# Functional Requirement

1.1 Email Creation Function   
 Function ID: FR-01   
 Description: A user or administrator can create a new email by providing the recipient's email address, subject, and message body. The system validates the input and prepares the email for sending.   
 Input: Recipient’s email address, subject, message body   
 Output: A new Email object with valid data and a unique EmailID   
  
1.2 Email Sending Function   
 Function ID: FR-02   
 Description: A user or administrator can send a created email. The system updates the email status to "Sent", removes it from the draft (if applicable), and adds it to the recipient's inbox.   
 Input: Email object (EmailID, SenderID, ReceiverID, Subject, Body, Timestamp, StatusID)   
 Output: The email is added to the recipient's inbox and marked as sent in the system   
  
1.3 Email Receiving Function   
 Function ID: FR-03   
 Description: When an email is sent, the system delivers it to the recipient's inbox and updates the inbox status. The recipient is notified of the new email.   
 Input: Email object (EmailID, SenderID, ReceiverID, Subject, Body, Timestamp, StatusID)   
 Output: The email is added to the recipient's inbox and a notification is sent to the recipient   
  
1.4 Email Viewing Function   
 Function ID: FR-04   
 Description: A user or administrator can view the content of an email by selecting it from their inbox. The system retrieves the email and marks it as read.   
 Input: Selected EmailID and UserID/InboxID   
 Output: Email content (sender, subject, body, attachments) and updated read status   
  
1.5 Email Deletion Function   
 Function ID: FR-05   
 Description: A user or administrator can delete an email from their inbox. The system removes the email from the inbox and marks it as deleted in the database.   
 Input: Selected EmailID and UserID/InboxID   
 Output: Updated inbox without the deleted email and the email marked as deleted in the database   
  
1.6 User Creation Function   
 Function ID: FR-06   
 Description: An administrator can create a new user account by providing the username, password, and role. The system validates the inputs and stores the new user in the database.   
 Input: Username, password, role   
 Output: A new User object with a unique UserID and initial settings   
  
1.7 User Management Function   
 Function ID: FR-07   
 Description: An administrator can edit or delete an existing user account. The system updates the user information or removes the user from the database based on the action.   
 Input: Selected UserID and new user information (e.g., role, status)   
 Output: Updated or deleted User object and confirmation message   
  
1.8 Administrator Creation Function   
 Function ID: FR-08   
 Description: An administrator can create a new administrator account by providing the username, password, and role. The system validates and stores the new administrator in the database.   
 Input: Username, password, role   
 Output: A new Admin object with a unique AdminID and initial permissions   
  
1.9 Inbox Management Function   
 Function ID: FR-09   
 Description: A user or administrator can manage their inbox by performing actions such as marking an email as read, moving it to another folder, or deleting it.   
 Input: Selected EmailID, InboxID, and action type (e.g., mark as read, delete, move)   
 Output: Updated inbox status and confirmation message   
  
1.10 Email Status Management Function   
 Function ID: FR-10   
 Description: A user or administrator can update the status of an email (e.g., read, unread, flagged, archived) to reflect its current state in the system.   
 Input: Selected EmailID and new StatusID (from EmailStatus)   
 Output: Updated Email object with new status and refreshed inbox or sent items view