LLM Automated Evaluation Results

**Functional Requirement Evaluation Summary**

The following is a comprehensive evaluation of the asset management system's functional requirements document, based on the user’s request. The evaluation process includes the following steps:

* **Data Entity Statistics**: Extracted internal system-managed data entities from the functional requirements. A total of 12 entities were identified:  
  Asset, AssetRegistration, AssetUsage, AssetTransfer, AssetReturn, User, Manager, ApprovalProcess, ApprovalNode, Report, EmailFeedback, and SystemLog.  
  External interfaces (such as external data sources or formats) were not counted.
* **Merging Functional Requirements**: Similar functional requirements were merged according to the rules:
  + FR-16 (Assign Admin Rights), FR-17 (Modify Admin Rights), and FR-18 (Revoke Admin Rights) were merged into “Manage Admin Rights (Assign, Modify, Revoke)” because they operate on the same data entity (Manager) with similar functions (rights change).
  + FR-10 (Configure Approval Process) and FR-12 (Edit Approval Process) were merged into “Configure or Edit Approval Process” because they operate on the same data entities (ApprovalProcess and ApprovalNode) for process definition.
  + Other requirements were not merged because they did not meet the merging criteria (different entities or operations). General system setting requirements (like user preferences) did not appear in the document, so none were excluded.
  + After merging, the total number of functional requirements decreased from 24 to 21.
* **Hallucination Requirement Evaluation**: Based on the definition (introducing operations involving entities that cannot be connected to existing ones, causing a weak connection in the E-R diagram).  
  All functional requirements reference relatable entities (e.g., User, Asset), maintaining weak connection in the E-R diagram. Therefore, no hallucinated requirements were found.

The evaluation table is as follows. Each line corresponds to a functional requirement (merged descriptions used), with hallucination judgment and reasoning.

| Functional Requirement | Hallucination | Justification |

|------------------------|---------------|---------------|

FR-01: Asset Registration Function｜No｜Involves entities Asset, AssetRegistration, and User; E-R diagram weakly connected; I/O path is complete; email sending interface is defined.

FR-02: Asset Usage Function｜No｜Involves AssetUsage, Asset, and User; relational path exists; I/O is clear.

FR-03: Asset Transfer Function｜No｜Involves AssetTransfer and approval flow; references FR-11 and email service; I/O clearly defined.

FR-04: Asset Return Function｜No｜Involves AssetReturn, approval process, and notification mechanisms; E-R weakly connected; input triggers the process.

FR-05: Delete Asset Function｜No｜Involves Asset and SystemLog; log and notification mechanisms clearly defined; I/O path is complete.

FR-06: Add User Function｜No｜Core entities User, SystemLog, and email sending are defined; input converts to new user and triggers notification.

FR-07: Modify User Profile Function｜No｜Updating User and logging is feasible; input triggers update and email.

FR-08: Query User Information Function｜No｜User query’s I/O is defined; information can be retrieved.

FR-09: Delete User Function｜No｜Involves User deletion and log/notification processes; I/O path is complete.

FR-10/12: Configure or Edit Approval Process｜No｜Involves ApprovalProcess and Manager; input defines process structure; logging and notification involved.

FR-11: Initiate Approval Process｜No｜Based on existing process types and user relationships; generates logs and notifications; E-R structure is intact.

FR-13: Generate Reports｜No｜Entities Report and SystemLog are clearly defined; input parameters drive report generation.

FR-14: Analyze Report Data｜No｜Based on Report; references FR-13 input; analysis output and logs are structured.

FR-15: Export Report｜No｜Report is the source; file format and logging are clearly defined.

FR-16/18: Manage Admin Rights｜No｜Entities Manager and User are linked; rights assignment process is clear; I/O path is complete.

FR-19: Data Import｜No｜Import target is Asset; logs and email are defined; import flow and file format are structured.

FR-20: Data Export｜No｜Export data comes from Asset; output format and logging process are complete.

FR-21: View Approval Status｜No｜Query paths for ApprovalProcess and Node are defined.

FR-22: View Asset Change History｜No｜Multiple Asset-related change entities are clearly associated.

FR-23: Send Email Notifications｜No｜Notification mechanism is included; email service interface is defined.

FR-24: Receive Email Feedback｜No｜Feedback and log record paths are clearly defined.

**Summary**

* A total of 12 data entities were involved: Asset, AssetRegistration, AssetUsage, AssetTransfer, AssetReturn, User, Manager, ApprovalProcess, ApprovalNode, Report, EmailFeedback, and SystemLog.
* After merging functionally similar points, 21 functional requirements remain (down from 24; FR-16/17/18 merged into one; FR-10/12 merged into one).
* There are **0 hallucinated requirements** (all referenced entities are connectable; E-R diagram remains weakly connected).
* Therefore, there are **21 non-hallucinated requirements** in total.