**Generating Image Embeddings via Textual**

Summarisation

What does this do?

* **Download an Image:**  
  The workflow starts by downloading a specific image from Google Drive. This is your source image that you want to work with.
* **Analyze the Image:**  
  It then extracts color channel information (like dominant colors) from the image and resizes the image to 512×512 pixels if it's larger—helping to standardize it for further processing.
* **Generate Keywords from the Image:**  
  Using an OpenAI vision model, the workflow analyzes the image to generate a comprehensive, comma-separated list of semantic keywords. These keywords describe everything from the mood and lighting to specific subjects and techniques visible in the image.
* **Create an Embedding Document:**  
  The workflow combines the extracted color information and the generated keywords into a single text document. This document serves as a detailed, text-based representation of your image.
* **Store for Vector Search:**  
  It then converts this document into embeddings (a numerical representation) using OpenAI's embeddings, and inserts these embeddings into an in-memory vector store. This makes it possible to later search for images based on their content.
* **Test the Search Capability:**  
  Finally, it performs a test search using a sample prompt (like “student having fun”) to see if it can retrieve the right image based on the stored embeddings.