项目文档

# 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, content, and selecting recipients.   
Input: Email subject, email content, selected Email Account or Shared Account, recipient Contact(s) or Distribution Group(s)   
Output: A new Email entity with attributes (EmailID, Subject, Body, SenderID, ReceiverID, Timestamp, Status, FolderID) is created and stored in the system.  
  
## 1.2 Email Sending Function   
Function ID: FR-02   
Description: The system allows the Administrator to send an email using the selected Email Account or Shared Account.   
Input: Email to be sent (EmailID), selected Email Account or Shared Account (EmailAccountID), recipient Contact(s) or Distribution Group(s)   
Output: Email is marked as "Sent" in the system, and stored in the Email Flow or Archive. A confirmation message is displayed.  
  
## 1.3 Email Receiving Function   
Function ID: FR-03   
Description: The system retrieves incoming emails from the configured Email Account or Shared Account and logs them in the Email Flow or Archive.   
Input: Incoming email data from the email server, associated Email Account or Shared Account (EmailAccountID)   
Output: A new Email entity is created with attributes (EmailID, Subject, Body, SenderID, ReceiverID, Timestamp, Status, FolderID), and stored in the system. The email is marked as "Received".  
  
## 1.4 Email Viewing Function   
Function ID: FR-04   
Description: The system allows the Administrator to view the details of a selected email.   
Input: Selected EmailID from the Email Flow or Archive   
Output: Displayed email details (Subject, Body, SenderID, ReceiverID, Timestamp, Status). The viewed email remains in its original location.  
  
## 1.5 Email Reply Function   
Function ID: FR-05   
Description: The system allows the Administrator to reply to a selected email.   
Input: Selected EmailID from the Email Flow or Archive, reply content, selected Email Account or Shared Account (EmailAccountID), recipient Contact(s) or Distribution Group(s)   
Output: A new Email entity is created as a reply, and marked as "Sent". The original email remains in the system.  
  
## 1.6 Email Forwarding Function   
Function ID: FR-06   
Description: The system allows the Administrator to forward a selected email to new recipients.   
Input: Selected EmailID from the Email Flow or Archive, forwarding content, selected Email Account or Shared Account (EmailAccountID), recipient Contact(s) or Distribution Group(s)   
Output: A new Email entity is created as a forward, and marked as "Sent". The original email remains in the system.  
  
## 1.7 Email Deletion Function   
Function ID: FR-07   
Description: The system allows the Administrator to delete a selected email from the Email Flow or Archive.   
Input: Selected EmailID from the Email Flow or Archive   
Output: The selected Email is removed from the Email Flow or Archive. A deletion confirmation is displayed.  
  
## 1.8 Email Archiving Function   
Function ID: FR-08   
Description: The system allows the Administrator to move a selected email from the Email Flow to the Archive based on retention policies.   
Input: Selected EmailID from the Email Flow, ArchiveID, PolicyID   
Output: The email is moved to the Archive and marked as "Archived". A confirmation message is displayed.  
  
## 1.9 Email Search Function   
Function ID: FR-09   
Description: The system allows the Administrator to search for emails in the Email Flow or Archive using specified criteria.   
Input: Search criteria such as subject, sender, receiver, date, or status   
Output: A list of matching Email entities with details (EmailID, Subject, SenderID, ReceiverID, Timestamp, Status) is displayed.  
  
## 1.10 Contact Management Function   
Function ID: FR-10   
Description: The system allows the Administrator to add, update, or delete Contact entries and manage their associations with Distribution Groups.   
Input: Contact details (Name, Email, PhoneNumber, Address), optional Distribution Group (GroupID)   
Output: Updated or new Contact entity (ContactID, Name, Email, PhoneNumber, Address, UserID) is stored in the system. Distribution Group associations are updated accordingly.  
  
## 1.11 Contact Addition Function   
Function ID: FR-11   
Description: The system allows the Administrator to add a new contact to the system and optionally assign it to a Distribution Group.   
Input: Contact details (Name, Email, PhoneNumber, Address), optional GroupID   
Output: A new Contact entity is created and stored in the system. The contact is optionally associated with a Distribution Group.  
  
## 1.12 Contact Update Function   
Function ID: FR-12   
Description: The system allows the Administrator to update an existing Contact's information and adjust its Distribution Group memberships.   
Input: Selected ContactID, updated details (Name, Email, PhoneNumber, Address), optional GroupID   
Output: Updated Contact entity is saved in the system. Distribution Group associations are updated accordingly.  
  
## 1.13 Contact Deletion Function   
Function ID: FR-13   
Description: The system allows the Administrator to delete an existing Contact and update its associations with Distribution Groups.   
Input: Selected ContactID   
Output: The Contact is removed from the system. Distribution Group associations are updated accordingly. A confirmation message is displayed.  
  
## 1.14 Distribution Group Creation Function   
Function ID: FR-14   
Description: The system allows the Administrator to create a new Distribution Group and assign Contacts to it.   
Input: Group name, selected ContactID(s)   
Output: A new Distribution Group entity (GroupID, Name, Description, OwnerID) is created, and associated Contacts are added.  
  
## 1.15 Distribution Group Management Function   
Function ID: FR-15   
Description: The system allows the Administrator to create, update, or delete Distribution Groups and manage their Contact memberships.   
Input: Selected Distribution GroupID, updated name, or selected Contacts to add/remove   
Output: Updated or new Distribution Group entity is stored in the system. Contact associations are updated accordingly.  
  
## 1.16 Distribution Group Update Function   
Function ID: FR-16   
Description: The system allows the Administrator to update the name or membership of a selected Distribution Group.   
Input: Selected Distribution GroupID, new name, and/or updated list of ContactID(s)   
Output: Updated Distribution Group entity is stored in the system. Contact associations are updated accordingly.  
  
## 1.17 Distribution Group Deletion Function   
Function ID: FR-17   
Description: The system allows the Administrator to delete a selected Distribution Group and disassociate its Contacts.   
Input: Selected Distribution GroupID   
Output: The Distribution Group is removed from the system. Contact associations are updated accordingly. A confirmation message is displayed.  
  
## 1.18 Email Account Creation Function   
Function ID: FR-18   
Description: The system allows the Administrator to create a new Email Account (Personal or Shared) for sending and receiving emails.   
Input: Email account details (Username, Password, Domain), account type (Personal or Shared), AdminID (for Shared Accounts)   
Output: A new Email Account entity (EmailAccountID, Username, Password, Domain, Status, UserID) is created and configured.  
  
## 1.19 Email Account Deletion Function   
Function ID: FR-19   
Description: The system allows the Administrator to delete an Email Account and archive or mark associated emails as inactive.   
Input: Selected EmailAccountID   
Output: The Email Account is removed from the system. Associated emails are archived or marked as inactive. A confirmation message is displayed.  
  
## 1.20 Shared Account Management Function   
Function ID: FR-20   
Description: The system allows the Administrator to manage Shared Accounts by creating, updating, or deleting them and associating them with Email Accounts.   
Input: Shared Account details (Name, Email, Password, Domain), associated EmailAccountID   
Output: Updated or new Shared Account entity (SharedAccountID, Name, Email, Password, Domain, AdminID) is stored. Email Account associations are updated accordingly.  
  
## 1.21 Calendar Event Creation Function   
Function ID: FR-21   
Description: The system allows the Administrator to create a new Calendar Event with details such as title, start time, end time, and optional invitees.   
Input: Event title, start and end times, description, optional ContactID(s) or Distribution GroupID(s) as invitees   
Output: A new Calendar Event entity (EventID, Title, Description, StartTime, EndTime, Location, CalendarID, OrganizerID) is created and stored in the Calendar.  
  
## 1.22 Calendar Event Update Function   
Function ID: FR-22   
Description: The system allows the Administrator to update an existing Calendar Event, including title, time, and invitees.   
Input: Selected EventID, updated title, start and end times, description, optional updated invitees (ContactID or Distribution GroupID)   
Output: Updated Calendar Event entity is stored in the Calendar. Invitee associations are updated accordingly.  
  
## 1.23 Calendar Event Deletion Function   
Function ID: FR-23   
Description: The system allows the Administrator to delete a Calendar Event and log the action.   
Input: Selected EventID   
Output: The Calendar Event is removed from the system. A deletion confirmation is displayed.  
  
## 1.24 Calendar View Function   
Function ID: FR-24   
Description: The system allows the Administrator to view all Calendar Events associated with their account.   
Input: CalendarID or UserID   
Output: A list of Calendar Events (EventID, Title, StartTime, EndTime, Description, Location) is displayed. The events remain in the Calendar.  
  
## 1.25 Meeting Scheduling Function   
Function ID: FR-25   
Description: The system allows the Administrator to schedule a meeting, create a Calendar Event, and send invitations via Email Account or Shared Account.   
Input: Meeting title, start and end times, description, selected invitees (ContactID or Distribution GroupID), selected Email Account or Shared Account (EmailAccountID)   
Output: A new Calendar Event is created and stored. Meeting invitation emails are sent and logged in the Email Flow or Archive.  
  
## 1.26 Email Flow Capture Function   
Function ID: FR-26   
Description: The system captures and logs all created, sent, or received emails into the Email Flow for tracking and compliance.   
Input: EmailID, EmailAccountID, FlowDescription, Timestamp, PolicyID   
Output: A new Email Flow entity (FlowID, EmailID, FlowDescription, Timestamp, PolicyID) is created and stored in the system.  
  
## 1.27 Retention Policy Application Function   
Function ID: FR-27   
Description: The system applies a configured Retention Policy to emails in the Email Flow, moving them to the Archive or deleting them as per policy rules.   
Input: Selected PolicyID, list of EmailID(s) in the Email Flow   
Output: Emails are archived or deleted based on the policy. Status and ArchiveID are updated accordingly.  
  
## 1.28 Retention Policy Management Function   
Function ID: FR-28   
Description: The system allows the Administrator to create, update, or delete Retention Policies.   
Input: Policy name, description, duration, ArchiveID (if applicable), PolicyID (for updates or deletions)   
Output: Updated or new Retention Policy entity (PolicyID, Name, Description, Duration, ArchiveID) is stored in the system.  
  
## 1.29 Expired Email Handling Function   
Function ID: FR-29   
Description: The system allows the Administrator to manage expired emails by recovering, permanently deleting, or moving them to a different archive location.   
Input: Selected ExpiredEmailID, action type (recover, delete, or move), ArchiveID (if applicable)   
Output: Expired Email status and location are updated. Recovery or deletion actions are logged in the Recovery Record.  
  
## 1.30 Email Recovery Function   
Function ID: FR-30   
Description: The system allows the Administrator to recover a deleted or expired email from the Archive and restore it to the Email Flow.   
Input: Selected EmailID or ExpiredEmailID from the Archive, RecoveryRecord details (ItemType, RecoveryDate, UserID)   
Output: The recovered Email is moved to the Email Flow and marked as "Recovered". A Recovery Record is created and stored.  
  
## 1.31 Contact Recovery Function   
Function ID: FR-31   
Description: The system allows the Administrator to recover a deleted or expired Contact from the Archive and restore it to the active Contact list.   
Input: Selected ContactID from the Archive, RecoveryRecord details (ItemType, RecoveryDate, UserID)   
Output: The recovered Contact is added back to the active list and marked as "Recovered". A Recovery Record is created and stored.  
  
## 1.32 Calendar Event Recovery Function   
Function ID: FR-32   
Description: The system allows the Administrator to recover an expired or archived Calendar Event and restore it to the active Calendar.   
Input: Selected EventID from the Archive, RecoveryRecord details (ItemType, RecoveryDate, UserID)   
Output: The recovered Calendar Event is restored to the Calendar and marked as "Recovered". A Recovery Record is created and stored.  
  
## 1.33 Recovery Record Management Function   
Function ID: FR-33   
Description: The system allows the Administrator to create, view, update, or delete Recovery Records to track recovery actions.   
Input: RecoveryRecord details (ItemType, ItemID, RecoveryDate, UserID), action type (create, update, delete)   
Output: Updated or new RecoveryRecord entity is stored in the system. Recovery history is maintained for audit purposes.  
  
## 1.34 Email Folder Management Function   
Function ID: FR-34   
Description: The system allows the Administrator to manage Email Folders, including creating, updating, or deleting folders and associating emails with them.   
Input: Folder name, description, selected EmailID(s) for association, action type (create, update, delete)   
Output: Updated or new EmailFolder entity is stored. Email associations are updated accordingly.  
  
## 1.35 Schedule Invite Update Function   
Function ID: FR-35   
Description: The system allows the Administrator to update a meeting invitation by modifying the event details and resending the updated invitation.   
Input: Selected EventID, updated event details, selected Email Account or Shared Account (EmailAccountID), selected invitee(s) (ContactID or Distribution GroupID)   
Output: Updated Calendar Event is stored. A new ScheduleInvite is generated and sent. Email Flow and Archive are updated accordingly.  
  
## 1.36 Schedule Invite Deletion Function   
Function ID: FR-36   
Description: The system allows the Administrator to delete a meeting invitation and send a cancellation email to all invitees.   
Input: Selected EventID, selected Email Account or Shared Account (EmailAccountID), list of invitee(s) (ContactID or Distribution GroupID)   
Output: The ScheduleInvite is deleted. A cancellation email is sent and stored in the Email Flow or Archive. The event is marked as "Invitation Canceled".  
  
## 1.37 Archive Management Function   
Function ID: FR-37   
Description: The system allows the Administrator to manage the Archive by viewing, recovering, or permanently deleting archived items.   
Input: Selected ArchiveID, action type (view, recover, delete)   
Output: Archive is updated. Items are either restored to the Email Flow or permanently deleted. Recovery actions are logged in the Recovery Record.  
  
## 1.38 Administrator Management Function   
Function ID: FR-38   
Description: The system allows the Administrator to manage other Administrator accounts by creating, updating, or deleting them.   
Input: Administrator details (Name, Role, AdminID), action type (create, update, delete)   
Output: Updated or new Admin entity is stored. Access rights and roles are updated accordingly. Actions are logged for audit purposes.

# External Description

2. External Interfaces   
This chapter describes the external interfaces that the system interacts with, including user interfaces, hardware interfaces, software interfaces, and communication interfaces. These interfaces define how the system communicates with users, external hardware, software components, and communication channels to fulfill the functional requirements.  
  
2.1 User Interface Output   
The system interacts with the Administrator through graphical user interfaces (GUIs) or web-based interfaces to support the following operations:   
- \*\*Email Creation and Sending (FR-01, FR-02):\*\* The system provides a form-based interface for the Administrator to enter the subject and content of an email, select an Email Account or Shared Account, and choose recipients from a list of Contacts or Distribution Groups.   
- \*\*Email Viewing (FR-04):\*\* The system displays the details of a selected email (Subject, Body, SenderID, ReceiverID, Timestamp, Status) in a dedicated view or modal window.   
- \*\*Email Reply and Forwarding (FR-05, FR-06):\*\* The system provides a reply/forward interface for the Administrator to enter the reply or forwarding content, select an Email Account or Shared Account, and specify new recipients.   
- \*\*Email Deletion and Archiving (FR-07, FR-08):\*\* The system includes a confirmation dialog for deletion or archiving actions to ensure the Administrator’s intent.   
- \*\*Email Search (FR-09):\*\* The system provides a search interface with filters for Subject, Sender, Receiver, Date, and Status to help the Administrator locate specific emails.   
- \*\*Contact Management (FR-10, FR-11, FR-12, FR-13):\*\* The system offers an interface for the Administrator to add, update, or delete Contacts, and to assign them to or remove them from Distribution Groups.   
- \*\*Distribution Group Management (FR-14, FR-15, FR-16, FR-17):\*\* The system provides an interface for the Administrator to create, update, or delete Distribution Groups and manage their memberships.   
- \*\*Email Account Management (FR-18, FR-19, FR-20):\*\* The system includes an interface for the Administrator to create, update, or delete Email Accounts (Personal or Shared), including configuration of account details such as Username, Password, and Domain.   
- \*\*Calendar Event Management (FR-21, FR-22, FR-23, FR-24):\*\* The system provides an interface for the Administrator to create, update, delete, and view Calendar Events, including specifying event details such as Title, Start Time, End Time, Location, and Organizer.   
- \*\*Meeting Scheduling (FR-25):\*\* The system offers a scheduling interface where the Administrator can create a Calendar Event and send meeting invitations via the system’s Email Accounts or Shared Accounts.   
- \*\*Archive and Recovery (FR-27, FR-29, FR-30, FR-31, FR-32, FR-37):\*\* The system provides an interface for the Administrator to view, recover, or permanently delete archived items, including logs of recovery actions.   
- \*\*Retention Policy Management (FR-28):\*\* The system includes an interface for the Administrator to configure, update, or delete Retention Policies, specifying Policy Name, Description, Duration, and associated ArchiveID.   
- \*\*Recovery Record Management (FR-33):\*\* The system provides an interface for the Administrator to view, create, update, or delete Recovery Records, which track recovery actions (ItemType, ItemID, RecoveryDate, UserID).   
- \*\*Email Folder Management (FR-34):\*\* The system includes an interface for the Administrator to manage Email Folders by creating, updating, or deleting folders and associating or dissociating emails with them.   
- \*\*Administrator Management (FR-38):\*\* The system provides an interface for the Administrator to create, update, or delete other Administrator accounts, including specifying Name, Role, and AdminID.   
  
2.2 Hardware Interface Output   
There are no hardware interfaces required for the system as described in the functional requirements. The system is designed to operate in a software-only environment and does not interact directly with hardware devices.  
  
2.3 Software Interface Output   
The system interacts with various software components, including databases, external tools, and internal modules, to support its functional operations. These interfaces are defined as follows:   
  
- \*\*Email Database (Email Table):\*\*   
 - \*\*Description:\*\* Stores all created, sent, received, and archived emails. Each email has attributes such as EmailID, Subject, Body, SenderID, ReceiverID, Timestamp, Status, and FolderID.   
 - \*\*Interaction Method:\*\* The system performs CRUD (Create, Read, Update, Delete) operations on the Email table to manage email entities.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Email subject, body, sender/receiver IDs, timestamps, statuses, folder associations.   
 - \*\*Output:\*\* Email entities are stored, retrieved, updated, or deleted from the database.   
  
- \*\*Contact Database (Contact Table):\*\*   
 - \*\*Description:\*\* Stores all Contact entries, including Name, Email, PhoneNumber, Address, and UserID.   
 - \*\*Interaction Method:\*\* The system performs CRUD operations on the Contact table to add, update, or delete contacts.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Contact details, including optional GroupID for Distribution Group associations.   
 - \*\*Output:\*\* Updated or new Contact entities are stored, and Distribution Group associations are modified accordingly.   
  
- \*\*Distribution Group Database (Distribution Group Table):\*\*   
 - \*\*Description:\*\* Stores all Distribution Groups with attributes such as GroupID, Name, Description, and OwnerID.   
 - \*\*Interaction Method:\*\* The system performs CRUD operations on the Distribution Group table to manage group entities and their memberships.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Group name, description, owner information, and list of ContactID(s) to add/remove.   
 - \*\*Output:\*\* Updated or new Distribution Group entities are stored, and Contact associations are modified accordingly.   
  
- \*\*Email Account Database (Email Account Table):\*\*   
 - \*\*Description:\*\* Stores all Email Account configurations, including EmailAccountID, Username, Password, Domain, Status, and UserID (for Personal Accounts) or AdminID (for Shared Accounts).   
 - \*\*Interaction Method:\*\* The system performs CRUD operations on the Email Account table to manage Personal and Shared Accounts.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Email account details such as Username, Password, Domain, and account type.   
 - \*\*Output:\*\* Updated or new Email Account entities are stored, and associated emails are archived or marked as inactive upon deletion.   
  
- \*\*Calendar Database (Calendar Event Table):\*\*   
 - \*\*Description:\*\* Stores all Calendar Events with attributes such as EventID, Title, Description, StartTime, EndTime, Location, CalendarID, and OrganizerID.   
 - \*\*Interaction Method:\*\* The system performs CRUD operations on the Calendar Event table to manage events and their invitees.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Event details, including optional invitee ContactID(s) or Distribution GroupID(s).   
 - \*\*Output:\*\* Updated or new Calendar Event entities are stored.   
  
- \*\*Archive Database (Archive Table):\*\*   
 - \*\*Description:\*\* Stores archived items such as emails, contacts, and calendar events. Each item is associated with an ArchiveID and may include metadata such as PolicyID or Timestamp.   
 - \*\*Interaction Method:\*\* The system performs read, update, and delete operations on the Archive table to manage archived data.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* EmailID, ContactID, or EventID to be archived, along with ArchiveID and PolicyID.   
 - \*\*Output:\*\* Archived items are stored, retrieved, or deleted. Recovery actions are logged.   
  
- \*\*Retention Policy Database (Policy Table):\*\*   
 - \*\*Description:\*\* Stores configured Retention Policies with attributes such as PolicyID, Name, Description, Duration, and ArchiveID.   
 - \*\*Interaction Method:\*\* The system performs CRUD operations on the Policy table to manage policies.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Policy name, description, duration, and optional ArchiveID for policy application.   
 - \*\*Output:\*\* Updated or new Retention Policy entities are stored.   
  
- \*\*Recovery Record Database (Recovery Record Table):\*\*   
 - \*\*Description:\*\* Stores all recovery actions for audit purposes, including ItemType, ItemID, RecoveryDate, and UserID.   
 - \*\*Interaction Method:\*\* The system performs CRUD operations on the Recovery Record table to track and manage recovery logs.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Recovery action details such as ItemType, ItemID, RecoveryDate, and UserID.   
 - \*\*Output:\*\* Updated or new Recovery Record entities are stored.   
  
- \*\*Email Flow Database (Email Flow Table):\*\*   
 - \*\*Description:\*\* Logs all created, sent, or received emails for tracking and compliance purposes. Each entry includes FlowID, EmailID, FlowDescription, Timestamp, and PolicyID.   
 - \*\*Interaction Method:\*\* The system performs insert and update operations on the Email Flow table to capture and modify email flow status.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* EmailID, EmailAccountID, FlowDescription, Timestamp, and PolicyID.   
 - \*\*Output:\*\* A new Email Flow entity is created, and existing entries are updated as needed.   
  
- \*\*Email Folder Database (Email Folder Table):\*\*   
 - \*\*Description:\*\* Stores Email Folders and their associations with emails. Each folder has attributes such as FolderID, Name, Description, and associated EmailID(s).   
 - \*\*Interaction Method:\*\* The system performs CRUD operations on the Email Folder table to manage folders and their content.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Folder name, description, and list of EmailID(s) to be associated.   
 - \*\*Output:\*\* Updated or new Email Folder entities are stored, and Email associations are modified accordingly.   
  
2.4 Communication Interface Output   
The system supports communication with external systems and services, primarily through email and internal notifications. The communication interfaces are defined as follows:   
  
- \*\*Email Communication Interface (Email Server):\*\*   
 - \*\*Description:\*\* The system communicates with an email server to send and receive emails using the configured Email Accounts or Shared Accounts.   
 - \*\*Interaction Method:\*\* The system uses standard email protocols (e.g., SMTP for sending, POP3/IMAP for receiving) to interact with the email server.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Email content, sender/receiver information, and timestamps.   
 - \*\*Output:\*\* Emails are sent or received and stored in the Email Flow or Archive.   
  
- \*\*Meeting Invitation Communication Interface (Email-based Notifications):\*\*   
 - \*\*Description:\*\* When a meeting is scheduled (FR-25), the system sends meeting invitation emails to invitees using the selected Email Account or Shared Account.   
 - \*\*Interaction Method:\*\* The system generates and sends emails using the Email Sending Function (FR-02) and the associated email server.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Meeting title, event details, invitee ContactID(s) or Distribution GroupID(s), and selected EmailAccountID.   
 - \*\*Output:\*\* Meeting invitation emails are sent and stored in the Email Flow or Archive.   
  
- \*\*Cancellation Email Communication Interface (Email-based Notifications):\*\*   
 - \*\*Description:\*\* When a meeting invitation is deleted (FR-36), the system sends a cancellation email to all invitees using the selected Email Account or Shared Account.   
 - \*\*Interaction Method:\*\* The system generates and sends cancellation emails via the Email Sending Function (FR-02) and the email server.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Event details, selected EmailAccountID, and list of invitee ContactID(s) or Distribution GroupID(s).   
 - \*\*Output:\*\* Cancellation emails are sent and stored in the Email Flow or Archive. The event is marked as "Invitation Canceled".   
  
- \*\*Email Server Communication for Incoming Emails (FR-03):\*\*   
 - \*\*Description:\*\* The system retrieves incoming emails from the configured Email Account or Shared Account via the email server.   
 - \*\*Interaction Method:\*\* The system polls or listens to the email server using POP3 or IMAP protocols to fetch new emails.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Incoming email data from the email server and associated EmailAccountID.   
 - \*\*Output:\*\* A new Email entity is created and marked as "Received".   
  
- \*\*Email Communication for Recovery Notifications:\*\*   
 - \*\*Description:\*\* When an email, contact, or calendar event is recovered (FR-30, FR-31, FR-32), the system may send a notification to the Administrator or relevant users.   
 - \*\*Interaction Method:\*\* The system sends a confirmation email or in-system notification to inform the user of the recovery action.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Recovery action details and selected EmailAccountID for notifications.   
 - \*\*Output:\*\* A recovery confirmation is sent via email or displayed in the user interface.   
  
- \*\*Email Communication for Deletion and Archiving (FR-19, FR-27):\*\*   
 - \*\*Description:\*\* The system may send confirmation emails to the Administrator when an Email Account is deleted or when emails are archived or deleted based on retention policies.   
 - \*\*Interaction Method:\*\* The system sends emails using the Email Sending Function (FR-02) and the email server.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* EmailAccountID or PolicyID and selected EmailID(s).   
 - \*\*Output:\*\* A confirmation email is sent and stored in the Email Flow or Archive.   
  
- \*\*Email Communication for Updates (FR-35):\*\*   
 - \*\*Description:\*\* When a meeting invitation is updated (FR-35), the system resends the updated invitation to the invitees via the selected Email Account or Shared Account.   
 - \*\*Interaction Method:\*\* The system uses the Email Sending Function (FR-02) to send the updated invitation.   
 - \*\*Inputs/Outputs:\*\*   
 - \*\*Input:\*\* Updated event details, EmailAccountID, and list of invitee ContactID(s) or Distribution GroupID(s).   
 - \*\*Output:\*\* A new ScheduleInvite is sent, and the event is updated in the Calendar.   
  
This section ensures that all external data sources and interfaces referenced in the functional requirements are clearly defined, enabling developers to understand and implement the system accurately.

# Use Case

Use Case Name: Create Email   
Use Case ID: UC-01   
Actors: Administrator, Email Account, Shared Account   
Preconditions:   
1. The Administrator is logged into the system.   
2. The Email Account or Shared Account is available and configured.   
  
Postconditions:   
1. A new email is created and saved in the system.   
2. The email is associated with the correct Email Account or Shared Account.   
  
Main Flow:   
1. The Administrator selects the option to "Create Email" from the system menu.   
2. The system displays the email creation interface.   
3. The Administrator enters the subject and content of the email.   
4. The Administrator selects the Email Account or Shared Account to be used for sending the email.   
5. The Administrator specifies the recipients (individual Contacts or Distribution Groups).   
6. The Administrator confirms the creation of the email.   
7. The system creates the email and associates it with the selected account.   
8. The system saves the email in the Archive or Email Flow for future reference.   
  
Alternative Flow:   
1. If the Administrator does not select a valid Email Account or Shared Account, the system displays an error message.   
2. If the Administrator attempts to send the email without specifying recipients, the system prompts for recipient information.   
3. If the system fails to save the email, it displays an error message and allows the Administrator to retry or cancel the operation.  
  
Use Case Name: Send Email   
Use Case ID: UC-02   
Actors: Administrator, Email Account, Shared Account, Contact, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. An email has been created and is ready for sending.   
3. A valid Email Account or Shared Account is selected.   
4. Recipients (Contacts or Distribution Groups) are specified.   
  
Postconditions:   
1. The email is sent to the specified recipients.   
2. The email is saved in the system as part of the Email Flow or Archive.   
3. The system updates the status of the email to "Sent".   
  
Main Flow:   
1. The Administrator selects the option to "Send Email" from the email preview or draft interface.   
2. The system verifies that the email is associated with a valid Email Account or Shared Account.   
3. The system checks that recipients have been specified.   
4. The Administrator confirms the sending action.   
5. The system sends the email to the designated recipients via the selected Email Account or Shared Account.   
6. The system logs the sent email in the Email Flow and updates its status.   
7. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the selected Email Account or Shared Account is not valid or unavailable, the system displays an error message and prompts the Administrator to choose another account.   
2. If no recipients are specified, the system alerts the Administrator and requests that recipients be added before proceeding.   
3. If the sending process fails due to network or system issues, the system displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the system fails to log the email in the Email Flow or Archive, it displays an error and provides an option to manually save or discard the email.  
  
Use Case Name: Receive Email   
Use Case ID: UC-03   
Actors: Administrator, Email Account, Shared Account, Email Flow, Archive   
Preconditions:   
1. The Administrator is logged into the system.   
2. The Email Account or Shared Account is configured and active.   
3. The system is connected to an email server and can receive incoming emails.   
  
Postconditions:   
1. The incoming email is retrieved and displayed in the system.   
2. The email is saved in the Email Flow or Archive for record-keeping.   
3. The email is marked as "Received" in the system.   
  
Main Flow:   
1. The system checks for incoming emails using the configured Email Account or Shared Account.   
2. The system retrieves a new email from the email server.   
3. The system displays the received email in the Administrator's inbox or notification area.   
4. The Administrator can view the email's subject, content, and sender information.   
5. The system saves the received email in the Email Flow or Archive based on the retention policy.   
6. The system updates the status of the email to "Received".   
  
Alternative Flow:   
1. If the system is unable to connect to the email server, it displays an error message and allows the Administrator to retry or investigate connectivity issues.   
2. If the retrieved email cannot be saved due to storage or policy restrictions, the system alerts the Administrator and provides options to resolve the issue or discard the email.   
3. If the Administrator is not logged in when an email is received, the system stores the email temporarily and notifies the Administrator upon login.  
  
Use Case Name: View Email   
Use Case ID: UC-04   
Actors: Administrator, Email Flow, Archive, Email Account, Shared Account   
Preconditions:   
1. The Administrator is logged into the system.   
2. At least one email exists in the Email Flow or Archive.   
  
Postconditions:   
1. The Administrator can view the selected email's details (subject, content, sender, recipients, date, etc.).   
2. The viewed email remains in its original location in the Email Flow or Archive.   
  
Main Flow:   
1. The Administrator navigates to the "View Email" section from the system menu.   
2. The system displays a list of emails from the Email Flow and Archive.   
3. The Administrator selects an email from the list.   
4. The system retrieves the selected email's details.   
5. The system displays the email's subject, content, sender, recipients, and other relevant information.   
6. The Administrator can optionally print, forward, or mark the email for further action.   
  
Alternative Flow:   
1. If no emails are available in the Email Flow or Archive, the system displays a message indicating that there are no emails to view.   
2. If the selected email is an expired email and not accessible, the system alerts the Administrator and provides options to locate it in the Archive or discard it.   
3. If the system fails to retrieve the email, it displays an error message and allows the Administrator to retry or cancel the operation.  
  
Use Case Name: Reply to Email   
Use Case ID: UC-05   
Actors: Administrator, Email Account, Shared Account, Email Flow, Archive   
Preconditions:   
1. The Administrator is logged into the system.   
2. An email has been received and is available in the Email Flow or Archive.   
3. The Administrator has selected the email to reply to.   
  
Postconditions:   
1. A reply email is created and associated with the original email.   
2. The reply email is saved in the Email Flow or Archive for future reference.   
3. The reply email is sent to the original sender or specified recipients.   
  
Main Flow:   
1. The Administrator selects an email from the list in the Email Flow or Archive.   
2. The system displays the email's content and sender information.   
3. The Administrator clicks the "Reply" button.   
4. The system opens a new email composition window with the original email's sender pre-filled as the recipient.   
5. The Administrator edits the reply subject and content.   
6. The Administrator selects the Email Account or Shared Account to be used for sending the reply.   
7. The Administrator confirms the sending action.   
8. The system sends the reply email via the selected account.   
9. The system logs the reply in the Email Flow or Archive and updates its status to "Sent".   
  
Alternative Flow:   
1. If the Administrator does not select a valid Email Account or Shared Account, the system displays an error message and prompts the Administrator to choose a valid account.   
2. If the system fails to send the reply email due to network or system issues, it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the system fails to save the reply email, it displays an error and provides an option to manually save or discard the email.   
4. If the selected email is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the reply action.  
  
Use Case Name: Forward Email   
Use Case ID: UC-06   
Actors: Administrator, Email Account, Shared Account, Contact, Distribution Group, Email Flow, Archive   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. An email is available in the Email Flow or Archive and has been selected for forwarding.   
3. The Administrator has access to at least one valid Email Account or Shared Account.   
  
Postconditions:   
1. A new email is created as a forward of the selected email.   
2. The forwarded email is associated with the selected Email Account or Shared Account.   
3. The forwarded email is sent to the specified recipients.   
4. The original and forwarded emails are saved in the Email Flow or Archive.   
  
Main Flow:   
1. The Administrator selects an email from the Email Flow or Archive.   
2. The system displays the email's details.   
3. The Administrator clicks the "Forward" button.   
4. The system opens a new email composition window with the original email attached and the subject prefixed with "FWD: ".   
5. The Administrator specifies new recipients (Contacts or Distribution Groups).   
6. The Administrator enters any additional comments or content.   
7. The Administrator selects the Email Account or Shared Account to use for forwarding.   
8. The Administrator confirms the forwarding action.   
9. The system sends the forwarded email using the selected account.   
10. The system logs the forwarded email in the Email Flow or Archive and updates its status to "Sent".   
  
Alternative Flow:   
1. If the Administrator does not select a valid Email Account or Shared Account, the system displays an error message and prompts for a valid account.   
2. If no recipients are specified, the system alerts the Administrator and requests that recipients be added before proceeding.   
3. If the system fails to send the forwarded email due to network or system issues, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the system fails to save the forwarded email, it displays an error and provides options to manually save or discard the email.   
5. If the selected email is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the forwarding action.  
  
Use Case Name: Delete Email   
Use Case ID: UC-07   
Actors: Administrator, Email Flow, Archive, Email Account, Shared Account   
Preconditions:   
1. The Administrator is logged into the system.   
2. The email to be deleted is available in the Email Flow or Archive.   
3. The Administrator has selected the email for deletion.   
  
Postconditions:   
1. The selected email is removed from the Email Flow or Archive.   
2. The deletion is logged in the system.   
3. The Administrator is notified of the successful deletion.   
  
Main Flow:   
1. The Administrator navigates to the "View Email" section and selects an email to delete.   
2. The system displays a confirmation prompt to delete the selected email.   
3. The Administrator confirms the deletion.   
4. The system removes the email from the Email Flow or Archive.   
5. The system logs the deletion action.   
6. The system provides a confirmation message to the Administrator indicating the email has been deleted.   
  
Alternative Flow:   
1. If the selected email is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the deletion action.   
2. If the Administrator cancels the deletion, the system returns to the previous screen without making any changes.   
3. If the system fails to delete the email due to an error or restriction, it displays an error message and provides options to retry or cancel the operation.  
  
Use Case Name: Archive Email   
Use Case ID: UC-08   
Actors: Administrator, Email Flow, Archive, Email Account, Shared Account   
Preconditions:   
1. The Administrator is logged into the system.   
2. An email exists in the Email Flow or Archive and is selected for archiving.   
3. The system has access to the Archive functionality.   
  
Postconditions:   
1. The selected email is moved to the Archive.   
2. The email is no longer displayed in the active Email Flow.   
3. The Administrator is notified that the email has been successfully archived.   
  
Main Flow:   
1. The Administrator navigates to the "View Email" section and selects an email to archive.   
2. The system displays an option to archive the selected email.   
3. The Administrator confirms the archiving action.   
4. The system verifies the email's eligibility for archiving based on the retention policy.   
5. The system moves the email from the Email Flow to the Archive.   
6. The system updates the email's status to "Archived".   
7. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the selected email is already archived, the system displays a message indicating that the email cannot be archived again.   
2. If the email is not eligible for archiving due to retention policy constraints, the system alerts the Administrator and provides details about the policy.   
3. If the system fails to move the email to the Archive, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected email is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the archiving action.  
  
Use Case Name: Search Archive   
Use Case ID: UC-09   
Actors: Administrator, Archive, Email Flow, Email Account, Shared Account   
Preconditions:   
1. The Administrator is logged into the system.   
2. The Archive or Email Flow contains emails that can be searched.   
3. The system has access to the Archive functionality.   
  
Postconditions:   
1. The Administrator receives a list of emails that match the search criteria.   
2. The search results include details such as subject, sender, recipients, date, and status.   
3. The emails remain in their original location in the Archive or Email Flow.   
  
Main Flow:   
1. The Administrator navigates to the "Search Archive" section from the system menu.   
2. The system displays the search interface with options to filter by subject, sender, date, status, etc.   
3. The Administrator enters search criteria or selects filters.   
4. The Administrator submits the search request.   
5. The system searches the Archive and Email Flow for matching emails.   
6. The system displays the search results to the Administrator.   
7. The Administrator can view or select specific emails from the results for further actions.   
  
Alternative Flow:   
1. If no matching emails are found, the system displays a message indicating that no results match the search criteria.   
2. If the search criteria are invalid or incomplete, the system prompts the Administrator to correct them.   
3. If the system fails to perform the search due to an error or restriction, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected email is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.  
  
Use Case Name: Manage Contacts   
Use Case ID: UC-10   
Actors: Administrator, Contact, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Contact and Distribution Group data entities.   
  
Postconditions:   
1. The Administrator can add, edit, or delete Contact and Distribution Group entries.   
2. Changes to Contacts or Distribution Groups are saved in the system.   
3. The system updates the status of Contacts or Distribution Groups accordingly.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Contacts" from the system menu.   
2. The system displays the Contact and Distribution Group management interface.   
3. The Administrator chooses to add a new Contact or Distribution Group, or selects an existing one to edit or delete.   
4. If adding or editing, the Administrator enters or updates details such as name, email, phone number, or group members.   
5. The Administrator confirms the changes.   
6. The system saves the updated Contact or Distribution Group information.   
7. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator attempts to delete a Contact or Distribution Group that is currently in use by an email, the system displays a warning and asks if the Administrator still wants to proceed.   
2. If the entered information is incomplete or invalid, the system displays an error message and prompts the Administrator to correct it.   
3. If the system fails to save the changes, it displays an error message and allows the Administrator to retry or cancel the operation.  
  
Use Case Name: Add Contact   
Use Case ID: UC-11   
Actors: Administrator, Contact, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Contact and Distribution Group data entities.   
  
Postconditions:   
1. A new Contact entry is added to the system.   
2. The Contact can be associated with a Distribution Group if applicable.   
3. The system updates the list of Contacts for future reference.   
  
Main Flow:   
1. The Administrator selects the option to "Add Contact" from the Contact management interface.   
2. The system displays the contact creation form with fields for name, email, phone number, and other relevant details.   
3. The Administrator enters the necessary information for the new Contact.   
4. If the Contact should be part of a Distribution Group, the Administrator selects the appropriate group.   
5. The Administrator confirms the addition of the Contact.   
6. The system validates the input data.   
7. The system adds the Contact to the database.   
8. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator enters incomplete or invalid data, the system displays an error message and prompts for correction.   
2. If the selected Distribution Group does not exist, the system alerts the Administrator and offers to create a new group or select an existing one.   
3. If the system fails to add the Contact due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.  
  
Use Case Name: Update Contact   
Use Case ID: UC-12   
Actors: Administrator, Contact, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. An existing Contact entry is available in the system.   
3. The system has access to the Contact and Distribution Group data entities.   
  
Postconditions:   
1. The Contact entry is updated with the new information.   
2. The updated Contact can be associated with or removed from a Distribution Group if applicable.   
3. The system reflects the updated Contact details in the database and any associated email records.   
  
Main Flow:   
1. The Administrator selects the option to "Update Contact" from the Contact management interface.   
2. The system displays a list of existing Contacts.   
3. The Administrator selects a Contact to update.   
4. The system opens the Contact's details for editing.   
5. The Administrator modifies the Contact's information (e.g., name, email, phone number, or group membership).   
6. The Administrator confirms the update.   
7. The system validates the updated data.   
8. The system saves the updated Contact information.   
9. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator enters incomplete or invalid data, the system displays an error message and prompts for correction.   
2. If the selected Distribution Group no longer exists or is invalid, the system alerts the Administrator and offers to select a valid group or remove the association.   
3. If the system fails to save the updated Contact information, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected Contact is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the update action.  
  
Use Case Name: Delete Contact   
Use Case ID: UC-13   
Actors: Administrator, Contact, Distribution Group   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. An existing Contact entry is available in the system.   
3. The system has access to the Contact and Distribution Group data entities.   
  
Postconditions:   
1. The selected Contact entry is removed from the system.   
2. Any associations with Distribution Groups are updated or removed accordingly.   
3. The system reflects the deletion in the Contact list and any related records.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Contacts" from the system menu.   
2. The system displays a list of existing Contacts.   
3. The Administrator selects a Contact to delete.   
4. The system displays a confirmation prompt for the deletion.   
5. The Administrator confirms the deletion.   
6. The system checks if the Contact is associated with any Distribution Groups.   
7. The system removes the Contact from the database and updates any related group memberships.   
8. The system provides a confirmation message to the Administrator indicating the Contact has been deleted.   
  
Alternative Flow:   
1. If the selected Contact is currently used in an email or email flow, the system displays a warning and asks if the Administrator still wants to proceed.   
2. If the Administrator cancels the deletion, the system returns to the previous screen without making any changes.   
3. If the system fails to delete the Contact due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected Contact is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the deletion action.  
  
Use Case Name: Create Distribution Group   
Use Case ID: UC-14   
Actors: Administrator, Contact, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. At least one Contact entry exists in the system.   
3. The system has access to the Distribution Group data entity.   
  
Postconditions:   
1. A new Distribution Group is created in the system.   
2. The Distribution Group contains the specified Contacts.   
3. The Administrator is notified that the group has been successfully created.   
  
Main Flow:   
1. The Administrator selects the option to "Create Distribution Group" from the system menu.   
2. The system displays the Distribution Group creation interface.   
3. The Administrator enters a name for the new Distribution Group.   
4. The Administrator selects Contacts to include in the group from the available list.   
5. The Administrator confirms the creation of the Distribution Group.   
6. The system creates the Distribution Group and adds the selected Contacts to it.   
7. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator does not enter a valid name for the Distribution Group, the system displays an error message and prompts for a valid name.   
2. If no Contacts are selected, the system alerts the Administrator and requests that at least one Contact be added before proceeding.   
3. If the system fails to create the Distribution Group due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.  
  
Use Case Name: Manage Distribution Group   
Use Case ID: UC-15   
Actors: Administrator, Distribution Group, Contact   
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Distribution Group and Contact data entities.   
3. At least one Contact exists in the system for group management.   
  
Postconditions:   
1. The Distribution Group is successfully created, updated, or deleted.   
2. The system reflects the current state of Distribution Groups and their associated Contacts.   
3. The Administrator is informed of the success or failure of the group management action.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Distribution Group" from the system menu.   
2. The system displays the Distribution Group management interface with a list of existing groups.   
3. The Administrator chooses to create a new group, edit an existing group, or delete a group.   
4. If creating or editing, the Administrator enters or modifies the group's name and selects Contacts to include.   
5. The Administrator confirms the action.   
6. The system validates the input data and updates the Distribution Group accordingly.   
7. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator attempts to delete a Distribution Group that is being used in an email or email flow, the system displays a warning and asks if the Administrator still wants to proceed.   
2. If the group name is invalid or not provided, the system displays an error message and prompts for correction.   
3. If no Contacts are selected for a new or updated group, the system alerts the Administrator and requests that at least one Contact be added.   
4. If the system fails to save or delete the Distribution Group, it displays an error message and allows the Administrator to retry or cancel the operation.   
5. If the selected Distribution Group is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.  
  
Use Case Name: Update Distribution Group   
Use Case ID: UC-16   
Actors: Administrator, Distribution Group, Contact   
Preconditions:   
1. The Administrator is logged into the system.   
2. An existing Distribution Group is available in the system.   
3. The system has access to the Contact data entity.   
  
Postconditions:   
1. The selected Distribution Group is updated with the new or modified Contact memberships.   
2. The updated Distribution Group is saved in the system.   
3. The Administrator is notified of the successful update.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Distribution Group" from the system menu.   
2. The system displays a list of existing Distribution Groups.   
3. The Administrator selects a Distribution Group to update.   
4. The system opens the selected group's details for editing.   
5. The Administrator modifies the group's name or adds/removes Contacts from the group.   
6. The Administrator confirms the update.   
7. The system validates the updated information.   
8. The system saves the updated Distribution Group.   
9. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the updated group name is invalid or already exists, the system displays an error message and prompts the Administrator to provide a valid name.   
2. If the Administrator attempts to remove a Contact that is in use by an email or another group, the system displays a warning and allows the Administrator to proceed or cancel.   
3. If no Contacts are selected for the group, the system alerts the Administrator and requests that at least one Contact be added.   
4. If the system fails to save the updated Distribution Group, it displays an error message and allows the Administrator to retry or cancel the operation.   
5. If the selected Distribution Group is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the update action.  
  
Use Case Name: Delete Distribution Group   
Use Case ID: UC-17   
Actors: Administrator, Distribution Group, Contact   
Preconditions:   
1. The Administrator is logged into the system.   
2. An existing Distribution Group is available in the system.   
3. The system has access to the Distribution Group and Contact data entities.   
  
Postconditions:   
1. The selected Distribution Group is removed from the system.   
2. All Contacts in the group are disassociated from it.   
3. The system reflects the deletion in the Distribution Group list and related email records.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Distribution Group" from the system menu.   
2. The system displays a list of existing Distribution Groups.   
3. The Administrator selects a Distribution Group to delete.   
4. The system displays a confirmation prompt for the deletion.   
5. The Administrator confirms the deletion.   
6. The system checks if the Distribution Group is referenced in any emails or email flows.   
7. The system removes the group from the database and disassociates any related Contacts.   
8. The system provides a confirmation message to the Administrator indicating the group has been deleted.   
  
Alternative Flow:   
1. If the selected Distribution Group is currently referenced in an email or email flow, the system displays a warning and asks if the Administrator still wants to proceed.   
2. If the Administrator cancels the deletion, the system returns to the previous screen without making any changes.   
3. If the system fails to delete the group due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected Distribution Group is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the deletion action.  
  
Use Case Name: Create Email Account   
Use Case ID: UC-01   
Actors: Administrator, Email Account, Shared Account   
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Email Account and Shared Account data entities.   
3. The system is connected to an email service or server to support account creation.   
  
Postconditions:   
1. A new Email Account is successfully created and configured in the system.   
2. The Administrator is notified of the success or failure of the account creation.   
3. The new Email Account is available for use in subsequent email operations.   
  
Main Flow:   
1. The Administrator selects the option to "Create Email Account" from the system menu.   
2. The system displays the email account creation interface.   
3. The Administrator enters the email address, password, and other required account details.   
4. The Administrator selects the type of account (e.g., Personal or Shared).   
5. The system validates the entered information and checks for account availability.   
6. The Administrator confirms the creation of the Email Account.   
7. The system creates the Email Account and configures it for use.   
8. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the entered email address or password is invalid or incomplete, the system displays an error message and prompts the Administrator to correct the input.   
2. If the selected account type is not supported or unavailable, the system displays a message and allows the Administrator to choose another type.   
3. If the system fails to validate or create the Email Account due to server issues or conflicts, it displays an error message and provides options to retry or cancel.   
4. If the Administrator cancels the operation at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Delete Email Account   
Use Case ID: UC-18   
Actors: Administrator, Email Account, Shared Account, Email Flow, Archive   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. An existing Email Account is available in the system.   
3. The system has access to the Email Account and Shared Account data entities.   
  
Postconditions:   
1. The selected Email Account is removed from the system.   
2. All emails associated with the deleted account are either archived or marked as inactive.   
3. The Administrator is informed of the success or failure of the deletion.   
  
Main Flow:   
1. The Administrator selects the option to "Delete Email Account" from the account management interface.   
2. The system displays a list of existing Email Accounts.   
3. The Administrator selects an Email Account to delete.   
4. The system displays a confirmation prompt for the deletion.   
5. The Administrator confirms the deletion.   
6. The system checks for any emails currently associated with the selected Email Account.   
7. The system archives or marks those emails as inactive based on the retention policy.   
8. The system removes the Email Account from the database.   
9. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the selected Email Account is currently being used to send or receive emails, the system displays a warning and asks if the Administrator still wants to proceed.   
2. If the Administrator cancels the deletion, the system returns to the previous screen without making any changes.   
3. If the system fails to delete the Email Account due to an error or restriction, it displays an error message and provides options to retry or cancel the operation.   
4. If the selected Email Account is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the deletion action.  
  
Use Case Name: Manage Shared Account   
Use Case ID: UC-19   
Actors: Administrator, Shared Account, Email Account   
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Shared Account and Email Account data entities.   
3. The Administrator has appropriate permissions to manage Shared Accounts.   
  
Postconditions:   
1. The Shared Account is successfully created, updated, or deleted.   
2. Changes to the Shared Account are saved in the system.   
3. The system reflects the updated state of Shared Accounts and their associations.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Shared Account" from the system menu.   
2. The system displays the Shared Account management interface with a list of existing shared accounts.   
3. The Administrator chooses to create a new Shared Account, edit an existing one, or delete a Shared Account.   
4. If creating or editing, the Administrator enters or updates the account name, associated Email Account, and access permissions.   
5. The Administrator confirms the action.   
6. The system validates the input data and updates the Shared Account accordingly.   
7. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator attempts to delete a Shared Account that is currently in use by an email or email flow, the system displays a warning and asks if the Administrator still wants to proceed.   
2. If the selected Email Account for the Shared Account is invalid or not available, the system alerts the Administrator and prompts for a valid selection.   
3. If the entered information is incomplete or invalid, the system displays an error message and prompts the Administrator to correct it.   
4. If the system fails to save or delete the Shared Account due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
5. If the selected Shared Account is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.  
  
Use Case Name: Create Calendar Event   
Use Case ID: UC-20   
Actors: Administrator, Calendar   
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Calendar data entity.   
3. The system is connected to a calendar service or database to support event creation.   
  
Postconditions:   
1. A new Calendar Event is created and saved in the system.   
2. The Administrator is notified of the success or failure of the event creation.   
3. The event is associated with the Administrator’s calendar for visibility and management.   
  
Main Flow:   
1. The Administrator selects the option to "Create Calendar Event" from the system menu.   
2. The system displays the event creation interface with fields for title, date, time, description, and attendees.   
3. The Administrator enters the necessary information for the event (e.g., title, start and end times, description).   
4. The Administrator optionally adds attendees or links the event to a Distribution Group.   
5. The Administrator confirms the creation of the Calendar Event.   
6. The system validates the input data and checks for scheduling conflicts.   
7. The system creates the event and adds it to the Calendar.   
8. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator enters incomplete or invalid data (e.g., invalid date or time), the system displays an error message and prompts for correction.   
2. If a scheduling conflict is detected, the system alerts the Administrator and offers to reschedule or proceed with a note.   
3. If the system fails to create the event due to server issues or restrictions, it displays an error message and provides options to retry or cancel.   
4. If the Administrator cancels the operation at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Update Calendar Event   
Use Case ID: UC-21   
Actors: Administrator, Calendar   
Preconditions:   
1. The Administrator is logged into the system.   
2. An existing Calendar Event is available in the system.   
3. The system has access to the Calendar data entity.   
  
Postconditions:   
1. The selected Calendar Event is updated with the new or modified information.   
2. The updated event is saved in the Calendar for visibility and management.   
3. The Administrator is notified of the success or failure of the event update.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Calendar Events" from the system menu.   
2. The system displays a list of existing Calendar Events.   
3. The Administrator selects a Calendar Event to update.   
4. The system opens the event’s details for editing.   
5. The Administrator modifies the event’s title, date, time, description, or attendees.   
6. The Administrator confirms the update.   
7. The system validates the updated information and checks for scheduling conflicts.   
8. The system saves the updated Calendar Event.   
9. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator enters incomplete or invalid data (e.g., invalid date or time), the system displays an error message and prompts for correction.   
2. If a scheduling conflict is detected after the update, the system alerts the Administrator and offers to reschedule or proceed with a note.   
3. If the system fails to save the updated Calendar Event due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected Calendar Event is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the update action.  
  
Use Case Name: Delete Calendar Event   
Use Case ID: UC-22   
Actors: Administrator, Calendar   
Preconditions:   
1. The Administrator is logged into the system.   
2. An existing Calendar Event is available in the system.   
3. The system has access to the Calendar data entity.   
  
Postconditions:   
1. The selected Calendar Event is removed from the Calendar.   
2. The deletion is logged in the system.   
3. The Administrator is notified of the success or failure of the deletion.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Calendar Events" from the system menu.   
2. The system displays a list of existing Calendar Events.   
3. The Administrator selects a Calendar Event to delete.   
4. The system displays a confirmation prompt for the deletion.   
5. The Administrator confirms the deletion.   
6. The system removes the selected Calendar Event from the Calendar.   
7. The system logs the deletion action.   
8. The system provides a confirmation message to the Administrator indicating the event has been deleted.   
  
Alternative Flow:   
1. If the selected Calendar Event is currently referenced in an email or email flow, the system displays a warning and asks if the Administrator still wants to proceed.   
2. If the Administrator cancels the deletion, the system returns to the previous screen without making any changes.   
3. If the system fails to delete the Calendar Event due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected Calendar Event is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the deletion action.  
  
Use Case Name: View Calendar   
Use Case ID: UC-23   
Actors: Administrator, Calendar   
Preconditions:   
1. The Administrator is logged into the system.   
2. The Calendar data entity is available and accessible.   
  
Postconditions:   
1. The Administrator can view all Calendar Events in the system.   
2. The viewed Calendar Events remain in the Calendar for future reference.   
3. The system displays events according to their scheduled dates and times.   
  
Main Flow:   
1. The Administrator selects the option to "View Calendar" from the system menu.   
2. The system displays the calendar interface with a grid or list view of events.   
3. The system retrieves and displays all Calendar Events associated with the Administrator.   
4. The Administrator can navigate between dates, view event details, or filter events by criteria.   
5. The system updates the view in real-time if new events are added or existing ones modified.   
  
Alternative Flow:   
1. If no Calendar Events are available, the system displays a message indicating that there are no events to view.   
2. If the system is unable to retrieve Calendar Events due to an error or connectivity issue, it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the selected Calendar is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.  
  
Use Case Name: Schedule Meeting   
Use Case ID: UC-24   
Actors: Administrator, Calendar, Contact, Distribution Group, Email Account, Shared Account   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. The Calendar data entity is available and accessible.   
3. At least one Contact or Distribution Group is available for invitation.   
4. A valid Email Account or Shared Account is configured for sending meeting invitations.   
  
Postconditions:   
1. A new Calendar Event is created and saved in the system.   
2. Meeting invitations are sent to the specified Contacts or Distribution Groups.   
3. The Administrator is notified of the success or failure of the scheduling and invitation process.   
  
Main Flow:   
1. The Administrator selects the option to "Schedule Meeting" from the system menu.   
2. The system displays the meeting scheduling interface with fields for title, date, time, description, and attendees.   
3. The Administrator enters the meeting details, including title, date, and time.   
4. The Administrator selects attendees by choosing individual Contacts or Distribution Groups.   
5. The Administrator selects the Email Account or Shared Account to use for sending meeting invitations.   
6. The Administrator confirms the scheduling action.   
7. The system creates the Calendar Event and saves it.   
8. The system generates and sends meeting invitation emails to the selected attendees.   
9. The system provides a confirmation message to the Administrator indicating the meeting has been scheduled.   
  
Alternative Flow:   
1. If the Administrator enters incomplete or invalid data (e.g., invalid date or time), the system displays an error message and prompts for correction.   
2. If no attendees are selected, the system alerts the Administrator and requests that at least one attendee be added.   
3. If the selected Email Account or Shared Account is not valid or unavailable, the system displays an error message and prompts for a valid account.   
4. If the system fails to send the meeting invitations due to network or system issues, it displays an error message and allows the Administrator to retry or cancel the operation.   
5. If the system fails to create the Calendar Event, it displays an error message and provides an option to retry or cancel.  
  
Use Case Name: Manage Email Flow   
Use Case ID: UC-10   
Actors: Administrator, Email Account, Shared Account, Email Flow, Archive, Contact, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. The Email Flow or Archive contains emails that can be managed.   
3. The Administrator has access to at least one valid Email Account or Shared Account.   
4. The system has access to the Contact and Distribution Group data entities for recipient management.   
  
Postconditions:   
1. The Administrator can add, modify, or delete emails in the Email Flow.   
2. The system updates the status and storage location of the affected emails.   
3. The system ensures data integrity and compliance with the retention policy.   
  
Main Flow:   
1. The Administrator selects the "Manage Email Flow" option from the system menu.   
2. The system displays a list of emails in the Email Flow, including details like subject, sender, recipients, and status.   
3. The Administrator selects an email to perform an action (e.g., edit, delete, archive).   
4. The system opens the selected email for modification or displays confirmation options for deletion/archiving.   
5. If editing, the Administrator updates the email’s content, recipients, or associated account.   
6. The Administrator confirms the action.   
7. The system applies the changes (e.g., updates the email, archives it, or deletes it).   
8. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the selected email is already archived, the system displays a message and offers to view it in the Archive.   
2. If the email is not eligible for modification due to retention policy constraints, the system alerts the Administrator and provides policy details.   
3. If the system fails to apply the changes, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected email is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.   
5. If no valid Email Account or Shared Account is selected during editing, the system displays an error and prompts for a valid account.  
  
Use Case Name: Capture Email Flow   
Use Case ID: UC-10   
Actors: Administrator, Email Account, Shared Account, Email Flow, Archive, Contact, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. An email is in the process of being created, sent, or received.   
3. The system has access to the Email Flow and Archive data entities.   
4. The system is connected to an email service or server to capture outgoing and incoming emails.   
  
Postconditions:   
1. The email is captured and added to the Email Flow for tracking and management.   
2. The email is stored in the system and made available for viewing, archiving, or deleting.   
3. The system updates the email's status and logs the event for record-keeping.   
  
Main Flow:   
1. The system detects an email action (create, send, or receive).   
2. The system captures the email and logs it in the Email Flow.   
3. The system assigns a unique identifier to the email for tracking.   
4. The system associates the email with the relevant Email Account or Shared Account.   
5. The system records the sender, recipient, subject, content, and timestamp of the email.   
6. The system updates the email's status in the Email Flow (e.g., "Draft," "Sent," "Received").   
7. The Administrator can view the email in the Email Flow or Archive for further management.   
  
Alternative Flow:   
1. If the system fails to capture the email due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
2. If the Email Account or Shared Account is invalid or unavailable during capture, the system displays an error and prompts for a valid account.   
3. If the email is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.   
4. If the system fails to assign a unique identifier, it displays an error message and allows the Administrator to troubleshoot or cancel the operation.  
  
Use Case Name: Apply Retention Policy   
Use Case ID: UC-25   
Actors: Administrator, Email Flow, Archive, Retention Policy   
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Email Flow and Archive.   
3. A Retention Policy is defined and active in the system.   
4. Emails exist in the system that may be subject to the Retention Policy.   
  
Postconditions:   
1. Emails are moved to the Archive or deleted based on the Retention Policy.   
2. The system updates the status of affected emails.   
3. The Administrator is informed of the policy application results.   
  
Main Flow:   
1. The Administrator selects the option to "Apply Retention Policy" from the system menu.   
2. The system displays the Retention Policy application interface.   
3. The Administrator selects the Retention Policy to apply.   
4. The system identifies all emails in the Email Flow that meet the criteria of the selected policy.   
5. The system processes each email by either archiving it or deleting it, as defined by the policy.   
6. The system updates the status of each affected email in the Email Flow or Archive.   
7. The system provides a summary of the number of emails archived or deleted.   
8. The Administrator confirms the completion of the operation.   
  
Alternative Flow:   
1. If no Retention Policy is selected or is invalid, the system displays an error message and prompts for a valid policy.   
2. If no emails are found that meet the policy criteria, the system informs the Administrator and offers to refine the criteria.   
3. If the system fails to process an email due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected policy is expired or inaccessible, the system alerts the Administrator and provides options to locate it or cancel the action.  
  
Use Case Name: Manage Retention Policy   
Use Case ID: UC-26   
Actors: Administrator, Email Flow, Archive, Retention Policy   
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Email Flow and Archive.   
3. A Retention Policy is available for configuration or modification.   
  
Postconditions:   
1. The Retention Policy is successfully created, updated, or deleted in the system.   
2. The system reflects the current Retention Policy and its effects on the Email Flow and Archive.   
3. The Administrator is informed of the success or failure of the policy management action.   
  
Main Flow:   
1. The Administrator selects the "Manage Retention Policy" option from the system menu.   
2. The system displays the Retention Policy management interface with a list of existing policies.   
3. The Administrator chooses to create a new policy, edit an existing one, or delete a policy.   
4. If creating or editing, the Administrator defines the policy rules (e.g., retention period, archive trigger, deletion rules).   
5. The Administrator confirms the changes or creation.   
6. The system validates the policy configuration.   
7. The system saves the Retention Policy.   
8. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator enters invalid or conflicting policy rules, the system displays an error message and prompts for correction.   
2. If the Administrator attempts to delete a Retention Policy that is currently applied to active emails, the system displays a warning and asks if the Administrator still wants to proceed.   
3. If the system fails to save the Retention Policy due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If no valid policy is selected for deletion or editing, the system displays a message and prompts for a valid selection.   
5. If the selected Retention Policy is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.  
  
Use Case Name: Handle Expired Email   
Use Case ID: UC-27   
Actors: Administrator, Email Flow, Archive, Expired Email   
Preconditions:   
1. The Administrator is logged into the system.   
2. An Expired Email exists in the system, either in the Email Flow or Archive.   
3. The system has access to the Email Flow, Archive, and Retention Policy data entities.   
  
Postconditions:   
1. The Expired Email is either permanently deleted, retained in the Archive, or restored to the Email Flow if appropriate.   
2. The system updates the status and location of the Expired Email accordingly.   
3. The Administrator is informed of the outcome of the handling action.   
  
Main Flow:   
1. The Administrator navigates to the "Manage Email Flow" or "Search Archive" section and selects an Expired Email for handling.   
2. The system displays the options to delete the Expired Email, move it to the Archive, or restore it to the Email Flow.   
3. The Administrator selects one of the available handling actions.   
4. The system verifies the selected action and checks for any policy constraints or dependencies.   
5. The system executes the handling action (delete, archive, or restore).   
6. The system updates the status and location of the Expired Email.   
7. The system provides a confirmation message to the Administrator indicating the outcome.   
  
Alternative Flow:   
1. If the selected Expired Email is already deleted or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.   
2. If the system fails to execute the handling action due to policy restrictions or technical errors, it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the Administrator cancels the handling action at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Recover Email   
Use Case ID: UC-28   
Actors: Administrator, Email Flow, Archive, Expired Email   
Preconditions:   
1. The Administrator is logged into the system.   
2. An Expired Email exists in the Archive and is eligible for recovery.   
3. The system has access to the Archive and Email Flow data entities.   
  
Postconditions:   
1. The Expired Email is recovered and moved back to the Email Flow.   
2. The email's status is updated to "Recovered."   
3. The Administrator is notified of the successful recovery.   
  
Main Flow:   
1. The Administrator navigates to the "Search Archive" or "Manage Email Flow" section.   
2. The system displays a list of emails, including Expired Emails in the Archive.   
3. The Administrator selects an Expired Email for recovery.   
4. The system verifies that the email is eligible for recovery based on the retention policy.   
5. The system moves the Expired Email from the Archive to the Email Flow.   
6. The system updates the email’s status to "Recovered."   
7. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the selected Expired Email is not eligible for recovery (e.g., permanently deleted), the system displays a message and offers to locate it in the Archive or cancel the action.   
2. If the system fails to recover the email due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the selected email is already in the Email Flow, the system informs the Administrator and offers to view it directly.   
4. If the Administrator cancels the recovery action at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Recover Contact   
Use Case ID: UC-14   
Actors: Administrator, Contact, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. A previously deleted or archived Contact is available in the Archive.   
3. The system has access to the Archive and Contact data entities.   
  
Postconditions:   
1. The selected Contact is recovered and restored to the active Contact list.   
2. The system updates the status of the recovered Contact to "Active."   
3. The Administrator is notified of the successful recovery.   
  
Main Flow:   
1. The Administrator navigates to the "Search Archive" or "Manage Contacts" section.   
2. The system displays a list of archived or deleted Contacts.   
3. The Administrator selects a Contact for recovery.   
4. The system verifies that the Contact is eligible for recovery.   
5. The system restores the Contact to the active Contact list and updates its status.   
6. The system provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the selected Contact is not eligible for recovery (e.g., permanently deleted), the system displays a message and offers to locate it in the Archive or cancel the action.   
2. If the system fails to recover the Contact due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the selected Contact is already active, the system informs the Administrator and offers to view it directly.   
4. If the Administrator cancels the recovery action at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Recover Calendar Event   
Use Case ID: UC-29   
Actors: Administrator, Calendar, Archive, Email Flow, Contact, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. A Calendar Event has been archived or marked as expired.   
3. The system has access to the Archive and Email Flow data entities.   
4. The system has access to the Calendar data entity for event restoration.   
  
Postconditions:   
1. The selected Calendar Event is recovered and restored to the active Calendar.   
2. The event's status is updated to "Active."   
3. The Administrator is notified of the success or failure of the recovery.   
  
Main Flow:   
1. The Administrator navigates to the "Search Archive" or "Manage Calendar Events" section.   
2. The system displays a list of archived or expired Calendar Events.   
3. The Administrator selects a Calendar Event for recovery.   
4. The system verifies that the event is eligible for recovery.   
5. The system restores the Calendar Event to the active Calendar and updates its status.   
6. The system provides a confirmation message to the Administrator indicating the event has been recovered.   
  
Alternative Flow:   
1. If the selected Calendar Event is not eligible for recovery (e.g., permanently deleted), the system displays a message and offers to locate it in the Archive or cancel the action.   
2. If the system fails to recover the event due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the selected Calendar Event is already active, the system informs the Administrator and offers to view it directly.   
4. If the Administrator cancels the recovery action at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Manage Email Folder   
Use Case ID: UC-30   
Actors: Administrator, Email Folder, Email Flow, Archive   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Email Folder data entity.   
3. At least one email exists in the Email Flow or Archive for folder management.   
4. The Administrator has permission to manage Email Folders.   
  
Postconditions:   
1. The selected Email Folder is successfully created, updated, or deleted.   
2. Emails are moved, added, or removed from the Email Folder as per the Administrator’s actions.   
3. The system reflects the current state of Email Folders and their associated emails.   
4. The Administrator is informed of the success or failure of the folder management action.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Email Folder" from the system menu.   
2. The system displays the Email Folder management interface with a list of existing folders.   
3. The Administrator chooses to create a new folder, edit an existing folder, or delete a folder.   
4. If creating or editing, the Administrator enters or modifies the folder name and optionally selects emails to add or remove.   
5. The Administrator confirms the action.   
6. The system validates the folder name and processes the email associations accordingly.   
7. The system saves the updated Email Folder configuration.   
8. The system provides a confirmation message to the Administrator indicating the folder has been managed.   
  
Alternative Flow:   
1. If the Administrator attempts to delete an Email Folder that contains emails currently in use or referenced in an email flow, the system displays a warning and asks if the Administrator still wants to proceed.   
2. If the folder name is invalid or already exists, the system displays an error message and prompts for correction.   
3. If no emails are selected for a new or updated folder, the system alerts the Administrator and requests that at least one email be added before proceeding.   
4. If the system fails to save or delete the Email Folder due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
5. If the selected Email Folder is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.  
  
Use Case Name: Recover Email   
Use Case ID: UC-31   
Actors: Administrator, Email Flow, Archive, Recovery Record   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. A deleted or expired email exists in the Archive and is eligible for recovery.   
3. The system has access to the Archive and Email Flow data entities.   
4. The Recovery Record functionality is available to track recovery actions.   
  
Postconditions:   
1. The selected email is recovered and moved back to the Email Flow.   
2. The email's status is updated to "Recovered."   
3. The recovery action is logged in the Recovery Record for audit purposes.   
4. The Administrator is notified of the success or failure of the recovery.   
  
Main Flow:   
1. The Administrator navigates to the "Search Archive" or "Manage Email Flow" section.   
2. The system displays a list of emails in the Archive, including deleted or expired ones.   
3. The Administrator selects an email for recovery.   
4. The system checks if the email is eligible for recovery based on the retention policy and Recovery Record rules.   
5. The system recovers the email by moving it from the Archive to the Email Flow.   
6. The system updates the email's status to "Recovered."   
7. The system logs the recovery action in the Recovery Record.   
8. The system provides a confirmation message to the Administrator indicating the email has been recovered.   
  
Alternative Flow:   
1. If the selected email is not eligible for recovery (e.g., permanently deleted or not in the Archive), the system displays a message and offers to locate it or cancel the action.   
2. If the system fails to recover the email due to an error or data inconsistency, it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the selected email is already in the Email Flow, the system informs the Administrator and offers to view it directly.   
4. If the system fails to log the recovery action in the Recovery Record, it displays an error message and provides an option to manually log the action or cancel the recovery.   
5. If the Administrator cancels the recovery action at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Recover Contact   
Use Case ID: UC-32   
Actors: Administrator, Contact, Archive, Recovery Record   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. A previously deleted or archived Contact is available in the Archive.   
3. The system has access to the Archive and Contact data entities.   
4. The Recovery Record functionality is available to track recovery actions.   
  
Postconditions:   
1. The selected Contact is recovered and restored to the active Contact list.   
2. The Contact's status is updated to "Recovered."   
3. The recovery action is logged in the Recovery Record for audit purposes.   
4. The Administrator is notified of the success or failure of the recovery.   
  
Main Flow:   
1. The Administrator navigates to the "Search Archive" or "Manage Contacts" section.   
2. The system displays a list of archived or deleted Contacts.   
3. The Administrator selects a Contact for recovery.   
4. The system verifies that the Contact is eligible for recovery.   
5. The system restores the Contact to the active Contact list and updates its status to "Recovered."   
6. The system logs the recovery action in the Recovery Record, including the timestamp and details of the recovered Contact.   
7. The system provides a confirmation message to the Administrator indicating the Contact has been successfully recovered.   
  
Alternative Flow:   
1. If the selected Contact is not eligible for recovery (e.g., permanently deleted or not in the Archive), the system displays a message and offers to locate it in the Archive or cancel the action.   
2. If the system fails to recover the Contact due to an error or data inconsistency, it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the selected Contact is already active, the system informs the Administrator and offers to view it directly.   
4. If the system fails to log the recovery action in the Recovery Record, it displays an error message and provides an option to manually log the action or cancel the recovery.   
5. If the Administrator cancels the recovery action at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Recover Calendar Event   
Use Case ID: UC-33   
Actors: Administrator, Calendar, Archive, Recovery Record, Email Flow, Contact, Distribution Group   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. A Calendar Event has been archived or marked as expired.   
3. The system has access to the Archive and Email Flow data entities.   
4. The system has access to the Calendar data entity for event restoration.   
5. The Recovery Record functionality is available to track recovery actions.   
  
Postconditions:   
1. The selected Calendar Event is recovered and restored to the active Calendar.   
2. The event's status is updated to "Recovered."   
3. The recovery action is logged in the Recovery Record for audit purposes.   
4. The Administrator is notified of the success or failure of the recovery.   
  
Main Flow:   
1. The Administrator navigates to the "Search Archive" or "Manage Calendar Events" section.   
2. The system displays a list of archived or expired Calendar Events.   
3. The Administrator selects a Calendar Event for recovery.   
4. The system verifies that the event is eligible for recovery.   
5. The system restores the Calendar Event to the active Calendar and updates its status.   
6. The system logs the recovery action in the Recovery Record, including the timestamp and details of the recovered event.   
7. The system provides a confirmation message to the Administrator indicating the event has been successfully recovered.   
  
Alternative Flow:   
1. If the selected Calendar Event is not eligible for recovery (e.g., permanently deleted), the system displays a message and offers to locate it in the Archive or cancel the action.   
2. If the system fails to recover the event due to an error or data inconsistency, it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the selected Calendar Event is already active, the system informs the Administrator and offers to view it directly.   
4. If the system fails to log the recovery action in the Recovery Record, it displays an error message and provides an option to manually log the action or cancel the recovery.   
5. If the Administrator cancels the recovery action at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Manage Recovery Record   
Use Case ID: UC-34   
Actors: Administrator, Recovery Record, Archive, Email Flow, Contact, Calendar, Distribution Group   
Preconditions:   
1. The Administrator is logged into the system.   
2. The system has access to the Recovery Record data entity.   
3. At least one Recovery Record exists in the system or the Administrator intends to create a new one.   
4. The system has access to the Archive and Email Flow for recovery-related operations.   
  
Postconditions:   
1. Recovery Records are successfully created, viewed, updated, or deleted as per the Administrator’s actions.   
2. The Recovery Record reflects the history of recovery actions for emails, contacts, or calendar events.   
3. The Administrator is informed of the success or failure of the recovery record management action.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Recovery Record" from the system menu.   
2. The system displays the Recovery Record management interface with a list of existing recovery records.   
3. The Administrator chooses to create a new Recovery Record, view an existing one, or delete a record.   
4. If creating a new Recovery Record, the Administrator selects the type of data (email, contact, or calendar event) and specifies details such as the recovery timestamp, associated account, and reason for recovery.   
5. If viewing or updating, the Administrator selects a Recovery Record and can modify its metadata if permitted.   
6. The Administrator confirms the action (create, update, or delete).   
7. The system validates the Recovery Record data and processes the action accordingly.   
8. The system updates the Recovery Record database and provides a confirmation message to the Administrator.   
  
Alternative Flow:   
1. If the Administrator attempts to delete a Recovery Record that is referenced in an audit or compliance report, the system displays a warning and asks if the Administrator still wants to proceed.   
2. If the entered data for a new Recovery Record is incomplete or invalid, the system displays an error message and prompts the Administrator to correct it.   
3. If the system fails to save or delete a Recovery Record due to an error, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the selected Recovery Record is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.   
5. If no valid Recovery Record is selected for deletion or editing, the system displays a message and prompts for a valid selection.  
  
Use Case Name: Schedule Meeting   
Use Case ID: UC-35   
Actors: Administrator, Calendar, Contact, Distribution Group, Email Account, Shared Account   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. The Calendar data entity is available and accessible.   
3. At least one Contact or Distribution Group is available for invitation.   
4. A valid Email Account or Shared Account is configured for sending meeting invitations.   
5. The system has access to the necessary data entities for scheduling and sending emails.   
  
Postconditions:   
1. A new Calendar Event is created and saved in the system.   
2. Meeting invitations are successfully sent to the specified Contacts or Distribution Groups.   
3. The Administrator is notified of the success or failure of the scheduling and invitation process.   
4. The system maintains a record of the meeting in the Email Flow or Archive as part of the communication history.   
  
Main Flow:   
1. The Administrator selects the "Schedule Meeting" option from the system menu.   
2. The system displays the meeting scheduling interface, including fields for title, date, time, description, and attendees.   
3. The Administrator fills in the meeting details (e.g., title, date, time, and description).   
4. The Administrator selects attendees by adding individual Contacts or Distribution Groups.   
5. The Administrator chooses the Email Account or Shared Account to use for sending the meeting invitation.   
6. The Administrator confirms the scheduling action.   
7. The system creates the Calendar Event and saves it in the Calendar for tracking.   
8. The system generates a meeting invitation email with details of the event.   
9. The system sends the invitation to the selected attendees via the chosen Email Account or Shared Account.   
10. The system logs the meeting and the related email in the Email Flow or Archive.   
11. The system provides a confirmation message to the Administrator indicating the meeting has been successfully scheduled.   
  
Alternative Flow:   
1. If the meeting details are incomplete or invalid (e.g., invalid date/time), the system displays an error message and prompts the Administrator to correct the information.   
2. If no attendees are selected, the system alerts the Administrator and requests that at least one attendee be added before proceeding.   
3. If the selected Email Account or Shared Account is not valid or unavailable, the system displays an error message and prompts for a valid account.   
4. If the system fails to send the meeting invitation due to network or system issues, it displays an error message and allows the Administrator to retry or cancel the operation.   
5. If the system fails to create the Calendar Event, it displays an error message and provides an option to retry or cancel the operation.   
6. If the selected Email Account or Shared Account has insufficient permissions to send the invitation, the system alerts the Administrator and offers to select another account.   
7. If the system is unable to log the meeting in the Email Flow or Archive, it displays an error and provides options to manually save or discard the email.   
8. If the selected Contact or Distribution Group is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.  
  
Use Case Name: View Calendar Event   
Use Case ID: UC-36   
Actors: Administrator, Calendar, Email Flow, Contact, Distribution Group   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. At least one Calendar Event exists in the system.   
3. The system has access to the Calendar data entity.   
4. The Calendar Event is either active or archived and accessible.   
  
Postconditions:   
1. The Administrator can view the selected Calendar Event's details (title, date, time, description, attendees, and status).   
2. The viewed Calendar Event remains in its original location in the Calendar or Archive.   
3. The system may display related emails from the Email Flow or Archive if linked to the event.   
  
Main Flow:   
1. The Administrator navigates to the "View Calendar Event" section from the system menu.   
2. The system displays a list of Calendar Events, including both active and archived events.   
3. The Administrator selects a Calendar Event from the list.   
4. The system retrieves the selected Calendar Event's details.   
5. The system displays the event’s title, date, time, description, and attendee list.   
6. If applicable, the system shows any related emails from the Email Flow or Archive.   
7. The Administrator can optionally print, forward, or mark the event for further action.   
  
Alternative Flow:   
1. If no Calendar Events are available for viewing, the system displays a message indicating there are no events to view.   
2. If the selected Calendar Event is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.   
3. If the system fails to retrieve the Calendar Event details, it displays an error message and allows the Administrator to retry or cancel the operation.   
4. If the system fails to display related emails, it provides a warning message and allows the Administrator to view the event details independently.  
  
Use Case Name: Update Schedule Invite   
Use Case ID: UC-37   
Actors: Administrator, Calendar, Email Account, Shared Account, Contact, Distribution Group   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. An existing Calendar Event with a scheduled meeting invitation is available in the system.   
3. The Administrator has selected the Calendar Event for modification.   
4. A valid Email Account or Shared Account is configured for sending updated invitations.   
5. The system has access to the Contact and Distribution Group data entities for updating invitees.   
  
Postconditions:   
1. The Calendar Event is updated with the new meeting details.   
2. Updated meeting invitation emails are sent to the specified Contacts or Distribution Groups.   
3. The system logs the updated event and the related email in the Email Flow or Archive.   
4. The Administrator is notified of the success or failure of the update and invitation process.   
  
Main Flow:   
1. The Administrator navigates to the "Manage Calendar Events" section and selects an event with an existing invite.   
2. The system displays the event details, including current invitees and meeting information.   
3. The Administrator modifies the event details (e.g., title, date, time, or description).   
4. The Administrator optionally updates the list of invitees by adding or removing Contacts or Distribution Groups.   
5. The Administrator selects the Email Account or Shared Account to be used for sending the updated invitation.   
6. The Administrator confirms the update and re-invitation action.   
7. The system updates the Calendar Event and generates a new meeting invitation email with the changes.   
8. The system sends the updated invitation to the modified list of invitees.   
9. The system logs the updated event and the sent email in the Email Flow or Archive.   
10. The system provides a confirmation message to the Administrator indicating the updated invitation has been successfully sent.   
  
Alternative Flow:   
1. If the Administrator enters incomplete or invalid data (e.g., invalid date/time), the system displays an error message and prompts for correction.   
2. If no invitees are selected for the updated invitation, the system alerts the Administrator and requests that at least one invitee be added.   
3. If the selected Email Account or Shared Account is not valid or unavailable, the system displays an error message and prompts for a valid account.   
4. If the system fails to send the updated invitation due to network or system issues, it displays an error message and allows the Administrator to retry or cancel the operation.   
5. If the system fails to update the Calendar Event, it displays an error message and provides an option to retry or cancel.   
6. If the selected Email Account or Shared Account has insufficient permissions to send the invitation, the system alerts the Administrator and offers to select another account.   
7. If the system is unable to log the updated invitation email in the Email Flow or Archive, it displays an error and provides options to manually save or discard the email.   
8. If the selected Contact or Distribution Group is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.  
  
Use Case Name: Delete Schedule Invite   
Use Case ID: UC-38   
Actors: Administrator, Calendar, Email Account, Shared Account, Contact, Distribution Group   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. An existing Calendar Event with a scheduled meeting invitation is available in the system.   
3. The Administrator has selected the Calendar Event for deletion of the invitation.   
4. A valid Email Account or Shared Account is configured for sending cancellation notifications.   
5. The system has access to the Contact and Distribution Group data entities for managing invitees.   
  
Postconditions:   
1. The meeting invitation associated with the Calendar Event is removed or marked as canceled.   
2. A cancellation email is sent to all previously invited Contacts or Distribution Groups.   
3. The Calendar Event remains in the system but is marked as "Invitation Canceled."   
4. The cancellation email is logged in the Email Flow or Archive for record-keeping.   
5. The Administrator is notified of the success or failure of the deletion and notification process.   
  
Main Flow:   
1. The Administrator navigates to the "Manage Calendar Events" section and selects an event with an active meeting invitation.   
2. The system displays the event details, including the list of invitees and the status of the invitation.   
3. The Administrator selects the option to "Delete Schedule Invite."   
4. The system prompts the Administrator to confirm the deletion of the invitation.   
5. The Administrator confirms the deletion.   
6. The system generates a cancellation email to notify all invitees of the deleted invitation.   
7. The system selects the appropriate Email Account or Shared Account for sending the cancellation email.   
8. The system sends the cancellation email to all invitees.   
9. The system updates the Calendar Event status to "Invitation Canceled."   
10. The system logs the cancellation email in the Email Flow or Archive.   
11. The system provides a confirmation message to the Administrator indicating that the invitation has been deleted and the cancellation email has been sent.   
  
Alternative Flow:   
1. If the Administrator does not select a valid Email Account or Shared Account for the cancellation email, the system displays an error message and prompts for a valid account.   
2. If the selected Calendar Event does not have an active meeting invitation, the system displays a message and offers to view the event details or cancel the action.   
3. If no invitees are found for the selected Calendar Event, the system alerts the Administrator and provides an option to cancel the action.   
4. If the system fails to send the cancellation email due to network or system issues, it displays an error message and allows the Administrator to retry or cancel the operation.   
5. If the system fails to update the Calendar Event status, it displays an error message and provides an option to retry or cancel.   
6. If the system fails to log the cancellation email in the Email Flow or Archive, it displays an error message and allows the Administrator to manually save or discard the email.   
7. If the selected Email Account or Shared Account has insufficient permissions to send the cancellation email, the system alerts the Administrator and offers to select another account.   
8. If the selected Contact or Distribution Group is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.  
  
Use Case Name: Manage Archive   
Use Case ID: UC-39   
Actors: Administrator, Archive, Email Flow, Recovery Record, Email Account, Shared Account, Contact, Distribution Group, Calendar   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. The Archive data entity is available and accessible.   
3. The system has access to the Recovery Record functionality for tracking archive-related actions.   
4. At least one email, contact, or calendar event exists in the Archive for management.   
  
Postconditions:   
1. The Administrator can perform actions such as viewing, recovering, or permanently deleting items in the Archive.   
2. The system updates the status of the affected items (e.g., "Recovered" or "Permanently Deleted").   
3. Recovery or deletion actions are logged in the Recovery Record for audit and compliance purposes.   
4. The Administrator is notified of the success or failure of the archive management action.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Archive" from the system menu.   
2. The system displays the Archive management interface with a list of archived items (emails, contacts, calendar events).   
3. The Administrator selects an item (email, contact, calendar event) for management.   
4. The system provides options to view, recover, or permanently delete the selected item.   
5. The Administrator chooses the desired action (e.g., recover an email or delete a contact).   
6. The system verifies the item's eligibility for the selected action based on retention policies or system rules.   
7. The system executes the action (e.g., restores the item to the Email Flow or Contact list, or permanently removes it from the system).   
8. The system updates the status of the item in the Archive and logs the action in the Recovery Record.   
9. The system provides a confirmation message to the Administrator indicating the action has been completed.   
  
Alternative Flow:   
1. If the selected item is not eligible for recovery (e.g., permanently deleted or expired), the system displays a message and offers to view the Recovery Record or cancel the action.   
2. If the Administrator attempts to permanently delete an item that is referenced in a compliance report or audit trail, the system displays a warning and asks if the Administrator still wants to proceed.   
3. If the system fails to log the archive action in the Recovery Record, it displays an error message and provides an option to manually log the action or cancel the operation.   
4. If the selected item cannot be accessed due to system restrictions or errors, the system alerts the Administrator and provides options to troubleshoot or cancel the action.   
5. If the Administrator cancels the archive management action at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Manage Expired Email   
Use Case ID: UC-40   
Actors: Administrator, Expired Email, Archive, Email Flow, Recovery Record   
  
Preconditions:   
1. The Administrator is logged into the system.   
2. An Expired Email exists in the system, either in the Archive or marked as expired in the Email Flow.   
3. The system has access to the Archive, Email Flow, and Recovery Record data entities.   
4. The system has a retention policy or configuration for handling expired emails.   
  
Postconditions:   
1. The Administrator can perform actions such as recovering, archiving further, or permanently deleting the Expired Email.   
2. The system updates the status and location of the Expired Email accordingly.   
3. Any recovery or deletion actions are logged in the Recovery Record for audit purposes.   
4. The Administrator is informed of the success or failure of the management action.   
  
Main Flow:   
1. The Administrator selects the option to "Manage Expired Email" from the system menu or navigates to the relevant section in the Archive.   
2. The system displays a list of expired emails, including details such as subject, sender, recipients, date, and status.   
3. The Administrator selects an expired email for management.   
4. The system provides options to recover the email, move it to a different archive location, or permanently delete it.   
5. The Administrator chooses one of the available actions.   
6. The system verifies the selected action and checks for any policy constraints or dependencies (e.g., compliance rules).   
7. The system executes the selected action (e.g., recovers the email to the Email Flow, updates its archive status, or permanently deletes it).   
8. The system updates the status of the expired email and logs the action in the Recovery Record if applicable.   
9. The system provides a confirmation message to the Administrator indicating the action has been completed.   
  
Alternative Flow:   
1. If the selected Expired Email is not eligible for recovery or further archiving due to policy restrictions, the system displays a message and offers to view the Recovery Record or cancel the action.   
2. If the system fails to execute the selected action (e.g., recovery or deletion), it displays an error message and allows the Administrator to retry or cancel the operation.   
3. If the system fails to log the action in the Recovery Record, it displays an error message and provides an option to manually log the action or cancel.   
4. If the selected Expired Email is already in the Email Flow or Archive and no action is needed, the system informs the Administrator and offers to view it directly.   
5. If the Administrator cancels the management action at any step, the system returns to the previous screen without making any changes.  
  
Use Case Name: Manage Administrator   
Use Case ID: UC-41   
Actors: System, Administrator   
  
Preconditions:   
1. The system is operational and accessible.   
2. The current Administrator is logged in and has the necessary permissions to manage other Administrator accounts.   
3. The system contains at least one Administrator account for modification or removal.   
  
Postconditions:   
1. The Administrator account is successfully created, updated, or deleted.   
2. The system updates the access rights or roles of the affected Administrator(s).   
3. The system logs the changes for audit and compliance purposes.   
4. The Administrator is informed of the success or failure of the management action.   
  
Main Flow:   
1. The current Administrator selects the option to "Manage Administrator" from the system menu.   
2. The system displays the Administrator management interface with a list of existing Administrator accounts.   
3. The Administrator chooses to create a new account, edit an existing one, or delete an account.   
4. If creating a new Administrator, the system prompts for the new user's credentials, role, and access permissions.   
5. If editing, the Administrator selects an account and modifies its details (e.g., permissions, status, or role).   
6. If deleting, the Administrator selects an account and confirms the deletion.   
7. The system validates the input data and checks for any dependencies or restrictions.   
8. The system applies the changes (e.g., creates, updates, or deletes the Administrator account).   
9. The system logs the action in the system audit trail.   
10. The system provides a confirmation message to the current Administrator indicating the action has been completed.   
  
Alternative Flow:   
1. If the input data for a new or updated Administrator is incomplete or invalid, the system displays an error message and prompts for correction.   
2. If the Administrator attempts to delete an account that is currently logged in or has active sessions, the system displays a warning and offers to proceed or cancel.   
3. If the selected Administrator account is referenced in an active email, calendar event, or policy, the system alerts the Administrator and offers to review dependencies before proceeding.   
4. If the system fails to apply the changes due to an error or restriction, it displays an error message and allows the Administrator to retry or cancel the operation.   
5. If the selected Administrator account is expired or inaccessible, the system alerts the Administrator and provides options to locate it in the Archive or cancel the action.   
6. If the Administrator cancels the management action at any step, the system returns to the previous screen without making any changes.