# Functional Requirement

1. Functional Requirements  
  
1.1 Asset Registration Function   
Function ID: FR-01   
Description: Administrators can register new assets in the system by providing required asset details. Upon successful registration, the system sends a confirmation email to the Administrator.   
Input: Asset details including Name, Description, Category, PurchaseDate, and Status.   
Output: A new Asset record stored in the database and a confirmation email sent to the Administrator.  
  
1.2 View Asset Information Function   
Function ID: FR-02   
Description: Administrators can view the details of an existing asset in the system. The system retrieves and displays the selected asset’s information without modifying it.   
Input: An AssetID or selection from the asset list.   
Output: Displayed asset information including Name, Description, Category, PurchaseDate, and Status.  
  
1.3 Update Asset Details Function   
Function ID: FR-03   
Description: Administrators can update the details of an existing asset. The system validates the updated input and stores the changes in the database.   
Input: Updated asset information including Name, Description, Category, PurchaseDate, and Status.   
Output: Updated Asset record stored in the database and a success message displayed to the Administrator.  
  
1.4 Delete Asset Function   
Function ID: FR-04   
Description: Administrators can delete an existing asset from the system. The system confirms the deletion and updates the database accordingly.   
Input: An AssetID or selection from the asset list.   
Output: The deleted Asset removed from the database and a confirmation message displayed to the Administrator.  
  
1.5 Register Asset Usage Function   
Function ID: FR-05   
Description: Administrators can register the usage of an asset by selecting the asset and entering the usage details. The system validates and stores the usage information in the database.   
Input: AssetID, UsageDate, UsageType, Duration, and UsageDetails.   
Output: A new AssetUsage record stored in the database and a success message displayed to the Administrator.  
  
1.6 View Asset Usage History Function   
Function ID: FR-06   
Description: Administrators can view the usage history of an asset. The system retrieves and displays all AssetUsage records associated with the selected asset.   
Input: An AssetID or selection from the asset list.   
Output: A list of AssetUsage records with details such as UsageDate, UsageType, and Duration.  
  
1.7 View Asset Usage Record Function   
Function ID: FR-07   
Description: Administrators can view the details of a specific asset usage record. The system retrieves and displays the selected AssetUsageRecord in a structured format.   
Input: A UsageID or selection from the asset usage records list.   
Output: Displayed usage record details including AssetID, UsageDate, UsageType, Duration, and UsageDetails.  
  
1.8 Modify Asset Usage Record Function   
Function ID: FR-08   
Description: Administrators can modify the details of a specific asset usage record. The system validates the updated data and stores the changes in the database.   
Input: Updated usage record details including AssetID, UsageDate, UsageType, Duration, and UsageDetails.   
Output: Updated AssetUsageRecord stored in the database and a success message displayed to the Administrator.  
  
1.9 Delete Asset Usage Record Function   
Function ID: FR-09   
Description: Administrators can delete a specific asset usage record from the system. The system confirms the deletion and updates the database accordingly.   
Input: A UsageID or selection from the asset usage records list.   
Output: The deleted AssetUsageRecord removed from the database and a confirmation message displayed to the Administrator.  
  
1.10 Send Asset Notification via Email Function   
Function ID: FR-10   
Description: Administrators can send notifications about an asset via email. The system validates the recipient email and message, then triggers the Email System to send the notification.   
Input: AssetID, Recipient email address, and notification message content.   
Output: An Email record stored in the database and a confirmation message displayed to the Administrator.  
  
1.11 Update Administrator Profile Function   
Function ID: FR-11   
Description: Administrators can update their own profile information, such as Name, EmailAddress, and Role. The system validates the input and updates the profile in the database.   
Input: Updated Administrator profile details including Name, EmailAddress, and Role.   
Output: Updated Administrator record stored in the database and a success message displayed to the Administrator.  
  
1.12 Delete Administrator Account Function   
Function ID: FR-12   
Description: Administrators can delete their own account from the system. The system confirms the deletion, removes the account from the database, and sends a confirmation email.   
Input: An AdminID or selection from the Administrator account list.   
Output: The deleted Administrator account removed from the database and a confirmation message and email sent to the Administrator.  
  
1.13 Assign Asset to Administrator Function   
Function ID: FR-13   
Description: Administrators can assign an asset to another Administrator. The system validates the selection and updates the assignment relationship in the database.   
Input: AssetID and AdminID of the target Administrator.   
Output: Updated assignment relationship stored in the database and a success message displayed to the Administrator.  
  
1.14 Manage Notification Preferences Function   
Function ID: FR-14   
Description: Administrators can modify their notification preferences, such as enabling or disabling email alerts, setting the frequency, or specifying asset-related events to notify about.   
Input: Updated notification preferences including email alert status, frequency, and event types.   
Output: Updated Notification record stored in the database and a success message displayed to the Administrator.