

```
from google.colab import files
from PIL import Image
import matplotlib.pyplot as plt

# Upload the file
uploaded = files.upload()

# Open and display the image
for fn in uploaded.keys():
    img = Image.open(fn)
    plt.imshow(img)
    plt.axis('off') # Hide axes
    plt.show()

!pip install transformers
!pip install torch

from transformers import BlipProcessor, BlipForConditionalGeneration
from PIL import Image
import requests

# Load the BLIP model and processor
processor = BlipProcessor.from_pretrained("Salesforce/blip-image-captioning-base")
model = BlipForConditionalGeneration.from_pretrained("Salesforce/blip-image-captioning-base")

# Load your image (assuming it was uploaded as shown above)
for fn in uploaded.keys():
    image = Image.open(fn)

# Preprocess the image
inputs = processor(image, return_tensors="pt")

# Generate a caption
out = model.generate(**inputs)
caption = processor.decode(out[0], skip_special_tokens=True)
print("Generated caption:", caption)
```



Choose Files DSC_0230.jpg

- **DSC_0230.jpg**(image/jpeg) - 15012679 bytes, last modified: 4/7/2023 - 100% done
Saving DSC_0230.jpg to DSC_0230.jpg



Requirement already satisfied: transformers in /usr/local/lib/python3.10/dist-packages (4.44.2)
 Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from transformers) (3.16.1)
 Requirement already satisfied: huggingface-hub<1.0,>=0.23.2 in /usr/local/lib/python3.10/dist-packages (from transformers) (0.24.0)
 Requirement already satisfied: safetensors<0.4.5, >=0.4.1 in /usr/local/lib/python3.10/dist-packages (from transformers) (0.4.5)

Start coding or [generate](#) with AI.

Requirement already satisfied: pygments<2.19, >=2.15.2 in /usr/local/lib/python3.10/dist-packages (from transformers) (2.18.0)
 Requirement already satisfied: regex!=2019.12.17 in /usr/local/lib/python3.10/dist-packages (from transformers) (2024.9.11)
 Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-packages (from transformers) (2.32.3)
 Requirement already satisfied: safetensors<0.4.5, >=0.4.1 in /usr/local/lib/python3.10/dist-packages (from transformers) (0.4.5)
 Requirement already satisfied: tokenizers<0.20, >=0.19 in /usr/local/lib/python3.10/dist-packages (from transformers) (0.19.1)
 Requirement already satisfied: tqdm<4.67, >=4.27 in /usr/local/lib/python3.10/dist-packages (from transformers) (4.66.5)
 Requirement already satisfied: fsspec<2023.5.0, >=2023.5.0 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub<1.0,>=0.23.2->transformers) (2024.9.1)
 Requirement already satisfied: typing-extensions<=3.7.4.3, >=3.7.4.3 in /usr/local/lib/python3.10/dist-packages (from huggingface-hub<1.0,>=0.23.2->transformers) (4.12.2)
 Requirement already satisfied: charset-normalizer<4, >=2 in /usr/local/lib/python3.10/dist-packages (from requests->transformers) (3.3.2)
 Requirement already satisfied: idna<4, >=2.5 in /usr/local/lib/python3.10/dist-packages (from requests->transformers) (3.10)
 Requirement already satisfied: urllib3<3, >=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests->transformers) (2.2.3)
 Requirement already satisfied: certifi<2017.4.17, >=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests->transformers) (2024.12.14)
 Requirement already satisfied: torch in /usr/local/lib/python3.10/dist-packages (2.4.1+cu121)
 Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from torch) (3.16.1)
 Requirement already satisfied: typing-extensions<=4.8.0, >=4.8.0 in /usr/local/lib/python3.10/dist-packages (from torch) (4.12.2)
 Requirement already satisfied: sympy in /usr/local/lib/python3.10/dist-packages (from torch) (1.13.3)
 Requirement already satisfied: networkx in /usr/local/lib/python3.10/dist-packages (from torch) (3.3)
 Requirement already satisfied: jinja2 in /usr/local/lib/python3.10/dist-packages (from torch) (3.1.4)
 Requirement already satisfied: fsspec in /usr/local/lib/python3.10/dist-packages (from torch) (2024.6.1)
 Requirement already satisfied: MarkupSafe<2.0, >=2.0 in /usr/local/lib/python3.10/dist-packages (from jinja2->torch) (2.1.5)
 Requirement already satisfied: mpmath<1.4, >=1.1.0 in /usr/local/lib/python3.10/dist-packages (from sympy->torch) (1.3.0)
 /usr/local/lib/python3.10/dist-packages/huggingface_hub/utils/_token.py:89: UserWarning:
 The secret `HF_TOKEN` does not exist in your Colab secrets.
 To authenticate with the Hugging Face Hub, create a token in your settings tab (<https://huggingface.co/settings/tokens>), set it as a Colab secret and refresh the page.
 You will be able to reuse this secret in all of your notebooks.