**Microsoft Outlook AI Email Assistant with contact**

support from Monday and Airtable

**Workflow: Microsoft Outlook AI Email Assistant**

**Purpose:**  
This workflow is designed to automate email processing in Microsoft Outlook using AI. It retrieves emails that meet specific criteria (e.g., not flagged, no existing categories), sanitizes the content, and leverages an AI assistant to analyze and categorize the emails. The workflow integrates with multiple systems (Microsoft Outlook, Airtable, OpenAI) to determine the appropriate category for each email, set its importance, and update the email accordingly. Additionally, it integrates with a CRM to update contact information if necessary.

**Key Components**

1. Trigger and Email Retrieval

* **Manual Trigger:**
  + **Node:** *When clicking ‘Test workflow’*
  + **Function:**  
    Initiates the workflow execution manually for testing purposes.
  + **Configuration:**  
    No additional parameters are required.
* **Email Retrieval from Outlook:**
  + **Node:** *Microsoft Outlook23*
  + **Function:**  
    Retrieves up to 10 emails from Microsoft Outlook that meet specific filter criteria.
  + **Configuration:**
    - **Fields Retrieved:** flag, from, importance, replyTo, sender, subject, toRecipients, body, categories, isRead
    - **Filters:**  
      Emails must have flag/flagStatus equal to notFlagged and must not have any categories assigned.
    - **Folder Inclusion:**  
      Emails are retrieved from a specific folder defined by its folder ID.

2. Email Sanitization and Preparation

* **Sanitize Email Content:**
  + **Node:** *Sticky Note11* (descriptive node)
  + **Function:**  
    Provides information on the sanitization process.
* **Convert Email Body to Markdown:**
  + **Node:** *Convert to Markdown*
  + **Function:**  
    Converts the HTML content of the email body into Markdown format to simplify text processing.
  + **Configuration:**  
    Uses the email body field ($json.body.content) and removes unnecessary formatting.
* **Set Email Fields:**
  + **Node:** *Email Messages*
  + **Function:**  
    Extracts and sets key email fields such as subject, sender, and body into a standardized format.
  + **Configuration:**  
    Uses a Set node to assign values for subject, sender, body, and the email's unique ID.

3. AI Analysis for Categorization

* **AI Email Analysis:**
  + **Node:** *AI: Analyse Email*
  + **Function:**  
    Utilizes an AI agent to analyze the email content, compare it with defined rules, and determine the appropriate category and subcategory for the email.
  + **Configuration:**
    - **Prompt:**  
      The AI prompt instructs the agent to parse the email (including subject, body, and sender details), compare against a set of rules and categories (retrieved from Airtable), and output a valid JSON with the email ID, subject, primary category, optional subcategory, and analysis explanation.
    - **System Message:**  
      Provides context about the categories available (from Airtable) and the expected format for output.
* **Structured Output Parsing:**
  + **Node:** *Structured Output Parser*
  + **Function:**  
    Validates and parses the output from the AI analysis into a structured JSON format.
  + **Configuration:**  
    The expected JSON schema includes fields for id, subject, category, subCategory, and analysis. The output is strictly formatted with no extraneous text.

4. Contact and CRM Integration

* **Contact Matching:**
  + **Node:** *Contact*
  + **Function:**  
    Checks if the sender of the email exists as a contact in the CRM system.
  + **Configuration:**  
    Uses an Airtable node to search for contacts based on the sender's email address. The search is performed against a pre-configured Airtable base and table.
* **Update Contact Information:**
  + **Node:** [*Monday.com*](http://monday.com/) *- Get Contacts* / *Airtable - Contacts*
  + **Function:**  
    Retrieves supplier or client contact details from a CRM system (e.g., [Monday.com](http://monday.com/) or Airtable) to provide context for email categorization.
  + **Configuration:**  
    Retrieves and maps fields such as first name, last name, email, and type.
* **Merge Data from Multiple Sources:**
  + **Node:** *Merge*
  + **Function:**  
    Combines data from the AI analysis, contact information, and defined rules to create a comprehensive view of the email for further processing.
  + **Configuration:**  
    Uses the Merge node in "merge by position" mode to combine outputs from the AI analysis, contact lookup, and category rules.
* **Set Category and Update Importance in Outlook:**
  + **Node:** *Set Category*
    - **Function:**  
      Updates the email in Microsoft Outlook with the category determined by the AI analysis.
    - **Configuration:**  
      Uses an update operation on the Outlook node to set the categories field.
  + **Node:** *Set Importance*
    - **Function:**  
      Updates the email's importance to "High" if certain conditions are met (e.g., if the AI analysis suggests action is required).
    - **Configuration:**  
      Uses the Outlook update operation with the importance field set to "High".

5. Communication and Notifications

* **Send Response via Slack:**
  + **Node:** *Slack1*
  + **Function:**  
    Sends a notification to Slack when a lead replies or when specific conditions are met, including a link to relevant information.
  + **Configuration:**  
    The Slack node is configured with a predefined channel and message template that includes a link to a lead report or campaign details.
* **Additional Communication Steps:**
  + **Nodes:** *Follow up task* (HubSpot), *lemlist - Mark as interested*, etc.
  + **Function:**  
    These nodes are used to update CRM data or trigger follow-up tasks based on the outcome of the email analysis and categorization.
  + **Configuration:**  
    They perform actions such as creating deals, marking leads, or unsubscribing users based on predefined conditions.

**Data Flow Overview**

1. **Trigger & Email Retrieval:**
   * The workflow is manually triggered using the "Test workflow" node.
   * Emails are retrieved from Microsoft Outlook based on specific filters (not flagged, no categories).
2. **Email Sanitization:**
   * The email content is sanitized and converted into a simplified Markdown format.
   * Key fields (subject, sender, body) are extracted and standardized.
3. **AI Analysis:**
   * The AI agent analyzes the email content to determine the appropriate category and subcategory.
   * The output is parsed and structured into a defined JSON format.
   * Contact information is retrieved and merged for enhanced context.
4. **Email Update & CRM Integration:**
   * The determined category is applied to the email via Microsoft Outlook.
   * The email's importance is updated if necessary.
   * Contact information is updated in the CRM systems (e.g., Airtable, [Monday.com](http://monday.com/)).
5. **Notifications and Follow-up:**
   * Slack notifications and other CRM-related actions are triggered based on the analysis outcome.

**Customization and Configuration**

* **API and Credential Setup:**
  + Ensure that all API credentials (Microsoft Outlook, OpenAI, Airtable, [Monday.com](http://monday.com/), Slack) are correctly configured.
  + Custom credentials should be set up as required (e.g., OAuth2 for Microsoft Outlook, API tokens for Airtable).
* **AI Prompt and Output Formatting:**
  + Modify the prompt in the "AI: Analyse Email" node to fine-tune categorization criteria.
  + Adjust the JSON schema in the "Structured Output Parser" node if additional fields are required.
* **Filters and Rules:**
  + The Outlook email filters can be customized to change which emails are processed.
  + Airtable and [Monday.com](http://monday.com/) integrations can be adjusted to suit your organization's CRM structure.
* **Error Handling:**
  + Use built-in error handling options (e.g., fallback outputs in Switch nodes) to manage cases where email processing fails.
  + Log errors and monitor API response times to optimize workflow performance.

**Troubleshooting & Best Practices**

* **Testing:**
  + Test the workflow thoroughly using the manual trigger before deployment.
  + Validate that email retrieval, sanitization, AI analysis, and updates occur as expected.
* **Monitoring:**
  + Monitor the outputs of key nodes (e.g., AI analysis and Structured Output Parser) to ensure accurate categorization.
  + Use logging and reporting (e.g., via Google Sheets or CRM dashboards) to track performance.
* **Performance Optimization:**
  + Adjust filters and wait times to optimize processing, especially during high email volumes.
  + Regularly review and update AI prompts to maintain relevancy and accuracy.
* **Documentation:**
  + Keep the workflow documentation updated as changes are made to the system or integrations.
  + Provide clear instructions for setting up custom credentials and API tokens.