# Functional Requirement

FR-01 Asset Registration

Description: Users enter asset details for registration. The system validates the data, stores the new record, and notifies administrators.

Input:

- UserID

- Name

- Type

- Model

- PurchaseDate

- PurchasePrice

Output:

- New Asset record in the database

- AssetRegistration log entry

- EmailNotification to administrators

FR-02 Asset Usage

Description: Users record asset usage; the system validates and stores the usage record.

Input:

- UserID

- AssetID

- UsageStartDate

- UsageEndDate

Output:

- New AssetUsage record

FR-03 Asset Transfer

Description: Users request asset transfers; the system validates, starts an approval workflow, logs the transfer, and notifies administrators.

Input:

- UserID

- AssetID

- ToUserID or DepartmentName

Output:

- New AssetTransfer record

- ApprovalProcess started

- EmailNotification to administrators

FR-04 Asset Return

Description: Users submit asset-return requests; the system validates, starts approval, logs the return, and notifies administrators.

Input:

- UserID

- AssetID

- ReturnDate

- ConditionAtReturn

Output:

- New AssetReturn record

- ApprovalProcess started

- EmailNotification to administrators

FR-05 Delete Asset

Description: Users delete obsolete assets; the system verifies permissions, removes the record, logs the deletion, and notifies administrators.

Input:

- UserID

- AssetID

Output:

- Asset record removed

- Deletion log entry

- EmailNotification to administrators

FR-06 Add User

Description: Administrators create new user accounts; the system validates, stores the record, sends credentials, and notifies administrators.

Input:

- Name

- Email

- PhoneNumber

- PermissionLevel

- Department

Output:

- New User record

- User registration log

- EmailNotification to administrators with credentials

FR-07 Edit User Profile

Description: Users update their own profile; the system validates, saves changes, logs the update, and notifies administrators.

Input:

- UserID

- Updated profile fields (Name, Email, PhoneNumber)

Output:

- Updated User record

- Profile-change log

- EmailNotification to administrators

FR-08 Query User Information

Description: Users search user records by username, ID, email, etc.

Input:

- UserID

- Search criteria (username, user ID, email)

Output:

- Matching User records

FR-09 Delete User

Description: Administrators delete users; the system verifies permissions, removes the record, logs the deletion, and notifies administrators.

Input:

- ManagerID

- UserID

Output:

- User record removed

- Deletion log

- EmailNotification to administrators

FR-10 Configure Approval Process

Description: Administrators define approval workflows; the system validates, stores the configuration, logs the change, and notifies approvers.

Input:

- ManagerID

- ProcessName

- Step definitions (NodeName, PreviousNodeID, NextNodeID)

Output:

- New ApprovalProcess record

- ApprovalNode records

- Configuration log

- EmailNotification to approvers

FR-11 Start Approval Process

Description: Users initiate a workflow; the system validates, logs the start, and notifies approvers and administrators.

Input:

- UserID

- ProcessType (e.g., transfer, return)

- Details (AssetID, ToUserID, etc.)

Output:

- Workflow-start log

- EmailNotifications to approvers and administrators

FR-12 Edit Approval Process

Description: Administrators modify existing workflows; the system validates, updates, logs the change, and notifies approvers.

Input:

- ManagerID

- ProcessID

- Updated step definitions

Output:

- Updated ApprovalProcess and ApprovalNode records

- Edit log

- EmailNotification to approvers

FR-13 Generate Report

Description: Users create reports based on parameters; the system stores the report, logs the action, and notifies administrators.

Input:

- UserID

- Report type (asset, user activity, etc.)

- Parameters (date range, category, group)

Output:

- New Report record

- Report-generation log

- EmailNotification to administrators

FR-14 Analyze Report Data

Description: Users analyze existing reports; the system returns charts or statistics and logs the analysis.

Input:

- UserID

- Report type

- Analysis parameters

Output:

- Analysis results (charts, stats)

- Analysis log

FR-15 Export Report

Description: Users export reports; the system creates downloadable files and notifies administrators.

Input:

- UserID

- Report type

- Parameters

- File format (PDF, Excel, CSV)

Output:

- Downloadable file (.pdf, .xlsx, .csv)

- Export log

- EmailNotification to administrators

FR-16 Assign Admin Permissions

Description: Administrators grant admin rights; the system validates, updates records, logs the change, and notifies administrators.

Input:

- ManagerID

- UserID

- PermissionLevel

Output:

- Updated Manager record

- Permission-assignment log

- EmailNotification

FR-17 Modify Admin Permissions

Description: Administrators change other admins’ permissions; system validates, updates, logs, and notifies.

Input:

- ManagerID

- UserID

- NewPermissionLevel

Output:

- Updated Manager record

- Permission-change log

- EmailNotification

FR-18 Revoke Admin Permissions

Description: Administrators revoke admin rights; system validates, updates, logs, and notifies.

Input:

- ManagerID

- UserID

Output:

- Updated Manager record

- Permission-revocation log

- EmailNotification

FR-19 Data Import

Description: Users upload multi-sheet Excel files containing asset data; system imports in bulk, logs the import, and notifies administrators.

Input:

- UserID

- Excel file (.xlsx) with fields: AssetID, Name, Type, Model, PurchaseDate, PurchasePrice

Output:

- New Asset records

- Import log

- EmailNotification

FR-20 Data Export

Description: Users export asset data; system generates files and notifies administrators.

Input:

- UserID

- Parameters (date range, category, status)

- File format (CSV, Excel, PDF)

Output:

- Downloadable file (.csv, .xlsx, .pdf)

- Export log

- EmailNotification

FR-21 View Approval Status

Description: Users query approval statuses by ProcessID, AssetID, or UserID.

Input:

- UserID

- Search criteria (ProcessID, AssetID, UserID)

Output:

- Matching approval-status records (ApprovalProcess, ApprovalNode)

FR-22 View Asset Change History

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

Input:

- UserID

- Search criteria (AssetID, change type, date)

Output:

- Matching change records (AssetRegistration, AssetUsage, AssetTransfer, AssetReturn)

FR-23 Send Email Notification

Description: System automatically sends notifications to specified users after certain operations.

Input:

- Operation type (e.g., asset registration, profile update)

- Recipient UserID

- Notification content

Output:

- EmailNotification sent

- Notification log

FR-24 Receive Email Feedback

Description: Users receive and process system email feedback; system validates, stores the feedback, logs the action, and notifies administrators.

Input:

- UserID

- FeedbackContent

Output:

- New EmailFeedback record

- Feedback-handling log

- EmailNotification to administrators