# Functional Requirement

# Chapter 1: Functional Requirements  
  
## 1.1 Create User Account Function   
Function ID: FR-01   
Description: The system allows an Administrator to create a new User Account, including sending a confirmation email. The email address must be unique and valid.   
Input: User's name, contact information, email address, and optional password.   
Output: A new User Account in the system, confirmation email sent, and success message displayed to the Administrator.  
  
## 1.2 Delete User Account Function   
Function ID: FR-02   
Description: The system allows an Administrator to delete a User Account, which includes marking the email as deleted in the Email Archive database and sending a confirmation.   
Input: Email address of the User to be deleted.   
Output: The User Account is deleted from the system, associated email is marked as deleted in the Email Archive, and a confirmation message is displayed.  
  
## 1.3 View User Account Information Function   
Function ID: FR-03   
Description: The system allows an Administrator to view detailed information of a specific User Account and associated email data from the Email Archive.   
Input: Email address of the User whose information is to be viewed.   
Output: Display of the User Account details and associated email history.  
  
## 1.4 Update User Account Settings Function   
Function ID: FR-04   
Description: The system allows an Administrator to modify a User Account's settings such as password or contact information and update the Email Archive database accordingly.   
Input: Email address of the User, updated settings (e.g., new password, contact info).   
Output: Updated User Account in the system, associated email information updated in the Email Archive, and a confirmation message.  
  
## 1.5 Send Email Function   
Function ID: FR-05   
Description: The system allows an Administrator to compose and send an email, and logs the email in the Email Archive database.   
Input: Recipient's email address, subject, message content.   
Output: The email is sent to the recipient, and the details are recorded in the Email Archive.  
  
## 1.6 Receive Email Function   
Function ID: FR-06   
Description: The system receives incoming emails from the Email Server, validates the sender, and stores the email in the Email Archive database.   
Input: Incoming email from the Email Server (sender, recipient, subject, content).   
Output: The email is stored in the Email Archive, categorized, and logged for audit purposes.  
  
## 1.7 Format Email Content Function   
Function ID: FR-07   
Description: The system allows an Administrator to format the content of an email using predefined templates, fonts, and signatures.   
Input: Email content (either from an existing email or entered manually).   
Output: Formatted email content ready for sending or saving, and a confirmation message.  
  
## 1.8 View Email Function   
Function ID: FR-08   
Description: The system allows an Administrator to view the full content of an email stored in the Email Archive database.   
Input: Email identifier or selection from the Email Archive.   
Output: Display of the email content (sender, recipient, subject, timestamp, body), and logging of the viewing action.  
  
## 1.9 Delete Email Function   
Function ID: FR-09   
Description: The system allows an Administrator to delete an email from the Email Archive database after confirmation.   
Input: Email identifier or selection from the Email Archive.   
Output: The selected email is deleted from the Email Archive, the action is logged, and a confirmation message is displayed.  
  
## 1.10 Archive Email Function   
Function ID: FR-10   
Description: The system allows an Administrator to archive an email from the active email system to the Email Archive database.   
Input: Email identifier or selection from the active email system.   
Output: The email is archived in the Email Archive database, its status is updated, and the action is logged.  
  
## 1.11 Recover Archived Email Function   
Function ID: FR-11   
Description: The system allows an Administrator to recover an archived email and move it back to the active email system.   
Input: Email identifier or selection from the Email Archive.   
Output: The email is recovered and marked as active, the action is logged, and a confirmation message is displayed.  
  
## 1.12 Create Contact Function   
Function ID: FR-12   
Description: The system allows an Administrator to create a new Contact with associated email information, ensuring the email is valid and not already linked to another Contact.   
Input: Contact name, email address, phone number, and address.   
Output: A new Contact is created and stored in the Contact database, and the email is linked and validated.  
  
## 1.13 Delete Contact Function   
Function ID: FR-13   
Description: The system allows an Administrator to delete a Contact and update the Email Archive database to reflect the deletion.   
Input: Email address of the Contact to be deleted.   
Output: The Contact is deleted from the Contact database, the associated email is updated in the Email Archive, and a confirmation message is displayed.  
  
## 1.14 View Contact Function   
Function ID: FR-14   
Description: The system allows an Administrator to view the full details of a specific Contact and its associated email history.   
Input: Email address of the Contact to be viewed.   
Output: Display of the Contact's details and associated email information from the Email Archive.  
  
## 1.15 Update Contact Information Function   
Function ID: FR-15   
Description: The system allows an Administrator to modify the information of an existing Contact and update the Email Archive database accordingly.   
Input: Email address of the Contact to be updated and the new information.   
Output: Updated Contact in the Contact database, associated email information updated in the Email Archive, and a confirmation message.  
  
## 1.16 Manage Email Archive Function   
Function ID: FR-16   
Description: The system allows an Administrator to perform archive-related actions (view, recover, or delete) on archived emails.   
Input: Email identifier or selection from the Email Archive.   
Output: The Email Archive is updated based on the action taken, the status of the email is modified, and the action is logged.  
  
## 1.17 View Email Archive Function   
Function ID: FR-17   
Description: The system allows an Administrator to view a list of archived emails and the full content of selected emails.   
Input: Access to the Email Archive database.   
Output: Display of the list of archived emails and the content of selected emails, with logging of the viewing action.  
  
## 1.18 Manage Administrator Permissions Function   
Function ID: FR-18   
Description: The system allows a Super Administrator to assign, modify, or revoke permissions for other Administrators or Users.   
Input: Email address of the user or role, permission level to be assigned or modified.   
Output: Updated Permission Setting in the database, confirmation message, and logging of the action.  
  
## 1.19 Manage Email Draft Function   
Function ID: FR-19   
Description: The system allows an Administrator to manage email drafts, including saving, editing, deleting, or sending them.   
Input: Draft identifier or content of the draft email.   
Output: Updated or deleted draft in the Email Draft database, and if sent, the email is stored in the Email Archive.  
  
## 1.20 Manage Contact Group Function   
Function ID: FR-20   
Description: The system allows an Administrator to manage Contact Groups, including creating, updating, deleting, or viewing groups and their associated contacts.   
Input: Group name, selected contacts to be added or removed from the group.   
Output: Updated Contact Group in the database, associated contacts updated, and a confirmation message.  
  
## 1.21 Manage Email Folder Function   
Function ID: FR-21   
Description: The system allows an Administrator to manage Email Folders, including creating, updating, deleting, or associating emails with folders.   
Input: Folder name, selected emails to be associated with the folder.   
Output: Updated Email Folder in the database, associated emails updated, and a confirmation message.  
  
## 1.22 Manage Email Archive Record Function   
Function ID: FR-22   
Description: The system allows an Administrator to manage Email Archive Records, including creating, updating, or deleting them.   
Input: Email identifier, archive date, recovery date, and status.   
Output: Updated Email Archive Record in the database, associated email data updated, and a confirmation message.  
  
## 1.23 Create Administrator Function   
Function ID: FR-23   
Description: The system allows a Super Administrator to create a new Administrator account with the appropriate permissions and roles.   
Input: Name, contact information, and email address of the new Administrator.   
Output: New Administrator account created in the User Account database, email validated and stored in the Email Archive, and a confirmation email sent.  
  
## 1.24 Delete Administrator Function   
Function ID: FR-24   
Description: The system allows a Super Administrator to delete an Administrator account, ensuring that at least one Super Administrator remains for system integrity.   
Input: Email address of the Administrator to be deleted.   
Output: The Administrator account is deleted, associated email is marked as deleted in the Email Archive, and a confirmation message is displayed.