# Functional Requirement

### 1.1 Asset Registration Function

\*\*Function Number: FR-01\*\*

\*\*Description:\*\*

Users can submit asset registration requests. The system will verify the completeness and accuracy of the information and store qualified asset information in the database. Additionally, the system supports generating records for asset transfer, return, and other operations.

\*\*Input:\*\*

- Username (UserID)

- Asset Name (AssetName)

- Asset Type (CategoryID)

- Purchase Date (PurchaseDate)

- User in Possession (OwnerUserID)

- Asset Status (UsageStatus)

\*\*Output:\*\*

- New asset information saved to the database (AssetID)

- Asset record saved to the database (RecordID)

- User interface feedback: Asset registration successful

### 1.2 Modify Asset Information Function

\*\*Function Number: FR-02\*\*

\*\*Description:\*\*

Users can modify existing asset information. The system will verify the completeness and accuracy of the modified information and update the qualified asset information in the database.

\*\*Input:\*\*

- Username (UserID)

- Asset ID (AssetID)

- Modified Asset Name (AssetName)

- Modified Asset Type (CategoryID)

- Modified Purchase Date (PurchaseDate)

- Modified User in Possession (OwnerUserID)

- Modified Asset Status (UsageStatus)

\*\*Output:\*\*

- Asset information updated in the database

- Asset record saved to the database (RecordID)

- User interface feedback: Asset information modification successful

### 1.3 Query Asset Details Function

\*\*Function Number: FR-03\*\*

\*\*Description:\*\*

Users can query detailed information of specific assets. The system will retrieve and display detailed asset information based on the asset identifier provided by the user.

\*\*Input:\*\*

- Username (UserID)

- Asset Identifier (AssetID or AssetName)

\*\*Output:\*\*

- Query results displayed to the user: including asset name, type, purchase date, user in possession, etc.

- User interface feedback: Query successful

### 1.4 Transfer Asset Function

\*\*Function Number: FR-04\*\*

\*\*Description:\*\*

Users can initiate asset transfer requests. The system will generate a transfer request and await approval from the approver. Once approved, the system will update the asset ownership information.

\*\*Input:\*\*

- Username (UserID)

- Asset ID (AssetID)

- Recipient Username (TargetUserID)

- Reason for Transfer (TransferReason)

- Remarks (Remark)

\*\*Output:\*\*

- Transfer request record saved to the database (ApprovalID)

- User interface feedback: Asset transfer request submitted

- Asset record saved to the database (RecordID)

- Asset ownership information updated (OwnerUserID)

### 1.5 Return Asset Function

\*\*Function Number: FR-05\*\*

\*\*Description:\*\*

Users can initiate asset return requests. The system will generate a return request and await approval from the approver. Once approved, the system will update the asset status information.

\*\*Input:\*\*

- Username (UserID)

- Asset ID (AssetID)

- Reason for Return (ReturnReason)

- Remarks (Remark)

\*\*Output:\*\*

- Return request record saved to the database (ApprovalID)

- User interface feedback: Asset return request submitted

- Asset record saved to the database (RecordID)

- Asset status information updated (UsageStatus)

### 1.6 Delete Asset Record Function

\*\*Function Number: FR-06\*\*

\*\*Description:\*\*

Users can delete asset records. The system will verify permissions and related conditions and perform the deletion operation.

\*\*Input:\*\*

- Username (UserID)

- Asset ID (AssetID)

\*\*Output:\*\*

- Asset record removed from the database

- User interface feedback: Deletion successful

- Log record (LogID): Record of the deletion operation

### 1.7 User Registration Function

\*\*Function Number: FR-07\*\*

\*\*Description:\*\*

New users can register accounts. The system will verify the completeness and accuracy of the input information and create a new user account.

\*\*Input:\*\*

- Username (UserName)

- Password (Password)

- Email Address (Email)

- Phone Number (Telephone)

\*\*Output:\*\*

- New user information saved to the database (UserID)

- User interface feedback: Registration successful

- System sends a verification code to the email or phone

- User interface feedback: Verification code validation successful

### 1.8 Modify User Profile Function

\*\*Function Number: FR-08\*\*

\*\*Description:\*\*

Users can modify their personal profiles. The system will verify the completeness and accuracy of the modified information and update the user information.

\*\*Input:\*\*

- Username (UserID)

- Modified Name (Name)

- Modified Gender (Gender)

- Modified Age (Age)

- Modified Email Address (Email)

- Modified Phone Number (Telephone)

\*\*Output:\*\*

- User information updated in the database

- User interface feedback: Profile modification successful

- Log record (LogID): Record of the modification operation

### 1.9 Query User Information Function

\*\*Function Number: FR-09\*\*

\*\*Description:\*\*

Users can query detailed information of specific users. The system will retrieve and display user information based on the identifier provided by the user.

\*\*Input:\*\*

- Username (UserID)

- Query User Identifier (QueryUserID)

\*\*Output:\*\*

- Query results displayed to the user: including name, gender, age, email address, etc.

- User interface feedback: Query successful

### 1.10 Approve Asset Application Function

\*\*Function Number: FR-10\*\*

\*\*Description:\*\*

Approvers can approve asset applications. The system will verify the validity of the approval operation and update the status of the asset application.

\*\*Input:\*\*

- Approver Username (AdminID)

- Asset Application Record ID (ApprovalID)

- Approval Opinion (ApprovalOpinion)

- Approval Result (ApprovalResult)

\*\*Output:\*\*

- Asset application status updated in the database

- User interface feedback: Approval successful

- Log record (LogID): Record of the approval operation

### 1.11 Approve Asset Transfer Function

\*\*Function Number: FR-11\*\*

\*\*Description:\*\*

Approvers can approve asset transfer requests. The system will verify the validity of the approval operation and update the status of the asset transfer request and asset ownership information.

\*\*Input:\*\*

- Approver Username (AdminID)

- Asset Transfer Request Record ID (ApprovalID)

- Approval Opinion (ApprovalOpinion)

- Approval Result (ApprovalResult)

\*\*Output:\*\*

- Asset transfer request status updated in the database

- Asset ownership information updated in the database

- User interface feedback: Approval successful

- Log record (LogID): Record of the approval operation

### 1.12 Approve Asset Return Function

\*\*Function Number: FR-12\*\*

\*\*Description:\*\*

Approvers can approve asset return requests. The system will verify the validity of the approval operation and update the status of the asset return request and asset status information.

\*\*Input:\*\*

- Approver Username (AdminID)

- Asset Return Request Record ID (ApprovalID)

- Approval Opinion (ApprovalOpinion)

- Approval Result (ApprovalResult)

\*\*Output:\*\*

- Asset return request status updated in the database

- Asset status information updated in the database

- User interface feedback: Approval successful

- Log record (LogID): Record of the approval operation

### 1.13 Generate Report Function

\*\*Function Number: FR-13\*\*

\*\*Description:\*\*

Users can generate asset reports. The system will retrieve asset records based on the parameters set by the user and generate a report.

\*\*Input:\*\*

- Username (UserID)

- Report generation parameters: time range, asset category, report type, etc.

\*\*Output:\*\*

- Report data saved to the database (ReportID)

- User interface feedback: Report generation successful

- Log record (LogID): Record of the report generation operation

### 1.14 Export Report Data Function

\*\*Function Number: FR-14\*\*

\*\*Description:\*\*

Users can export generated report data. The system will verify the validity of the export operation and provide an export data file.

\*\*Input:\*\*

- Username (UserID)

- Report ID (ReportID)

\*\*Output:\*\*

- Report data file downloaded to the user's local device

- User interface feedback: Export successful

- Log record (LogID): Record of the export operation

### 1.15 Import Asset Data Function

\*\*Function Number: FR-15\*\*

\*\*Description:\*\*

Users can import files containing asset information. The system will verify the format and content of the imported file and save qualified data to the database.

\*\*Input:\*\*

- Username (UserID)

- Asset data file (format: .csv or .xlsx), including fields such as asset name, type, purchase date, user in possession, etc.

\*\*Output:\*\*

- Asset information updated in the database

- User interface feedback: Import successful

- Log record (LogID): Record of the import operation

### 1.16 Assign Administrator Permissions Function

\*\*Function Number: FR-16\*\*

\*\*Description:\*\*

Senior administrators can assign administrator permissions. The system will verify the validity of the permission assignment operation and update the permission information.

\*\*Input:\*\*

- Senior Administrator Username (AdminID)

- Target Username (TargetUserID)

- Permission List (PowerList)

\*\*Output:\*\*

- Permission information saved to the database (PowerID)

- User interface feedback: Permission