

Test Scenario Document: Customer and Product Management Functions

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1. PURPOSE

This document describes the test scenario for verifying customer and product management functions in the E-commerce Application. This includes CRUD operations on customers and products.

2. PREREQUISITES

- Application setup completed successfully
- Database connection established
- Basic database schema in place
- Application configuration verified

3. TEST STEPS

3.1 Customer Management Tests - Start the application console UI - Navigate to Customer Management menu (Option 1) - Test 1: List all customers - Expected: Shows existing customers or “No customers found” - Test 2: Add new customer - Enter: First Name: John, Last Name: Doe, Email: john.doe@test.com - Expected: Customer added successfully with new ID - Test 3: View customer details - Enter existing customer ID - Expected: Customer details displayed correctly - Test 4: Update customer - Select existing customer, update email - Expected: Customer updated successfully - Test 5: Delete customer - Select created customer, confirm deletion - Expected: Customer deleted successfully

3.2 Product Management Tests - Navigate to Product Management menu (Option 2) - Test 6: List all products - Expected: Shows existing products or “No products found” - Test 7: Add new product - Enter: Product Name: Test Product, Description: Test, Price: 29.99 - Expected: Product added successfully with new ID - Test 8: View product details - Enter existing product ID - Expected: Product details displayed with category and order information - Test 9: Update product - Select existing product, update price - Expected: Product updated successfully - Test 10: Delete product - Select created product, confirm deletion - Expected: Product deleted successfully

3.3 Data Validation Tests - Test 11: Add customer with invalid email - Enter: Email without @ symbol - Expected: Validation error message displayed - Test 12: Add product with negative price - Enter: Price: -10.00 - Expected: Validation error message displayed

4. VERIFICATION STEPS

4.1 Database Verification - After each create/update/delete operation, verify database reflects changes - Check that related records are properly maintained

4.2 UI Response Verification - Confirm all operations provide appropriate feedback - Verify error messages are clear and actionable

5. SUCCESS CRITERIA

- All CRUD operations complete successfully
- Data validation works correctly
- Database changes are persisted
- UI provides clear feedback
- Error handling works as expected

6. FAILURE CONDITIONS

- CRUD operations fail
- Validation doesn't work properly
- Database operations cause errors
- UI doesn't respond appropriately
- Error messages are unclear

7. ERROR HANDLING

- If customer creation fails, verify all required fields are provided
- If product creation fails, verify price is positive number
- If database operations fail, check connection and permissions
- If validation doesn't work, verify error handling implementation

8. POST-CONDITIONS

- Customer and product data integrity maintained
- All operations properly validated
- Error conditions handled gracefully
- Database consistency preserved