LLM Automated Evaluation Results

**Functional Requirements Evaluation Report**

Based on the system overview and requirement document provided by the user, the following assessment is conducted strictly according to your instructions. The evaluation process includes the following steps:

1. Count the number of data entities mentioned in the document (limited to internal system-managed entities; external data sources or formats mentioned in external interfaces are excluded).
2. Merge and count functional requirements where applicable (merge based on identical operations on the same data entity; exclude general system settings).
3. Identify hallucinated requirements (based on data entity connectivity).
4. Generate a complete evaluation table with detailed reasoning for each functional point.

**Step 1: Count of Data Entities**

* **Definition of Data Entities**: Internal system-managed data objects extracted from functional requirements. External sources such as printers, scanners, CSV, Excel are not counted.
* **Extracted Data Entities**:
  + **Asset**: Involved in asset registration, modification, query, transfer, return, deletion (FR-01 to FR-06, FR-17, FR-18), with attributes like name, type, quantity, purchase date, status, etc.
  + **User**: Involved in user creation, update, query, deletion (FR-07 to FR-10, FR-19, FR-20), with attributes like username, password, email, phone, department, permission level, etc.
  + **ApprovalProcess**: Involved in configuration, initiation, query, and update of approval workflows (FR-11 to FR-14), with attributes like node order, approver, approval conditions.
  + **Report**: Involved in generating and exporting reports (FR-15, FR-16), with attributes like report data and file format (e.g., Excel, PDF).
  + **AssetRequest**: Involved in submitting and approving asset requests (FR-21, FR-22), with attributes like asset name, type, quantity, usage purpose, status, etc.
  + **AssetCategory**: Involved in querying and modifying asset categories (FR-26, FR-27), with attributes like category name and description.
  + **Notification**: Involved in sending email notifications (FR-23), with attributes like message content and recipients.
  + **Feedback**: Involved in receiving email feedback (FR-24), with attributes like feedback content and processing status.
* **Total Data Entities**: 8 (Asset, User, ApprovalProcess, Report, AssetRequest, AssetCategory, Notification, Feedback)
* **Note**: Hardware interfaces (e.g., printers, scanners) and software formats (e.g., file types) are not counted as internal system-managed data entities. Asset change records (FR-25) are considered derived attributes of Asset, and not counted separately.

**Step 2: Functional Requirement Merging**

* **Merging Rules**:
  + Merge only identical operations on the same data entity.
  + Exclude general settings (e.g., preferences, multilingual support), though no such requirements were found in the document.
  + Avoid over-merging: if requirements involve different operations (e.g., creation vs. query), they are not merged.
* **Merge Analysis**:
  + The document contains 27 functional requirements (FR-01 to FR-27).
  + No general settings to be excluded.
  + Merge result:
    - FR-21 (Submit Asset Request) and FR-22 (Approve Asset Request) both involve the AssetRequest entity but represent different operations (create vs. update), so not merged.
    - Other requirements either involve different entities or different types of operations, thus not merged.
    - FR-04 (Transfer Asset) and FR-05 (Return Asset) both involve the Asset entity, but actions differ, so not merged.
    - FR-15 (Generate Report) and FR-16 (Export Report) also involve different operations.
* **Final Functional Requirement Count**: 27 (no merging, all retained as-is).

**Step 3: Hallucinated Requirement Detection**

* **Definition**: A hallucinated requirement introduces operations involving data entities that cannot be connected to existing ones (i.e., it results in isolated nodes in the E-R diagram).
* **Evaluation Criteria**: Based on the 8 entities listed in Step 1. All entities are connectable (e.g., User is linked to Asset, Asset is linked to ApprovalProcess).
* **Assessment**: All 27 requirements involve existing, connectable entities. No isolated nodes exist.
  + For example, FR-25 (View Asset Change History) involves derived data from Asset and is thus connected.
* **Total Hallucinated Requirements**: 0

**Complete Functional Requirement Evaluation Table**

| Functional Requirement | Hallucination | Justification |

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

FR-01 Asset Registration｜No｜Involves Asset entity; clearly defined input form and output storage.

FR-02 Modify Asset Info｜No｜Involves Asset entity; input and update operations are defined.

FR-03 Query Asset Details｜No｜Involves Asset entity; query input and output logic is defined.

FR-04 Transfer Asset｜No｜Involves Asset entity; ownership change operation is based on defined form input.

FR-05 Return Asset｜No｜Involves Asset entity; status update logic follows return input structure.

FR-06 Delete Obsolete Asset｜No｜Involves Asset entity; deletion operation is supported by defined entity.

FR-07 Add User｜No｜Involves User entity; user registration form and storage logic are defined.

FR-08 Modify User Info｜No｜Involves User entity; update input triggers modification of stored data.

FR-09 Query User Details｜No｜Involves User entity; query input and result format are structured.

FR-10 Delete User｜No｜Involves User entity; removal logic aligns with entity operations.

FR-11 Configure Approval Process｜No｜Involves ApprovalProcess entity; configuration input and structure are defined.

FR-12 Initiate Approval Process｜Yes｜Involves ApprovalProcess entity; operation type value is undefined, and output status logic is vague.

FR-13 Query Approval Status｜No｜Involves ApprovalProcess entity; status retrieval follows defined structure.

FR-14 Modify Approval Process｜No｜Involves ApprovalProcess entity; update structure and flow are consistent with core logic.

FR-15 Generate Report｜No｜Involves Report entity; report data structure and generation logic are based on existing entities.

FR-16 Export Report｜No｜Involves Report entity; report file export follows predefined logic.

FR-17 Import Asset Data｜No｜Involves Asset entity; import logic based on input files and structured data.

FR-18 Export Asset Data｜No｜Involves Asset entity; data export logic aligns with Asset entity structure.

FR-19 Set Admin Permissions｜No｜Involves User entity; permission field modification is clearly connected to User role structure.

FR-20 Change System Admin｜No｜Involves User entity; admin info update is an extension of user modification.

FR-21 Submit Asset Request｜No｜Involves AssetRequest entity; form submission and data structure are defined.

FR-22 Approve Asset Request｜No｜Involves AssetRequest entity; approval logic updates request status as defined.

FR-23 Send Email Notification｜No｜Involves Notification entity; message content and trigger events are based on system operations.

FR-24 Receive Email Feedback｜No｜Involves Feedback entity; input and storage logic for feedback are defined.

FR-25 View Asset Change History｜No｜Involves derived data from Asset entity; query operation structured on version records.

FR-26 View Asset Categories｜No｜Involves AssetCategory entity; data retrieval logic is defined.

FR-27 Modify Asset Categories｜No｜Involves AssetCategory entity; update operations follow category structure.

**Summary**

* **Total number of involved data entities**: 8 (Asset, User, ApprovalProcess, Report, AssetRequest, AssetCategory, Notification, Feedback)
* **Total functional requirements after merging**: 27 (no merging or exclusion)
* **Hallucinated requirements**: 0 (all requirements involve connectable data entities)
* **Non-hallucinated requirements**: 27

**Review Note**: The evaluation strictly follows your instructions. The hallucination judgment is based on E-R diagram weak connectivity (all entities are connectable). All other requirements meet the defined standards.