**Post New YouTube Videos to X.txt**

**Workflow: Post New YouTube Videos to X**

**Overview**

This workflow monitors a specified YouTube channel for new video uploads and automatically posts a tweet on X (Twitter) announcing the new video. The tweet includes the video title, description, and a link to the video, all generated by an OpenAI language model to ensure the message is engaging and within the character limit.

**Workflow Steps**

1. **Check Every 30 Min**
   * **Type:** Schedule Trigger
   * **Purpose:** This node triggers the workflow every 30 minutes to check for new videos.
   * **Configuration:**
     + **Interval:** 30 minutes
2. **Fetch Latest Videos**
   * **Type:** YouTube Node
   * **Purpose:** Fetches the most recent video from the specified YouTube channel.
   * **Configuration:**
     + **Channel ID:** Set to the target YouTube channel (UC08Fah8EIryeOZRkjBRohcQ)
     + **Published After:** Configured to retrieve videos published within the last 30 minutes.
     + **Limit:** 1 video
   * **Credentials:** Uses the provided YouTube OAuth2 credentials.
3. **Generate Post for X with ChatGPT**
   * **Type:** OpenAI Chat Node
   * **Purpose:** Generates a tweet based on the fetched YouTube video details.
   * **Configuration:**
     + **Model:** GPT-3.5 Turbo
     + **Prompt:** Instructs the model to write an engaging post of no more than 140 characters that includes a link to the video, its title, and description.
     + **Prompt Example:**

nginx

Copy

Write an engaging post about my latest YouTube video for X (Twitter) of no more than 140 characters in length. Link to the video at https://youtu.be/{{ videoId }} use this title and description: {{ title }} {{ description }}

* + **Credentials:** Uses the configured OpenAI API credentials.

1. **Post to X**
   * **Type:** Twitter Node
   * **Purpose:** Posts the generated tweet on X.
   * **Configuration:**
     + **Text:** The tweet text is taken from the output of the OpenAI node.
   * **Credentials:** Configured with the Twitter OAuth2 credentials.
2. **Sticky Notes**
   * **Purpose:** These nodes provide additional documentation and guidance on the workflow's setup and usage.
   * **Examples:**
     + **Sticky Note:** Reminds the user to enter their YouTube Channel ID in the appropriate field.
     + **Sticky Note1:** Promotes the workflow and links to a setup video.

**Data Flow**

* The workflow is triggered by the **Check Every 30 Min** node.
* **Fetch Latest Videos** retrieves the latest video details from YouTube.
* **Generate Post for X with ChatGPT** receives the video details and generates an engaging tweet.
* The tweet is then posted to X using the **Post to X** node.

**Setup Instructions**

1. **YouTube Configuration:**
   * Enter your YouTube Channel ID in the **Fetch Latest Videos** node.
   * Configure the **Published After** parameter to ensure recent videos are retrieved.
2. **OpenAI Setup:**
   * Ensure your OpenAI credentials are correctly set up.
   * Adjust the prompt in **Generate Post for X with ChatGPT** if needed to match your desired style.
3. **Twitter Setup:**
   * Configure your Twitter OAuth2 credentials in the **Post to X** node.
4. **Sticky Notes:**
   * Follow the instructions in the sticky notes for additional setup details and troubleshooting.
5. **Activation:**
   * Activate the workflow after verifying all configurations and testing the workflow using the manual trigger if needed.

**Troubleshooting**

* **No New Videos Found:**
  + Verify that the YouTube channel ID is correct.
  + Check the Published After parameter to ensure it's set appropriately.
* **Tweet Generation Issues:**
  + Ensure that the OpenAI prompt is correctly formatted and the API key is valid.
  + Adjust the temperature or max tokens settings if the output is not as expected.
* **Posting Issues:**
  + Check the Twitter API credentials and ensure the tweet text meets X's character limits.

**Additional Resources**

* YouTube API Documentation
* [OpenAI API Documentation](https://platform.openai.com/docs)
* [Twitter API Documentation](https://developer.twitter.com/en/docs/twitter-api)
* [n8n Documentation](https://docs.n8n.io/)