LLM Automated Evaluation Results

Functional Requirement Evaluation Table

The following presents a comprehensive evaluation of the asset management system’s requirements document based on user specifications. The evaluation strictly adheres to the defined rules:

Data Entity Extraction: Only core data entities managed internally by the system were counted, excluding external data sources and formats mentioned in interfaces. A total of 8 data entities were extracted: Asset, User, Permission, Approval, Log, Report, Asset Category, and Operation Record.

Functional Requirement Merging:

Merging Rules: Merge requirements related to the same data entity and identical functional points (e.g., multiple approval operations merged into one); exclude general system settings (e.g., preferences, multilingual support).

Merging Result: Of the original 30 functional requirements (FR-01 to FR-30), FR-16 (Approval Submission) and FR-17 (Approval Processing) were merged into “Approval Processing Function” due to identical core behavior involving approval processing. Other requirements remained unmerged as they referred to different entities or actions (e.g., asset addition and modification are independent). No generic settings were excluded (none found in the document). Final count of merged requirements: 29.

Hallucinated Requirement Judgement:

Standard: If a requirement’s associated data entity cannot be linked to existing system entities, causing the E-R graph to be weakly connected (i.e., isolated nodes), it is considered hallucinated.

Structural Assessment: All entities (Asset, User, Permission, Approval, Log, Report, Asset Category, Operation Record) are interrelated (e.g., Asset links to Approval via Operation Record; User links to Permission via assignment), forming a weakly connected graph.

Result: All requirements involve existing entities; no hallucinated requirements.

Evaluation Table Explanation:

Columns: Functional Requirement (post-merging name), Hallucinated Requirement (Yes/No), Justification.

Justification: Based on entity connectivity (hallucination), document definition coverage (reference), and transformability between input and output (testability).

｜Functional Requirement｜Hallucinated Requirement｜Evaluation Rationale｜

｜FR-01: Asset Registration Function｜No｜Based on the asset entity, field definitions align with system schema, and the process is realistic with executable business paths.｜

｜FR-02: Asset Creation Function｜No｜Function aligns with asset entity; operations include custodian and document fields that support the creation process.｜

｜FR-03: Asset Modification Function｜No｜Clearly defines fields for modification and resulting actions, aligned with actual modification and audit workflows.｜

｜FR-04: Asset Deletion Function｜No｜Deletion operations are based on asset entity; the status transition logic is sound without introducing redundant entities.｜

｜FR-05: Asset Transfer Function｜No｜Involves asset and transfer records; logic is complete with no detachment from core data.｜

｜FR-06: Asset Return Function｜No｜Return process is integrated with asset management; all fields are reasonable and the function scope is clearly defined.｜

｜FR-07: Asset View Function｜No｜Although based on asset entity, the desensitization standard is undefined, leading to ambiguity in the functional boundary.｜

｜FR-08: User Creation Function｜No｜User information structure is clear; the addition process is standardized without involving fictitious structures.｜

｜FR-09: User Modification Function｜No｜Modification behavior matches user management needs, without introducing abnormal data or unlinked entities.｜

｜FR-10: User Deletion Function｜No｜Deletion logic is straightforward and supported by related functions such as permission freezing.｜

｜FR-11: User View Function｜No｜Though a basic function, the absence of desensitization rules lowers system behavior predictability.｜

｜FR-12: Permission Creation Function｜No｜Permission structure and field definitions are clear; function integrates with system flow and references correct entities.｜

｜FR-13: Permission Modification Function｜No｜Modification logic is based on the permission entity with no excess or broken data chains.｜

｜FR-14: Permission Deletion Function｜No｜Deletion flow aligns with the permission module and does not exceed acceptable management boundaries.｜

｜FR-15: Permission View Function｜No｜Output involves undefined desensitization rules, causing inconsistent system behavior.｜

｜FR-16/17: Approval Processing Function｜No｜Approval behavior aligns with system entities; input/output flow is data-supported.｜

｜FR-18: Approval Record Viewing Function｜No｜Viewing structure is complete; function is based on authentic approval data.｜

｜FR-19: User Permission Assignment Function｜No｜Bidirectional references between Role and Permission entities are clear; the behavior is within system control scope.｜

｜FR-20: Admin Permission Management Function｜No｜Involves a subset of permission management; the process is valid and aligns with system role operations.｜

｜FR-21: Admin Approval Management Function｜No｜Approval chain configuration and flow updates are system-supported; no broken paths.｜

｜FR-22: Admin Log Viewing Function｜No｜Based on the log entity, viewing operation is clear and integrated with system structure.｜

｜FR-23: Asset Operation Record Management Function｜No｜As a submodule of the log entity, its structure is clear and the recording method complies with norms.｜

｜FR-24: Log Management Function｜No｜Log-related operations (export and clean-up) are complete with no abnormal data flow.｜

｜FR-25: Asset Category Management Function｜No｜Asset category management is standard; data fields align with the system’s classification structure.｜

｜FR-26: Report Generation Function｜No｜Report structure is well-defined; charts and templates integrate with system modules and function boundaries are clear.｜

｜FR-27: Report Management Function｜No｜Templates are consistent with system data; design supports both management and modification.｜

｜FR-28: Report Export Function｜No｜Export logic matches the functional goal without introducing abnormal external workflows.｜

｜FR-29: Report Analysis Function｜No｜Although based on AI-generated insights, the lack of defined AI mechanisms leads to unstandardized behavior.｜

｜FR-30: Data Import and Export Function｜No｜Involves entities such as Asset and User; the data interaction process is logical and interface design is compliant.｜

Summary

Total number of data entities involved in the document: 8 (Asset, User, Permission, Approval, Log, Report, Asset Category, Operation Record).

Total number of functional requirements after merging based on identical function points: 29 (originally 30, FR-16 and FR-17 merged).

Number of hallucinated requirements: 0 (all involve existing entities with weakly connected E-R graph).

Number of non-hallucinated requirements: 29 (since there are 0 hallucinated requirements, all are non-hallucinated).