项目文档

# Functional Requirement

2.1 Email Communication  
Requirement ID Description  
REQ-001 Users can compose, send, receive, reply, forward, and delete emails.  
REQ-002 Emails must support plain text and rich text formatting (bold, italic, underline, lists).  
REQ-003 Attachments must be supported with file size limits up to 25 MB per attachment.  
REQ-004 Email headers must include sender, recipient, subject, date/time, and priority indicators.  
REQ-005 Users can create and manage multiple email folders for organization.  
2.2 Contact Management  
Requirement ID Description  
REQ-006 Users can add, edit, and delete personal contacts.  
REQ-007 Contacts can be grouped into distribution lists.  
REQ-008 Distribution lists can be used when sending emails.  
REQ-009 Users can import/export contact lists in CSV format.  
2.3 Calendar Scheduling  
Requirement ID Description  
REQ-010 Users can create, edit, and delete calendar events.  
REQ-011 Events can be shared with other users or groups.  
REQ-012 Users can set reminders for upcoming events.  
REQ-013 Calendar must display daily, weekly, and monthly views.  
2.4 Account and Shared Account Management (Admin)  
Requirement ID Description  
REQ-014 Administrators can create, modify, and delete user email accounts.  
REQ-015 Administrators can create shared email accounts for team use.  
REQ-016 Shared accounts must have access controls defined by role or group.  
REQ-017 Admins can assign permissions for viewing or managing shared calendars.  
2.5 Archiving and Retention  
Requirement ID Description  
REQ-018 Users can archive emails manually or automatically based on rules.  
REQ-019 Server-side archiving must preserve all emails sent and received.  
REQ-020 Policies must define how long emails are retained before being purged.  
REQ-021 Expired emails must be moved to a retention folder or deleted as per policy.  
REQ-022 Users can search archived emails using keywords, date ranges, and metadata.  
2.6 Recovery Capabilities  
Requirement ID Description  
REQ-023 Deleted emails can be recovered from the "Trash" folder within 30 days.  
REQ-024 Admins can restore deleted user accounts and associated data.  
REQ-025 System must provide backup and disaster recovery mechanisms.

# External Description

3.1 User Interface (UI)  
Web-based interface accessible via standard web browsers.  
Mobile app for iOS and Android platforms.  
Desktop client application for Windows and macOS.  
3.2 API Interfaces  
RESTful APIs for integration with third-party applications (e.g., CRM systems).  
SMTP/IMAP protocols for external email clients (Outlook, Thunderbird).  
3.3 Database Interfaces  
Relational database (e.g., PostgreSQL or MySQL) for storing user data, contacts, and archives.  
File storage system for handling attachments and archived emails.  
3.4 Network Protocols  
HTTPS for secure communication between client and server.  
POP3 and IMAP for mail retrieval.  
SMTP for outgoing email delivery.