# Functional Requirement

1. Functional Requirements

1.1 Asset Registration Function

Function Number: FR-01

Description: Administrators can enter the basic information of new assets and select the affiliated department. The system verifies the validity of the department, generates a unique asset ID, and saves the asset information.

Input: Asset name, specifications and model, purchase date, affiliated department.

Output: Newly added asset information in the system, asset status set to "Available," system prompt "Asset registration successful."

1.2 Asset Modification Function

Function Number: FR-02

Description: Administrators can modify existing asset information, including asset status and storage location. The system verifies the validity of the modified department and updates the asset information.

Input: Asset ID, modified asset information, target department.

Output: Updated asset information, the system generates a modification operation record, system prompt "Asset information updated successfully."

1.3 Asset Deletion Function

Function Number: FR-03

Description: Administrators can delete asset information that has not been marked as "Deleted." The system verifies the asset status and disassociates it from the department.

Input: Asset ID.

Output: Asset status updated to "Deleted," the system disassociates the asset from the department, system prompt "Asset deletion successful."

1.4 Asset Viewing Function

Function Number: FR-04

Description: Users and administrators can view asset information within the system. The system returns corresponding asset summary and detailed information based on user permissions.

Input: Asset ID, asset name, affiliated department, status.

Output: Asset summary list and detailed information, the system generates an asset viewing record, system prompt "Asset information loaded."

1.5 Asset Status Update Function

Function Number: FR-05

Description: Administrators can update the status of assets. The system verifies the legality of the status transition and automatically notifies the relevant using departments.

Input: Asset ID, target status, reason for change.

Output: Asset status updated to the new status, the system generates a status change record, system prompt "Status update successful."

1.6 Asset Scrap Function

Function Number: FR-06

Description: Administrators can initiate the scrapping process for assets that meet the scrapping conditions. The system verifies the asset status and disassociates it from the department.

Input: Asset ID, reason for scrapping, scrapping date.

Output: Asset status updated to "Scrapped," the system disassociates the asset from the department, the system generates a scrapping record.

1.7 User Registration Function

Function Number: FR-07

Description: Users can create a new account and select the affiliated department. The system verifies the validity of the department, generates a user ID, and establishes the association between the user and the department.

Input: Username, password, real name, affiliated department.

Output: New user account information, the system establishes the association between the user and the department, system prompt "Registration successful."

1.8 User Login Function

Function Number: FR-08

Description: Users and administrators can log in to the system using their account and password. The system verifies user permissions and loads the corresponding functional interface.

Input: Username, password, verification code.

Output: Login status, the system loads the functional interface corresponding to user permissions, the system records the login log.

1.9 User Information Modification Function

Function Number: FR-09

Description: Users and administrators can modify user information, including contact details and affiliated department. The system verifies the validity of the department and updates the user profile.

Input: User ID, modified user information, target department.

Output: Updated user information, the system generates a modification record, system prompt "User information updated successfully."

1.10 User Account Cancellation Function

Function Number: FR-10

Description: Users and administrators can cancel accounts. The system verifies the user status and disassociates the user from the department and assets.

Input: User ID, reason for cancellation.

Output: User status updated to "Cancelled," the system disassociates the user from the department/assets, the system records the cancellation log.

1.11 Permission Allocation Function

Function Number: FR-11

Description: Administrators can allocate or revoke permissions for users. The system verifies the compliance of permissions and updates the user permission configuration.

Input: User ID, permission type, target department.

Output: Updated user permission configuration, the system generates a permission change record, system prompt "Permission allocation successful."

1.12 Permission Revocation Function

Function Number: FR-12

Description: Administrators can revoke user permissions. The system verifies the validity of permissions and generates a permission revocation record.

Input: User ID, list of revoked permissions, effective time.

Output: Updated user permission configuration, the system generates a permission revocation record, system prompt "Permission revocation successful."

1.13 Department Creation Function

Function Number: FR-13

Description: Administrators can create new departments and set the parent department. The system verifies the uniqueness of the department name, generates a department ID, and establishes a hierarchical relationship.

Input: Department name, department code, parent department.

Output: New department information, the system establishes the association between the department and the parent department, system prompt "Department creation successful."

1.14 Department Modification Function

Function Number: FR-14

Description: Administrators can modify department information, including department name and parent department. The system verifies the validity of the department and updates the department profile.

Input: Department ID, modified department information, target parent department.

Output: Updated department information, the system generates a modification record, system prompt "Department information updated successfully."

1.15 Department Deletion Function

Function Number: FR-15

Description: Administrators can delete departments. The system verifies that there are no associated data under the department and updates the department status to "Deleted."

Input: Department ID.

Output: Department status updated to "Deleted," the system disassociates the department from the parent department, the system records the deletion log.

1.16 Department Information Viewing Function

Function Number: FR-16

Description: Users and administrators can view department information. The system returns corresponding department summary and detailed information based on user permissions.

Input: Department ID, department name, parent department.

Output: Department summary list and detailed information, the system generates a viewing log.

1.17 Asset Department Adjustment Function

Function Number: FR-17

Description: Administrators can adjust the department to which an asset belongs. The system verifies the validity of the target department and updates the association between the asset and the department.

Input: Asset ID, target department, reason for adjustment.

Output: Asset department updated, the system generates an adjustment record, system prompt "Asset department adjustment successful."

1.18 Usage Application Submission Function

Function Number: FR-18

Description: Users can submit usage applications. The system verifies the asset status and department validity and generates a usage application record.

Input: Asset ID, applying department, estimated usage duration, application purpose.

Output: Usage application record, asset status updated to "Pending Approval," the system sends an approval notification.

1.19 Usage Application Cancellation Function

Function Number: FR-19

Description: Users and administrators can cancel usage applications. The system verifies the application status and updates the application status to "Cancelled."

Input: Application ID, reason for cancellation.

Output: Usage application status updated to "Cancelled," the system generates a cancellation record, the system sends a cancellation notification.

1.20 Usage Application Viewing Function

Function Number: FR-20

Description: Users and administrators can view usage application records. The system returns corresponding application lists and detailed information based on user permissions.

Input: Application ID, asset ID, department, status.

Output: Usage application list and detailed information, the system generates a viewing log.

1.21 Transfer Application Submission Function

Function Number: FR-21

Description: Users can submit asset transfer applications. The system verifies the asset status and department validity and generates a transfer application record.

Input: Asset ID, target department, reason for transfer.

Output: Transfer application record, asset status updated to "Transfer Approval Pending," the system sends an approval notification.

1.22 Transfer Application Cancellation Function

Function Number: FR-22

Description: Users and administrators can cancel transfer applications. The system verifies the application status and updates the application status to "Cancelled."

Input: Application ID, reason for cancellation.

Output: Transfer application status updated to "Cancelled," the system generates a cancellation record, the system sends a cancellation notification.

1.23 Transfer Application Viewing Function

Function Number: FR-23

Description: Users and administrators can view transfer application records. The system returns corresponding application lists and detailed information based on user permissions.

Input: Application ID, asset ID, department, status.

Output: Transfer application list and detailed information, the system generates a viewing log.

1.24 Return Application Submission Function

Function Number: FR-24

Description: Users can submit asset return applications. The system verifies the asset status and generates a return application record.

Input: Asset ID, return date, return description.

Output: Return application record, asset status updated to "Return Pending Approval," the system sends an approval notification.

1.25 Return Application Cancellation Function

Function Number: FR-25

Description: Users and administrators can cancel return applications. The system verifies the application status and updates the application status to "Cancelled."

Input: Application ID, reason for cancellation.

Output: Return application status updated to "Cancelled," the system generates a cancellation record, the system sends a cancellation notification.

1.26 Return Application Viewing Function

Function Number: FR-26

Description: Users and administrators can view return application records. The system returns corresponding application lists and detailed information based on user permissions.

Input: Application ID, asset ID, department, status.

Output: Return application list and detailed information, the system generates a viewing log.

1.27 Report Generation Function

Function Number: FR-27

Description: Users and administrators can generate various asset reports. The system filters data based on permissions and generates report files in the specified format.

Input: Report type, filter conditions (time range, department, asset category), output format.

Output: Report file (PDF/Excel/chart), the system records the generation log.

1.28 Data Export Function

Function Number: FR-28

Description: Users and administrators can export system data. The system verifies the export permissions and generates files in the specified format.

Input: Data type (asset inventory, user list, operation log), filter conditions, output format.

Output: Exported file (Excel/CSV/PDF), the system records the export log.

1.29 Approval Process Viewing Function

Function Number: FR-29

Description: Users and administrators can view approval process records. The system returns corresponding approval lists and detailed information based on user permissions.

Input: Approval type, approval status, filter conditions (time range, department, asset).

Output: Approval process list and detailed information, the system generates a viewing log.

1.30 Approval Record Management Function

Function Number: FR-30

Description: Administrators can manage completed approval records, including archiving, exporting, and adding notes.

Input: Approval ID, operation type (archive/export/add note), parameters.

Output: Updated approval record, the system records the management log.