# Functional Requirement

1.1 Asset Registration Function

Function Number: FR-01

Description: Administrators can manually register the basic information of assets, including asset number, asset category, model, quantity, status, storage location, etc. After registration, the system should store the asset information in the database and update the asset status to "Registered."

Input: Fields such as asset name, asset category, model, quantity, status, storage location, registration date, etc.

Output: New asset record in the database, asset number, system prompt indicating successful asset registration.

1.2 Asset Transfer Function

Function Number: FR-02

Description: Administrators can transfer assets from one user or department to another. The system needs to verify whether the asset status allows for transfer and record the history of this operation.

Input: Fields such as asset number, target user, target department, reason for transfer, transfer date, etc.

Output: Updated asset record, asset status updated to "Transferred," system prompt indicating successful asset transfer.

1.3 Asset Return Function

Function Number: FR-03

Description: Administrators or users can return assets that are currently checked out. The system needs to verify whether the asset status is "Checked Out" and determine whether an approval process is required based on system configuration. After the return operation, the system needs to update the asset status to "Returned" and record the operation history.

Input: Fields such as asset number, returner, return date, reason for return, etc.

Output: Asset status updated to "Returned," system prompt indicating successful asset return, approval process (if enabled) initiated or completed.

1.4 Asset Information Query Function

Function Number: FR-04

Description: Administrators or users can query the basic information of assets. The system retrieves asset information from the database based on the input query conditions and displays a list of assets and their detailed information.

Input: Query conditions such as asset number, asset name, asset category, asset status, assigned user or department, etc.

Output: List of assets and their detailed information that meet the conditions, query operation history.

1.5 Asset Management Function

Function Number: FR-05

Description: Administrators can perform operations such as editing and deleting existing assets. The system needs to verify whether the administrator has the necessary permissions and update the asset information and status after the operation.

Input: Asset number, operation type (edit or delete), modified asset information, etc.

Output: Updated asset information, operation success prompt, asset history record.

1.6 User Management Function

Function Number: FR-06

Description: Administrators can create, edit, or delete user accounts. The system needs to verify the administrator's permissions and record the history of user management operations.

Input: Fields such as username, password, name, department, user role, contact information, etc.

Output: Result of user account creation, modification, or deletion, system prompt indicating successful operation, user management operation log.

1.7 User Permission Management Function

Function Number: FR-07

Description: Administrators can assign or revoke permissions for users. The system needs to verify the validity of the permission configuration and update the user's permission status.

Input: User ID, permission ID or permission name, operation type (assign or revoke).

Output: Updated user permission information, permission operation history.

1.8 Approval Process Management Function

Function Number: FR-08

Description: Administrators can submit approval processes and review approval requests submitted by other administrators. The system needs to determine whether to start the approval process based on approval rules and update the approval status.

Input: Approval operation type (registration, transfer, return, etc.), approval process configuration information, approval comments, etc.

Output: Result of approval process creation or update, approval status information, approval operation log.

1.9 Approval Status Viewing Function

Function Number: FR-09

Description: Administrators can view the current status and processing progress of approval processes. The system needs to display detailed status information of the approval process, including approval nodes, approvers, approval comments, etc.

Input: Approval process ID, user permission verification information.

Output: Detailed status information of the approval process, approval status viewing record.

1.10 Report Generation Function

Function Number: FR-10

Description: Administrators can generate asset reports based on filtering criteria. The system needs to verify permissions and extract data from the database to generate reports according to the filtering criteria.

Input: Report type, filtering criteria (such as asset category, status, assigned user or department, time range, etc.).

Output: Content of the generated report, report generation log.

1.11 Report Export Function

Function Number: FR-11

Description: Administrators can export reports as files in specified formats (such as Excel, PDF, etc.). The system needs to verify permissions and generate downloadable report files.

Input: Report ID, export format (Excel, PDF, etc.).

Output: Download link or save prompt for the report file, report export record.

1.12 Report Management Function

Function Number: FR-12

Description: Administrators can perform operations such as viewing, exporting, or deleting generated reports. The system needs to verify permissions and display the report management interface.

Input: Report ID, operation type (view, export, delete), reason for deletion (if deleting).

Output: Content of the viewed report, exported file, or result of the deletion operation, report management operation log.

1.13 Administrator Management Function

Function Number: FR-13

Description: Administrators can add, edit, or delete other administrator accounts. The system needs to verify the administrator's permissions and update the administrator account information and status.

Input: Administrator ID, operation type (add, edit, delete), administrator information (such as username, role, department, etc.).

Output: Result of administrator account creation, modification, or deletion, administrator operation history.

1.14 Asset Category Management Function

Function Number: FR-14

Description: Administrators can add, edit, or delete asset categories. The system needs to verify permissions and ensure that category changes do not affect the use of existing assets.

Input: Category name, description, operation type (add, edit, delete), reason for deletion (if deleting).

Output: Result of asset category update, system prompt indicating successful operation, asset category operation log.

1.15 Asset Location Management Function

Function Number: FR-15

Description: Administrators can add, edit, or delete asset location information. The system needs to verify permissions and ensure that location changes do not affect existing asset records.

Input: Location name, description, operation type (add, edit, delete), reason for deletion (if deleting).

Output: Result of asset location update, system prompt indicating successful operation, asset location operation log.

1.16 Asset Status Management Function

Function Number: FR-16

Description: Administrators can define, modify, or delete asset statuses. The system needs to verify permissions and ensure that status changes do not affect existing asset records.

Input: Status name, description, operation type (add, edit, delete), reason for deletion (if deleting).

Output: Result of asset status update, system prompt indicating successful operation, asset status operation log.

1.17 Asset History Record Management Function

Function Number: FR-17

Description: Administrators can view the history of assets, including operations such as usage, transfer, and return. The system needs to verify permissions and display detailed historical records.

Input: Asset ID, operation type (view).

Output: List and detailed information of asset history records, historical record viewing log.

1.18 Data Import and Export Record Management Function

Function Number: FR-18

Description: Administrators can view the history of data imports and exports, including operation time, file information, and executing user. The system needs to verify permissions and display detailed records.

Input: Operation type (view), filtering criteria (such as time range, user ID, etc.).

Output: List and detailed information of data import and export records, data import and export record viewing log.

1.19 Approval Task Management Function

Function Number: FR-19

Description: Administrators can view and manage approval tasks, including task status, executor, approval comments, etc. The system needs to verify permissions and display detailed information of approval tasks.

Input: Task ID, operation type (view, manage), approval comments, etc.

Output: Detailed information of approval tasks, approval task management log.