LLM Automated Evaluation Results

**Functional Requirements Evaluation Table**

As a requirements review expert, I conducted a comprehensive evaluation of the provided "GAMMA-J Web Store" requirements document (including the system overview, functional requirements, and external interfaces). The review process strictly followed your instructions:

* **Data Entity Identification**:  
  Core data entities managed within the system were extracted from the functional requirements (external data sources or formats mentioned in interfaces were excluded). According to the document, the identified entities are: **User**, **Product**, **ShoppingCart**, and **Order** — a total of 4 data entities.
* **Functional Requirement Consolidation**:  
  Requirements were merged based on the following rules: requirements operating on the same data entity and representing the same functional point were combined; system-level generic requirements were excluded (none found); over-merging was avoided. After consolidation, the original functional requirements (FR-001 to FR-011) were reduced to 6.
* **Hallucinated Requirement Identification**:  
  Based on structural criteria (i.e., whether adding a requirement breaks the weak connectivity of the E-R diagram). A hallucinated requirement is defined as one involving entities that cannot be linked to the existing core entities.
* **Strict Evaluation**:  
  Each requirement was independently assessed; possible issues in otherwise valid (non-hallucinated) requirements were carefully checked for missing definitions in the document.

Below is the detailed evaluation table. Each requirement is based on its merged ID and description.

| **Functional Requirement** | **Hallucinated** | **Evaluation Reason** |
| --- | --- | --- |
| User Account Management | No | Operations involve the User entity, which is linked to core entities (e.g., account creation, login, logout are all based on User). |
| Product Browsing | No | Operations involve the Product entity, which is connected to core functions (viewing product listings). |
| Shopping Cart Management | No | Operations involve both ShoppingCart and Product entities, both connected to the core system (adding/modifying/viewing cart items). |
| Order Processing | No | Operations involve the Order entity, which is associated with both User and Product entities (checkout and email confirmation). |
| Product Management | No | Operations involve the Product entity, integrated with core architecture (admin can add/delete/update products). |
| Plugin API Support | Yes | Introduces plugin-related operations, but the involved entity (e.g., Plugin) is undefined in the document and cannot be linked to existing User/Product/ShoppingCart/Order entities. This may cause the E-R diagram to lose weak connectivity (isolated node). |

**Summary**

* **Total data entities in the document: 4** — User, Product, ShoppingCart, Order.
* **Total functional requirements after merging: 6**
* **Hallucinated requirements: 1** (Plugin API Support)
* **Non-hallucinated requirements: 5**

**Review Notes**:

* The consolidation process was cautious: over-merging was avoided (e.g., Product Browsing and Product Management both involve Product but serve different purposes).
* Hallucination detection was strict: FR-011 introduces an undefined entity, leading to a potentially disconnected architecture.