N8N Activity Workflow Documentation

In this activity, you will design an n8n workflow that automates user data processing. The goal is to simulate a real-world automation scenario where data is fetched from an online spreadsheet, filtered, formatted, and exported into categorized reports. This hands-on task will help you understand how to integrate multiple n8n nodes to create a data-driven automation system.
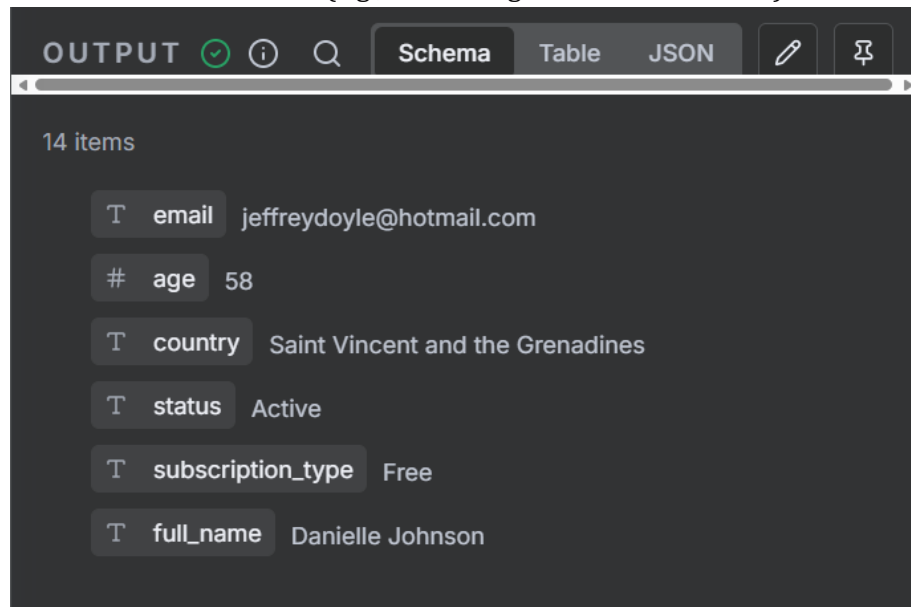
Objective

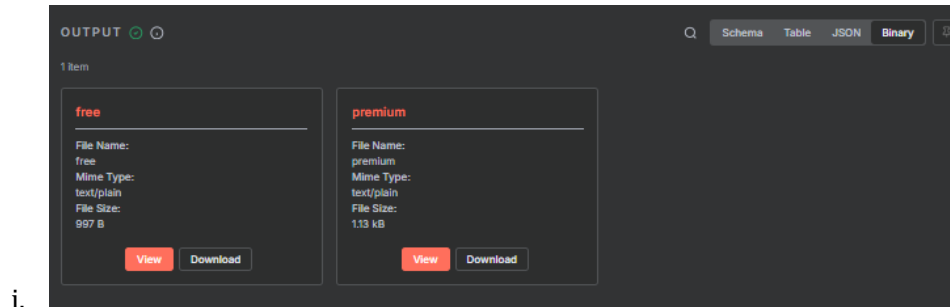Create an n8n automation that performs the following tasks:

1. **Main Workflow**:
   a. Starts with a trigger node (Manual or Webhook) to initiate execution.
   b. Reads user data from a Google Sheet. [Example Data](#)
   c. Send messages using the Gmail node.
2. **Sub-Workflow (Data Processing)**:
   a. Separates users based on subscription type (Free or Premium).
   b. Filters only users with 'Active' status.
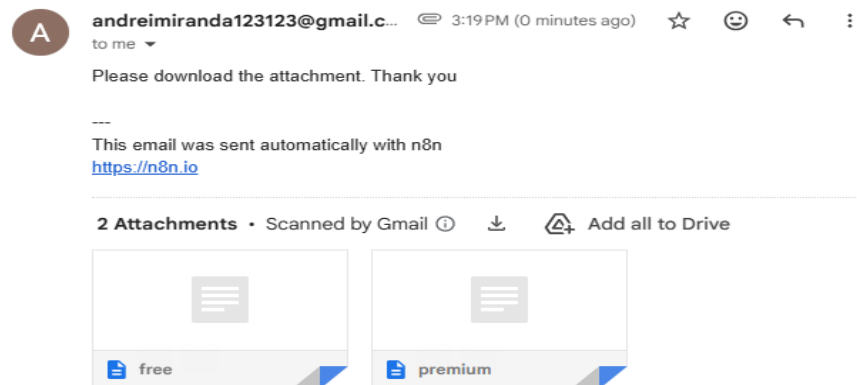   c. Edits and formats the data fields (e.g., combining first and last names).

   d. Limit each data to 10 users for each subscription type.
   e. Converts each filtered group into a CSV file and properly adds the filename.
   f. Combine or merge the two branches

i.

3. **Final Step**:
   a. Sends the generated CSV files automatically in a Gmail message to yourself.

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Description

Your main workflow should begin with a trigger node (Manual or Webhook) to initiate execution and retrieve user records from Google Sheets. Then, use an **Execute Workflow** node to call a sub-workflow for data processing. Inside the sub-workflow, apply a Switch node to divide users by subscription type, filter only active users, and use a Set node to clean and restructure the data. After that, convert each group into CSV files using the **Convert to File** node. Finally, the main workflow sends the generated CSV files automatically via Gmail to your personal email.

Expected Output

After running the workflow successfully, two CSV files should be generated and sent via Gmail:

1. **free.csv** — Contains all Active users with Free subscription.
2. **premium.csv** — Contains all Active users with Premium subscription.

Each CSV file should include the following fields: Full Name, Email, Age, Country, Status, and Subscription Type.

Notes

- Ensure your **Google Sheets** and **Gmail credentials** are properly connected in n8n.
- Build the main workflow first, then create and link the sub-workflow for data processing using the **Execute Workflow** node.
- Test the workflow using the **Manual Trigger** before switching to the **Webhook Trigger** and verify that both the main and sub-workflows run correctly.