**Email Automation App**

**High Level Functional Spec**

# Overall concept

Allow users to specify their email automation criteria such as high priority senders (VIPs), urgent emai criteria and email templates for standard responses.

# email processing steps

## Ingestion and pre-processing

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| **Activity** | **Description** |
| 1. Trigger/Monitor Mailbox | Continuously check for new emails in the specified mailbox (Inbox, Shared, or a specific folder). |
| 1. Sender Validation | Check the email address/domain against a whitelist (e.g., *known clients*) or blacklist (e.g., *known spammers*). |
| 1. Content Normalization | Remove extraneous data (e.g., disclaimers, previous reply chains, images, HTML formatting) to isolate the core message text. |
| 1. Attachment Handling | Detect and download attachments. Classify the attachment type (PDF, CSV, image) and determine if it needs to be sent to a separate Document Processing Agent (e.g., for OCR/Invoice scanning). |
| 1. Thread/Conversation Context | Determine if the email is a new thread or a reply to an existing one. If a reply, pull in the context of the previous two messages. |

## Processing Activities

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| **Activity** | **Description** |
| 1. Classification | Determine the primary topic/intent of the email. (e.g., Sales Inquiry, Technical Support, Invoice/Billing, HR Request, Spam). |
| 1. Priority/Sentiment Analysis | Assign an urgency level or sentiment score. (e.g., P0 - Critical, P3 - Normal, or Negative, Neutral, Positive sentiment). |
| 1. Entity & Data Extraction | Extract structured data points from the unstructured email text. (e.g., Customer Name, Order ID, Requested Date, Product SKU, Total Amount). |
| 1. Validation/Lookup | Cross-reference extracted data against a system of record (e.g., CRM or ERP). *Example: Check if extracted Order ID: 12345 is valid.* |
| 1. Draft Generation | Generate a human-reviewable draft of a response based on the email content, classification, and business-specific boilerplate/templates. |
| 1. Human control | All created responses wil remain in draft for Human-in-the-loop to review and send |