LLM Automated Evaluation Results

Functional Requirements Evaluation Table

The following is a complete evaluation conducted based on the system overview, requirements document (functional requirements and external interfaces), and your specific instructions. The evaluation process strictly followed your rules:

1.｜Data Entity Statistics｜: Data entities required to be managed within the system were extracted from the functional requirements, excluding external data sources or formats mentioned in interface definitions. Entities were identified based on core objects described in the requirements. A total of 7 data entities were identified:

｜Customer｜

｜Product｜

｜Category｜

｜Shopping Cart｜

｜Order｜

｜Payment Method｜

｜Plugin｜

(Note: Admin is considered a special type of Customer and is not counted separately. Inventory management (FR-05) is a property of Product and not an independent entity. The calculation of total cost (FR-21) is an attribute operation of Shopping Cart and not a separate entity.)

2.｜Functional Requirement Consolidation and Statistics｜:

｜Merging rules｜: Only the same functional points of the same data entity are merged (e.g., C, R, U, D operations are not merged unless the requirements are highly similar). Generic system setting requirements (such as preference settings) are excluded, but none were present in the document.

｜Total number of functional requirements after merging｜: 20 (originally 21; FR-10 and FR-11 involve the same data entity (Order) and the same operation point “order confirmation”, and were therefore merged into “Process Order Confirmation”).

｜List of functional requirements after merging｜:

1. Customer Registration (FR-01)

2. Customer Login (FR-02)

3. Customer Logout (FR-03)

4. Create Product (FR-04)

5. Manage Inventory (FR-05) – Update product stock quantities

6. View Product Details (FR-06)

7. Add to Cart (FR-07)

8. Modify Cart Item (FR-08)

9. Checkout Order (FR-09) – Including payment processing

10. Process Order Confirmation (Merged FR-10 and FR-11) – Confirm order and send email

11. View Purchase History (FR-12)

12. Update Personal Information (FR-13)

13. Admin Login (FR-14)

14. Manage Categories (FR-15) – Includes creating, updating, and deleting categories

15. Update Product Details (FR-16) – Update product information (excluding inventory)

16. Install Plugin (FR-17)

17. Access Plugin API Documentation (FR-18)

18. Manage User Accounts (FR-19) – Includes viewing, updating, and deleting accounts

19. Manage Payment Method (FR-20) – Includes adding, updating, and deleting payment methods

20. Calculate Total Cost (FR-21)

3.｜Hallucinated Requirement Judgment｜:

｜Standard｜: A requirement is judged as hallucinated if the functional operation introduces a data entity that cannot be associated with any existing entity in the system (causing the E-R diagram to become weakly connected). If the entity is connectable (e.g., through shared attributes or relationships), it is not considered hallucinated. Only requirements introducing entirely isolated entities are considered hallucinations.

｜Evaluation｜: All entities (Customer, Product, Category, Shopping Cart, Order, Payment Method, Plugin) are connected through core relationships (e.g., Customer is linked to Order, Product to Category, Plugin to system functions). Thus, there are no hallucinated requirements.

｜Number of hallucinated requirements｜: 0, Number of non-hallucinated requirements: 20

Complete Evaluation Table

| Functional Requirement | Hallucinated | Evaluation Reason |

| Customer Registration (FR-01) | No | Involves the Customer entity; the registration process has clear inputs and outputs; the system supports entity operations |

| Customer Login (FR-02) | No | Involves the Customer entity; credential input and session status handling conform to system logic |

| Customer Logout (FR-03) | No | Involves the Customer entity; session termination is directly linked to system structure |

| Create Product (FR-04) | No | Involves the Product entity; the creation process is a core system operation |

| Manage Inventory (FR-05) | No | Involves the inventory attribute of the Product entity; stock changes align with product management |

| View Product Details (FR-06) | No | Involves the Product entity; detail display is tightly coupled with user browsing behavior |

| Add to Cart (FR-07) | No | Involves the Shopping Cart entity; item and quantity addition logic is clear |

| Modify Cart Item (FR-08) | No | Involves the Shopping Cart entity; item modification is consistently linked with system data |

| Checkout Order (FR-09) | No | Involves the Shopping Cart and Order entities; checkout logic is complete and entities are reasonably connected |

| Process Order Confirmation (Merged FR-10 and FR-11) | No | Involves the Order entity; status update and notification mechanisms are consistent with system structure |

| View Purchase History (FR-12) | No | Involves the Order and Customer entities; reading historical data conforms to system design |

| Update Personal Information (FR-13) | No | Involves the Customer entity; the update path is clear |

| Admin Login (FR-14) | No | Involves the Admin subclass of the Customer entity; login mechanism is consistent with that of regular users |

| Manage Categories (FR-15) | No | Involves the Category entity; category management is part of the product structure |

| Update Product Details (FR-16) | No | Involves the Product entity; product information update is a routine system behavior |

| Install Plugin (FR-17) | No | Involves the Plugin entity; plugin installation is part of system extensibility support |

| Access Plugin API Documentation (FR-18) | No | Involves the Plugin entity; documentation access is clearly linked to functional modules |

| Manage User Accounts (FR-19) | No | Involves the Customer entity; account management is a fundamental system function |

| Manage Payment Method (FR-20) | No | Involves the Payment Method entity; managing payment methods is embedded in the checkout process |

| Calculate Total Cost (FR-21) | No | Involves the Shopping Cart entity; total cost calculation is part of the cart logic |

Summary

There are 7 data entities involved in the entire document. After merging based on similar functional points, the total number of functional requirements is 20, among which 0 are hallucinated and 20 are non-hallucinated.

Evaluation Notes:

This evaluation was executed according to strict rules, and the requirement document is relatively complete and consistent.

If any requirement element is undefined, certain requirements (e.g., FR-17 or FR-18) may raise concerns, but in this case, external interfaces provide sufficient support.

As a requirement review expert, I recommend adding corresponding test cases during the implementation phase to ensure the testability of external dependencies (such as payment gateways).