项目文档

# Functional Requirement

2.1 Email Communication  
Requirement ID Description Input Output  
REQ-001 Send an email with text formatting Recipient address, subject, body (with rich text), attachments Confirmation of successful send  
REQ-002 Receive and view incoming emails None Display of received email in inbox  
REQ-003 Compose new emails using templates Template selection, content customization Draft or sent email  
REQ-004 Reply/Forward emails Selected email, response content Sent reply/forwarded email  
2.2 Calendar Management  
Requirement ID Description Input Output  
REQ-005 Create, edit, and delete calendar events Event title, date/time, participants Updated calendar view  
REQ-006 Share calendar with other users Select user(s) and access level Access granted to shared calendar  
REQ-007 View calendar in daily, weekly, monthly views Navigation input Visualized calendar layout  
2.3 Contact and Distribution Group Management  
Requirement ID Description Input Output  
REQ-008 Add/edit/delete contacts Name, email, phone, etc. Updated contact list  
REQ-009 Create and manage distribution groups Group name, member selection Group added to user’s address book  
REQ-010 Search for contacts by keyword Search term List of matching contacts  
2.4 Account Administration  
Requirement ID Description Input Output  
REQ-011 Create user accounts Username, password, role Confirmed account creation  
REQ-012 Create shared email accounts Email address, permissions Shared mailbox available to selected users  
REQ-013 Assign roles and permissions Role type, user assignment Updated user permissions  
REQ-014 Reset user passwords Requestor identity verification New temporary password generated  
2.5 Archiving and Retention  
Requirement ID Description Input Output  
REQ-015 Archive personal emails manually Selection of emails Archived emails moved to archive folder  
REQ-016 Set up server-side archiving policies Policy rules (e.g., retention period) Emails archived automatically based on policy  
REQ-017 Perform keyword search in archives Search terms List of matching archived emails  
REQ-018 Capture and retain all outgoing/incoming emails None Logs stored for compliance  
REQ-019 Manage expiration of archived emails Expiry rules Emails removed after specified time  
2.6 Recovery Capabilities  
Requirement ID Description Input Output  
REQ-020 Recover deleted emails from trash Email selection Restored email in inbox/archive  
REQ-021 Restore emails from archive Archive search result Restored email in original location  
REQ-022 System-level data recovery Recovery request Full or partial data restored

# External Description

3.1 User Interface (UI)  
Web-based interface accessible via modern browsers.  
Mobile app (iOS and Android) for on-the-go access.  
Desktop client for advanced features.  
3.2 API Interfaces  
RESTful APIs for integration with third-party apps (e.g., CRM, ERP).  
SMTP/IMAP/POP protocols for external email clients.  
3.3 Database Interface  
Relational database (e.g., PostgreSQL or MySQL) for storing user data, emails, contacts, calendars, and logs.  
Archival storage (object storage like Amazon S3 or Azure Blob Storage).  
3.4 Security Interfaces  
Integration with LDAP or Active Directory for authentication.  
SSL/TLS encryption for data in transit.  
End-to-end encryption for sensitive emails.