**Optimize & Update Printify Title and Description**

Workflow

**Workflow Documentation: Printify Automation - Update Title and Description**

**Overview**

This workflow is designed to update product details on Printify using information from Google Sheets. It retrieves the shop and product data from Printify, processes the product title and description (possibly using AI-powered text generation), and then updates the product information on Printify. The workflow also interacts with Google Sheets to log or update product options.

**Nodes Description**

1. **When clicking ‘Test workflow’**

* **Type:** Manual Trigger
* **Purpose:** Initiates the workflow manually for testing purposes.
* **Configuration:** No additional parameters are required.

2. **Printify - Get Shops**

* **Type:** HTTP Request
* **Purpose:** Retrieves the list of shops from Printify.
* **Configuration:**
  + **URL:** https://api.printify.com/v1/shops.json
  + **Authentication:** Header-based authentication is used with Printify credentials.
* **Output:** A JSON array of shops is returned.

3. **Printify - Get Products**

* **Type:** HTTP Request
* **Purpose:** Retrieves the list of products for a specific shop.
* **Configuration:**
  + **URL:** https://api.printify.com/v1/shops/{{ $json.id }}/products.json
  + **Authentication:** Uses the same Printify credentials.
* **Output:** A JSON array of products for the specified shop.

4. **Split Out**

* **Type:** Split Out
* **Purpose:** Splits the products array into individual items.
* **Configuration:**
  + **Field to Split Out:** data
* **Output:** Each product is processed individually.

5. **Loop Over Items**

* **Type:** Split In Batches
* **Purpose:** Processes product items in batches.
* **Configuration:** No specific batch size defined (default is used).

6. **Split - id, title, desc**

* **Type:** Split Out
* **Purpose:** Extracts specific fields (id, title, and description) from each product item.
* **Configuration:**
  + **Include:** Selected other fields: title, description
  + **Field to Split Out:** id
* **Output:** The output includes product id, title, and description.

7. **Calculator**

* **Type:** Tool Calculator (AI-powered)
* **Purpose:** (Optional) Can be used for any numerical calculations if needed during processing.
* **Configuration:** No parameters provided.

8. **Wikipedia**

* **Type:** Wikipedia Tool (AI-powered)
* **Purpose:** (Optional) Retrieves additional context or information from Wikipedia.
* **Configuration:** No specific parameters provided.

9. **Printify - Update Product**

* **Type:** HTTP Request
* **Purpose:** Updates product details on Printify, specifically the title and description.
* **Configuration:**
  + **URL:** https://api.printify.com/v1/shops/{{ $json.id }}/products/{{ $('Google Sheets Trigger').item.json.product\_id }}.json
  + **Method:** PUT
  + **Body Parameters:**
    - **Title:** Updated product title from Google Sheets.
    - **Description:** Updated product description from Google Sheets.
* **Authentication:** Header-based authentication using Printify credentials.

10. **Brand Guidelines + Custom Instructions**

* **Type:** Set
* **Purpose:** Provides brand guidelines and custom instructions for content re-writing.
* **Configuration:** Defines fields for brand\_name, brand\_tone, and custom\_instructions.
* **Output:** These fields are used later by AI nodes to generate updated product titles and descriptions.

11. **Google Sheets Trigger**

* **Type:** Google Sheets Trigger
* **Purpose:** Listens for updates on a Google Sheets document (e.g., when product options are updated).
* **Configuration:**
  + **Event:** Row update
  + **Columns to Watch:** upload
  + **Sheet Name & Document ID:** Configured to point to the appropriate Google Sheets document.
* **Output:** The updated row data from Google Sheets is used to update products on Printify.

12. **Additional Nodes (e.g., Split Out, Loop Over Items, Number of Options, Calculate Options, Remember Options)**

* **Purpose:** These nodes are used to manage and process product option data, ensuring that updated product titles and descriptions are appropriately calculated and applied.
* **Configuration:** Various nodes extract and compute necessary data to be used in the update process.

13. **Connections and Data Flow**

* The workflow starts with a manual trigger and fetches shops and products from Printify.
* The products are split into individual items for processing.
* Data from Google Sheets (via a trigger) is merged with the product information.
* AI tools and custom instructions are applied to generate updated product titles and descriptions.
* Finally, the Printify - Update Product node sends the updated details back to Printify.
* Throughout the process, several nodes manage data transformation and preparation.

**Setup Instructions**

1. **Credentials:**
   * Ensure that Printify API credentials are set up correctly in the n8n credentials section.
   * Configure Google Sheets API credentials for both triggering and updating.
   * If using additional AI tools (e.g., OpenAI), ensure those credentials are properly configured.
2. **Google Sheets:**
   * Prepare the Google Sheets document as required, ensuring it includes columns for product IDs, titles, descriptions, etc.
   * Configure the Google Sheets Trigger node to watch for row updates in the appropriate sheet.
3. **Customization:**
   * **Brand Guidelines:** Update the brand guidelines and custom instructions in the respective node to match your brand's tone and messaging.
   * **Product Update:** Adjust the HTTP request URL and body parameters if your Printify API endpoints or schema differ.
4. **Testing:**
   * Click on "Test workflow" to simulate a workflow run.
   * Verify that the product data is fetched from Printify, processed as expected, and updated based on the new data from Google Sheets.
   * Check Google Sheets for the logged product options and updated details.
5. **Activation:**
   * Once tested, activate the workflow to run in production.
   * Monitor the workflow execution for any errors or data mismatches, and adjust configurations as needed.

**Troubleshooting**

* **API Errors:** Verify the API keys and ensure that the endpoints used in HTTP Request nodes are correct and accessible.
* **Google Sheets Issues:** Ensure that the correct sheet name and document ID are specified. Confirm that the Google Sheets API has appropriate access.
* **Data Mapping:** Check that the data is correctly split and merged between nodes, especially when handling product options and custom instructions.
* **Custom Instructions:** If the AI-generated content doesn't meet your expectations, adjust the prompt in the relevant OpenAI nodes.