# Functional Requirement

1. Functional Requirements  
  
1.1 Email Creation Function   
 Function ID: FR-01   
 Description: The system allows the Administrator to create a new email by entering the subject, body, and selecting recipients from the Email Contact Distribution Group.   
 Input: Email subject, email body, recipient list (individual contacts or distribution groups).   
 Output: A new Email object with associated metadata stored in the system and archived in the Email Archive.  
  
1.2 Email Sending Function   
 Function ID: FR-02   
 Description: The system sends the created email to the selected recipients using the associated Email Account.   
 Input: Email content, recipient list, and the associated Email Account.   
 Output: The email is successfully delivered to the recipients, and a copy is archived in the Email Archive.  
  
1.3 Email Receiving Function   
 Function ID: FR-03   
 Description: The system detects and retrieves incoming emails to the associated Email Account and stores them in the system.   
 Input: Incoming email data from the Email Account.   
 Output: A new Email object with sender and metadata stored in the system and archived in the Email Archive.  
  
1.4 Email Viewing Function   
 Function ID: FR-04   
 Description: The system allows the Administrator to view the content and metadata of an existing email.   
 Input: Email ID or identifier selected from the Email Archive.   
 Output: Email content and metadata displayed in a read-only format.  
  
1.5 Email Deletion Function   
 Function ID: FR-05   
 Description: The system allows the Administrator to delete an email from the system and archive it in the Email Archive.   
 Input: Email ID or identifier selected from the system.   
 Output: The email is deleted from the system and archived in the Email Archive.  
  
1.6 Email Archiving Function   
 Function ID: FR-06   
 Description: The system allows the Administrator to manually archive an email to the Email Archive.   
 Input: Email ID or identifier selected from the system.   
 Output: The email is moved to the Email Archive with an associated EmailArchiveRecord.  
  
1.7 Email Recovery Function   
 Function ID: FR-07   
 Description: The system allows the Administrator to recover a previously archived email and restore it to the system.   
 Input: Email ID or identifier selected from the Email Archive.   
 Output: The email is restored to the system and associated with the relevant Email Account.  
  
1.8 Contact Creation Function   
 Function ID: FR-08   
 Description: The system allows the Administrator to create a new contact with details such as name, email address, phone number, and address.   
 Input: Contact name, email address, phone number, and address.   
 Output: A new Contact object stored in the system and associated with the Email Contact Distribution Group.  
  
1.9 Contact Update Function   
 Function ID: FR-09   
 Description: The system allows the Administrator to update an existing contact’s information.   
 Input: Contact ID, updated contact details (e.g., name, email, phone number).   
 Output: Updated Contact object stored in the system and associated with the Email Contact Distribution Group.  
  
1.10 Contact Deletion Function   
 Function ID: FR-10   
 Description: The system allows the Administrator to delete an existing contact from the Email Contact Distribution Group.   
 Input: Contact ID selected from the system.   
 Output: The contact is removed from the system and associated Email Contact Distribution Group.  
  
1.11 Contact Viewing Function   
 Function ID: FR-11   
 Description: The system allows the Administrator to view the details of an existing contact.   
 Input: Contact ID or identifier selected from the system.   
 Output: Contact details displayed in a read-only format.  
  
1.12 Distribution Group Creation Function   
 Function ID: FR-12   
 Description: The system allows the Administrator to create a new distribution group with a name, description, and associated contacts.   
 Input: Group name, description, and selected contacts.   
 Output: A new DistributionGroup object stored in the system and associated with the Email Contact Distribution Group.  
  
1.13 Distribution Group Update Function   
 Function ID: FR-13   
 Description: The system allows the Administrator to update a distribution group’s name, description, or contact list.   
 Input: Group ID, updated group name, description, and/or contact list.   
 Output: Updated DistributionGroup object stored in the system.  
  
1.14 Distribution Group Deletion Function   
 Function ID: FR-14   
 Description: The system allows the Administrator to delete an existing distribution group from the system.   
 Input: Group ID selected from the system.   
 Output: The distribution group is removed from the system and associated Email Contact Distribution Group.  
  
1.15 Add Contact to Distribution Group Function   
 Function ID: FR-15   
 Description: The system allows the Administrator to add an existing contact to a distribution group.   
 Input: Contact ID and Distribution Group ID.   
 Output: Updated DistributionGroup object with the new contact added.  
  
1.16 Remove Contact from Distribution Group Function   
 Function ID: FR-16   
 Description: The system allows the Administrator to remove a contact from a distribution group.   
 Input: Contact ID and Distribution Group ID.   
 Output: Updated DistributionGroup object with the contact removed.  
  
1.17 Email Account Management Function   
 Function ID: FR-17   
 Description: The system allows the Administrator to manage the settings of an existing email account, including username, password, domain, and signature.   
 Input: Email Account ID and updated account settings.   
 Output: Updated EmailAccount object stored in the system.  
  
1.18 Email Account Update Function   
 Function ID: FR-18   
 Description: The system allows the Administrator to update the configuration of an email account.   
 Input: Email Account ID and updated configuration data.   
 Output: Updated EmailAccount object stored in the system.  
  
1.19 Email Account Deletion Function   
 Function ID: FR-19   
 Description: The system allows the Administrator to delete an email account from the system.   
 Input: Email Account ID.   
 Output: The email account is removed from the system, and a copy is archived if needed.  
  
1.20 Email Account Permission Management Function   
 Function ID: FR-20   
 Description: The system allows the Administrator to update the access permissions of an email account, including which distribution groups or users can interact with it.   
 Input: Email Account ID and updated permission settings.   
 Output: Updated permissions for the Email Account and updated Email Contact Distribution Group.  
  
1.21 Audit Record Viewing Function   
 Function ID: FR-21   
 Description: The system allows the Administrator to view an Audit Record to track system actions (e.g., email creation, deletion, archive).   
 Input: Audit Record ID or identifier selected from the system.   
 Output: Audit Record details displayed in a read-only format.  
  
1.22 Compliance Report Generation Function   
 Function ID: FR-22   
 Description: The system allows the Administrator to generate a compliance report by retrieving relevant data from the Email Archive, Audit Record, and Email Contact Distribution Group.   
 Input: Report criteria such as date range, Email Account, or group.   
 Output: A structured compliance report displayed to the Administrator for download or printing.  
  
1.23 Email Update Function   
 Function ID: FR-23   
 Description: The system allows the Administrator to update an existing email’s content or metadata.   
 Input: Email ID, updated subject, body, or recipient list.   
 Output: Updated Email object stored in the system and archived in the Email Archive.  
  
1.24 Email Archive Management Function   
 Function ID: FR-24   
 Description: The system allows the Administrator to manage archived emails, including tagging, categorizing, or moving them to subfolders.   
 Input: EmailArchiveRecord ID and management action (e.g., tag, move, delete).   
 Output: Updated EmailArchiveRecord and Audit Record documenting the action.  
  
1.25 Email Archive Deletion Function   
 Function ID: FR-25   
 Description: The system allows the Administrator to permanently delete an email from the Email Archive.   
 Input: EmailArchiveRecord ID selected from the Email Archive.   
 Output: The email is permanently removed from the Email Archive, and an Audit Record is generated.