card, Cash-on-Delivery).	Customer	Functional (Integration)
RF-A.3	Promotions and Discounts Module (Creation and Management of campaigns).	Administrator	Functional (Management)

Feature 2: Order & Delivery Management

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-A.4, RF-D.2	Order Tracking through clear statuses (Pending, Processing, Out for Delivery, Completed).	Administrator, Delivery Personnel	Functional (Process/Update)
RF-C.9	Customer Order History and Status Viewing.	Customer	Functional (Tracking)
RF-A.5	Real-time Stock Alerts for low-running items.	Administrator	Functional (Alerts)

Feature 3: Reporting & Analytics

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-A.6	Sales and Performance Dashboard (Visual summaries of total sales, best-selling products, active orders, stock stats).	Administrator	Functional (Reporting)
RF-A.7	Generation of Sales and Inventory Reports/Metrics (e.g., Total Sales, Stock Turnover Rate, Average Order Value).	Administrator	Functional (Reporting)

Feature 4: Customer Feedback & Review System

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-C.10	Allow customers to rate and review purchased products.	Customer	Functional (Feedback)
RF-A.8	Admin moderation of reviews and ability to respond to customer feedback.	Administrator	Functional (Moderation)

Feature 5: Loyalty & Rewards Program

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-C.11	Customers earn points with each purchase that can be redeemed for discounts.	Customer	Functional (Rewards)
RF-A.9	Admin management of point system, reward tiers, and redemption options.	Administrator	Functional (Management)

Feature 6: Inventory Forecasting and Supplier Management

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-A.10	Automatic demand forecasting based on sales trends.	Administrator	Functional (Analytics)
RF-A.11	Supplier management for automatic restocking and purchase orders.	Administrator	Functional (Supply Management)

Feature 7: Push Notifications & Email Alerts

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-C.12	Send automated email and in-app notifications for order confirmations, promotions, and delivery updates.	Customer	Functional (Communication)
RF-A.12	Admin control over notification templates and triggers.	Administrator	Functional (Automation)

Feature 8: Delivery Route Optimization (Map Integration)

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-D.3	Real-time route optimization using Google Maps API to improve delivery times.	Delivery Personnel	Functional (Integration)
RF-A.13	Admin view of delivery zones and performance analytics per route.	Administrator	Functional (Visualization)

Feature 9: Admin Settings & Security Logs

Req. ID	Grouped Requirement Description	Roles Involved	Type
RF-A.14	Manage user roles, access levels, and password reset policies.	Administrator	Functional (Security)
RF-A.15	Monitor system activity and login history for auditing.	Administrator	Functional (Logging)