# Functional Requirement

# 3 Functional Requirements  
  
## 3.1 Event Detection  
- \*\*FR-1\*\*: The system shall detect meeting requests, deadlines, and follow-up dates from incoming email content.  
- \*\*FR-2\*\*: The system shall extract event details such as date, time, participants, and location from email content.  
- \*\*FR-3\*\*: The system shall allow users to define additional user-defined or context-specific phrases for event detection. These phrases shall be stored in a configuration file and managed through a user interface.  
- \*\*FR-4\*\*: The system shall support the configuration of up to 50 custom phrases per user, with each phrase having a maximum length of 50 characters.  
- \*\*FR-5\*\*: The system shall provide the ability for users to edit or delete custom phrases via a dedicated configuration module.  
  
## 3.2 Task and Event Management  
- \*\*FR-6\*\*: The system shall allow users to create, edit, and delete tasks and events from the application interface.  
- \*\*FR-7\*\*: The system shall provide a unified dashboard to display tasks and events sorted by date and priority.  
- \*\*FR-8\*\*: The system shall create and apply at least three automated folders or labels in the user’s email client. These folders or labels shall be based on the system’s analysis of event types and shall be created within 2 seconds of the system detecting an event.  
- \*\*FR-9\*\*: The system shall allow users to manually assign emails to folders or labels through a user interface.  
- \*\*FR-10\*\*: The system shall allow users to tag emails with at least three predefined categories. These categories shall be defined by the system as "Urgent," "Follow-Up," and "Meeting." Users may also define up to five custom categories.  
  
## 3.3 Configuration  
- \*\*FR-11\*\*: The system shall provide a configuration module for users to define and manage custom rules for event detection.  
- \*\*FR-12\*\*: The system shall store configuration data in a JSON format and provide an import/export feature for backup and sharing.

# External Description

# 5 Constraints  
  
## 5.1 Platform Constraints  
- The system shall interface only with the following email clients and calendar platforms: Gmail, Outlook, Apple Mail, Google Calendar, Microsoft Calendar, and Apple Calendar.  
- The system shall not modify or interfere with the native UI of these platforms in any way, including layout, icons, or navigation.  
  
## 5.2 Legal and Regulatory Constraints  
- The system shall comply with all applicable data protection laws and regulations, including but not limited to GDPR and CCPA.  
- The system shall not process any user data without explicit consent, as defined by the user’s configuration settings and the platform’s policies.  
  
## 5.3 User Constraints  
- The system shall not require root or administrative access on any platform. For Android, it shall not require the "Device Admin" permission. For iOS, it shall not require "Full Disk Access." For Windows and macOS, it shall not require "Administrator" or "Root" privileges.  
- The system shall not automatically synchronize or process emails without user consent. Synchronization shall be initiated by the user through the application interface or via a scheduled task with a minimum of 24 hours between syncs.