项目文档

# Functional Requirement

2.1 Email Communication  
FR-001: The system shall allow users to compose, send, receive, reply, and forward emails.  
FR-002: Users shall be able to format emails using text styling (bold, italic, underline), bullet points, and hyperlinks.  
FR-003: The system shall support sending and receiving attachments (e.g., PDFs, images, documents).  
FR-004: Users shall be able to organize emails into folders and subfolders.  
FR-005: The system shall provide spam filtering and virus scanning for incoming emails.  
2.2 Contact Management  
FR-006: Users shall be able to create, edit, delete, and search personal contacts.  
FR-007: Users shall be able to create and manage distribution groups for bulk email sending.  
FR-008: Contacts can be imported from external files (CSV, vCard) and exported in supported formats.  
2.3 Calendar & Scheduling  
FR-009: The system shall allow users to create, update, and delete calendar events.  
FR-010: Users shall be able to invite other users to events and set reminders.  
FR-011: The system shall synchronize calendar data across devices and platforms.  
2.4 Administration  
FR-012: Administrators shall be able to create, modify, and delete user accounts.  
FR-013: Administrators shall be able to configure shared mailboxes for team collaboration.  
FR-014: The system shall enforce password policies and account lockout mechanisms.  
2.5 Email Archiving & Compliance  
FR-015: The system shall allow users to perform personal email archiving and search within archives.  
FR-016: Emails shall be retained according to predefined policies set by administrators.  
FR-017: The system shall capture all outgoing and incoming email traffic for audit purposes.  
FR-018: Expired emails shall be automatically moved to archive or deleted based on policy.  
FR-019: Users and administrators shall be able to recover deleted or expired emails within a defined retention period.  
2.6 Recovery  
FR-020: The system shall provide a recovery mechanism for corrupted or lost data.  
FR-021: Backup and restore functionality shall be available for administrator use.

# External Description

3.1 User Interface  
Web-based interface with responsive design.  
Desktop client application for Windows and macOS.  
Mobile app for iOS and Android.  
3.2 Data Interfaces  
IMAP/POP3 protocols for email access.  
SMTP protocol for sending emails.  
RESTful API for integration with third-party applications.  
LDAP or Active Directory for user authentication and directory services.  
3.3 Hardware Interfaces  
Server infrastructure supporting high availability and load balancing.  
Storage systems for email databases and archives.  
3.4 Software Interfaces  
Operating Systems: Windows, macOS, Linux.  
Browsers: Chrome, Firefox, Safari, Edge.  
Database Systems: MySQL, PostgreSQL, or Microsoft SQL Server.