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import numpy as np
import tensorflow as tf
from tensorflow.keras.applications.vgg16 import VGG16, preprocess_input, decode_predictions
from tensorflow.keras.preprocessing.image import load_img, img_to_array

# Load the VGG16 model
model = VGG16()

# Load and preprocess the image
img = load_img('obj.png', target_size=(224, 224))
img_arr = img_to_array(img)
img_arr = preprocess_input(np.expand_dims(img_arr, axis=0))

# Predict objects in the image
preds = model.predict(img_arr)
decoded_preds = decode_predictions(preds, top=5)[0]

# Print the predicted objects and their probabilities
for pred in decoded_preds:
    print(f"{pred[1]}: {pred[2]*100:.2f}%")

```

```

1/1 [=====] - 1s 830ms/step
rubber_eraser: 51.04%
pencil_sharpener: 12.47%
web_site: 7.03%
rule: 3.15%
matchstick: 2.87%

```

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```

import tensorflow as tf
import numpy as np
from tensorflow.keras.preprocessing.image import load_img
from tensorflow.keras.preprocessing.image import img_to_array
from tensorflow.keras.applications.vgg16 import VGG16
from tensorflow.keras.applications.vgg16 import preprocess_input
from tensorflow.keras.applications.vgg16 import decode_predictions

# Load the VGG16 model with pre-trained weights
model = VGG16()

# Load the image
image = load_img('obj.png', target_size=(224, 224))

# Convert the image to a numpy array
image = img_to_array(image)

# Reshape the image data for VGG
image = image.reshape((1, image.shape[0], image.shape[1], image.shape[2]))

# Preprocess the image
image = preprocess_input(image)

# Make predictions on the image using the VGG model
predictions = model.predict(image)

# Decode the predictions
decoded_predictions = decode_predictions(predictions, top=2)

# Print the predictions with their probabilities
for i, prediction in enumerate(decoded_predictions[0]):
    print("Object ", i+1, ": ", prediction[1], ", Probability: ", prediction[2])

```

```

1/1 [=====] - 1s 798ms/step
Object 1 : rubber_eraser , Probability: 0.5103751
Object 2 : pencil_sharpener , Probability: 0.1246893

```