# Functional Requirement

FR-01 Register Asset

Description: Users fill in the asset registration form and submit it. The system validates the data for completeness and accuracy, stores the asset in the database, and sets the status to “Registered.” Administrators are notified for review.

Input: Completed registration form (asset name, type, quantity, purchase date, etc.).

Output: Stored asset record with status “Registered.”

FR-02 Modify Asset

Description: Users edit registered asset details and submit the change. The system validates the data, stages the change for admin approval, and updates the status to “Modified” upon approval.

Input: Completed modification form (editable fields such as name, type, quantity, purchase date).

Output: Updated asset record with status “Modified.”

FR-03 Query Asset Details

Description: Users search for asset details using name, type, or ID. The system returns matching records.

Input: Search criteria (name, type, ID).

Output: Detailed asset information (name, type, quantity, purchase date, status, etc.).

FR-04 Transfer Asset

Description: Users request to transfer assets to a new user or department. The system validates the request, stages it for admin approval, and updates the ownership upon approval.

Input: Transfer form (asset ID, new recipient).

Output: Updated owner information with status “Transferred.”

FR-05 Return Asset

Description: Users initiate asset returns. The system validates the request, stages it for approval, and updates the status to “Returned” upon approval.

Input: Return form (asset ID, return date).

Output: Updated asset status “Returned.”

FR-06 Delete Obsolete Asset

Description: Users request removal of obsolete assets. The system validates the request, stages it for admin approval, and deletes the record upon approval.

Input: Deletion request (asset ID).

Output: Removed asset record with status “Deleted.”

FR-07 Add User

Description: Administrators create new user accounts. The system validates the form, stores the user, and sends an activation email.

Input: New-user form (username, password, email, phone, department).

Output: New User record with status “Activated.”

FR-08 Edit User Profile

Description: Users edit their own profiles. The system validates changes, stages them for admin approval, and updates the record upon approval.

Input: Profile-edit form (name, username, email, phone).

Output: Updated user record with status “Modified.”

FR-09 Query User Details

Description: Users search for user information by username, email, or department.

Input: Search criteria (username, email, department).

Output: Detailed user information (name, username, email, phone, department, permission level).

FR-10 Delete User

Description: Administrators remove user accounts. The system validates the request, stages it for senior-admin approval, and deletes the record upon approval.

Input: Deletion request (user ID).

Output: Removed user record with status “Deleted.”

FR-11 Configure Approval Workflow

Description: Administrators define workflows. The system validates configuration details, stages the setup for senior-admin approval, and activates the workflow upon approval.

Input: Workflow configuration form (node order, approvers, conditions).

Output: Stored workflow with status “Configured.”

FR-12 Start Approval Process

Description: Users initiate approval processes for registration, usage, transfer, or return. The system validates the request, stages it for admin review, and executes the operation upon approval.

Input: Approval-start request (asset ID, operation type).

Output: Approval-process record and updated operation status.

FR-13 Query Approval Status

Description: Users check the status of asset or user operations (pending, in progress, approved, rejected).

Input: Search criteria (asset ID, operation type, user ID).

Output: Approval status details.

FR-14 Edit Approval Workflow

Description: Administrators modify existing workflows. The system validates changes, stages them for senior-admin approval, and updates the workflow upon approval.

Input: Workflow-edit form (updated nodes, approvers, conditions).

Output: Updated workflow with status “Modified.”

FR-15 Generate Report

Description: Users create reports on assets, users, or management data. The system validates parameters, generates the report, and stores the data.

Input: Report parameters (date range, filters).

Output: Stored report data and generated file (Excel, PDF).

FR-16 Export Report

Description: Users export existing reports. The system validates the request, prepares the file, and provides a download link.

Input: Selected report and export format (CSV, Excel).

Output: Downloadable report file and export log.

FR-17 Import Asset Data

Description: Users upload CSV/Excel files. The system validates format and data, parses rows, and stores valid records with an error report.

Input: Uploaded data file (CSV/Excel).

Output: Imported asset records and error report.

FR-18 Export Asset Data

Description: Users export selected asset data. The system validates the request, generates the file, and provides a download link.

Input: Selected assets and export format (CSV, Excel).

Output: Downloadable data file and export log.

FR-19 Set Admin Permissions

Description: Administrators assign management permissions. The system validates the request, stages it for senior-admin approval, and updates permissions upon approval.

Input: Permission form (user ID, permission level).

Output: Updated permissions with status “Permissions Set.”

FR-20 Replace System Administrator

Description: Senior administrators replace the current system admin. The system validates the request, stages it for top-level approval, and updates admin records upon approval.

Input: Replacement form (current admin ID, new admin info).

Output: Updated admin record with status “Replaced.”

FR-21 Submit Asset Request

Description: Users request assets. The system validates the request, stages it for admin approval, and updates status upon approval.

Input: Asset-request form (name, type, quantity, purpose).

Output: Stored request with status “Approved” or “Rejected.”

FR-22 Approve Asset Request

Description: Administrators review and approve or reject asset requests. The system updates the request status and notifies users.

Input: Approval form (decision, reason).

Output: Updated request status and user notification.

FR-23 Send Email Notification

Description: The system automatically sends email notifications for events such as registration or profile updates.

Input: Event details and recipient list.

Output: Sent email and send log.

FR-24 Receive Email Feedback

Description: The system receives user email feedback, parses the content, stores it, and notifies administrators for handling.

Input: User feedback email.

Output: Stored feedback and admin notification.

FR-25 View Asset Change History

Description: Users query asset change logs by asset ID, change type, or change date.

Input: Search criteria (asset ID, type, date).

Output: Change history (time, operation, user, before/after values).

FR-26 View Asset Category

Description: Users query asset categories by name or ID.

Input: Search criteria (category name, category ID).

Output: Category details (name, description, asset count).

FR-27 Edit Asset Category

Description: Administrators modify category information. The system validates changes, stages them for senior-admin approval, and updates the category upon approval.

Input: Category-edit form (name, description).

Output: Updated category with status “Modified.”