# Functional Requirement

1. Functional Requirements  
  
1.1 Email Creation Function   
Function ID: FR-01   
Description: Users can create new emails with specified content and recipient information. Drafting is also supported.   
Input: Subject, body, recipient(s), and optional email template selection.   
Output: A new email stored in the system, either as a draft or sent email, with a confirmation message displayed.  
  
1.2 Email Sending Function   
Function ID: FR-02   
Description: Users can send an email to the specified recipient(s) after confirming the content.   
Input: Valid email content, recipient(s), and confirmation from the user.   
Output: The email is sent to the recipient(s), marked as sent in the database, and a confirmation message is displayed.  
  
1.3 Email Receiving Function   
Function ID: FR-03   
Description: The system receives incoming emails from an external email server and stores them in the user’s inbox.   
Input: Incoming email from an external server with valid sender information.   
Output: The email is stored in the user’s inbox, and a notification is sent to the user or administrator.  
  
1.4 Email Deletion Function   
Function ID: FR-04   
Description: Users can delete an existing email after confirmation. The system retains a log of the deletion.   
Input: Selected email and confirmation from the user.   
Output: The email is removed from the database, and a confirmation message is displayed.  
  
1.5 Email Viewing Function   
Function ID: FR-05   
Description: Users can view the content of an existing email. The system marks the email as read if it was previously unread.   
Input: Selected email from the inbox or another accessible folder.   
Output: The email’s content (subject, body, sender, timestamp) is displayed to the user.  
  
1.6 Email Update Function   
Function ID: FR-06   
Description: Users can update an existing email that is in a draft or saved state.   
Input: Selected email and modified content (subject, body, recipient(s)).   
Output: The email is updated in the database, and a confirmation message is displayed.  
  
1.7 User Management Function   
Function ID: FR-07   
Description: Administrators can create, update, or delete user accounts.   
Input: User account details (username, email, password, role) for creation or modification.   
Output: The user account is updated or deleted in the database, and a confirmation message is displayed.  
  
1.8 User Registration Function   
Function ID: FR-08   
Description: Administrators can register new user accounts with unique credentials.   
Input: New user details (username, email, password, role).   
Output: A new user account is created in the database, and a confirmation email is sent to the user.  
  
1.9 User Deletion Function   
Function ID: FR-09   
Description: Administrators can delete a user account and all associated data.   
Input: Selected user account and confirmation from the administrator.   
Output: The user account and related data are removed from the database, and a confirmation message is displayed.  
  
1.10 Contact Addition Function   
Function ID: FR-10   
Description: Users or administrators can add new contacts with unique email addresses.   
Input: Contact details (name, email, phone number, and any additional information).   
Output: A new contact is stored in the database, and a confirmation message is displayed.  
  
1.11 Contact Update Function   
Function ID: FR-11   
Description: Users or administrators can modify an existing contact’s information.   
Input: Selected contact and updated details (name, email, phone number, etc.).   
Output: The contact is updated in the database, and a confirmation message is displayed.  
  
1.12 Contact Deletion Function   
Function ID: FR-12   
Description: Users or administrators can delete an existing contact after confirmation.   
Input: Selected contact and confirmation from the user or administrator.   
Output: The contact is removed from the database, and a confirmation message is displayed.  
  
1.13 Folder Management Function   
Function ID: FR-13   
Description: Users or administrators can create, update, or delete folders to organize their emails.   
Input: Folder details (name, parent folder, and action type).   
Output: The folder is created, updated, or deleted in the database, and a confirmation message is displayed.  
  
1.14 Inbox Management Function   
Function ID: FR-14   
Description: Users or administrators can organize, filter, or customize the view of their inbox.   
Input: Sorting criteria, filtering conditions, or customization settings.   
Output: The inbox is updated with the new organization, filters, or view settings, and a confirmation message is displayed.  
  
1.15 Email Status Management Function   
Function ID: FR-15   
Description: Users or administrators can update the status of an email (e.g., read, unread, flagged, archived).   
Input: Selected email and new status selection.   
Output: The email status is updated in the database, and the inbox or email list is refreshed accordingly.  
  
1.16 Email Status Viewing Function   
Function ID: FR-16   
Description: Users or administrators can view the current status of an email.   
Input: Selected email from the inbox or another accessible folder.   
Output: The email’s current status (e.g., read, unread, flagged) is displayed in the interface.  
  
1.17 Folder Viewing Function   
Function ID: FR-17   
Description: Users or administrators can view the contents of a folder, including a list of emails.   
Input: Selected folder.   
Output: The folder’s name and list of associated emails are displayed, along with optional folder details.