import cv2

import os

from google.colab import files

import shutil

# Function to resize the image to 512x927 while preserving the filename as PNG

def resize\_image(input\_image\_path, output\_directory, target\_width=512, target\_height=927):

    # Read the image

    image = cv2.imread(input\_image\_path)

    if image is None:

        print(f"Error: Failed to load the image: {input\_image\_path}")

        return

    # Resize the image to 512x927

    resized\_image = cv2.resize(image, (target\_width, target\_height))

    # Get the filename from the original path and change extension to .png

    filename = os.path.basename(input\_image\_path)

    filename\_without\_extension = os.path.splitext(filename)[0]  # Remove the original extension

    filename\_png = filename\_without\_extension + ".png"  # Change extension to .png

    # Create the output file path with the same filename but in PNG format

    output\_path = os.path.join(output\_directory, filename\_png)

    # Save the resized image as PNG with the same filename

    cv2.imwrite(output\_path, resized\_image)

    print(f"Resized image saved to {output\_path}")

    # Return the path of the saved image for downloading

    return output\_path

# Choose a file using the file upload dialog

uploaded = files.upload()

# Directory to save the resized images

output\_directory = "resized\_images"  # Directory to save resized images

# Make the output directory if it doesn't exist

if not os.path.exists(output\_directory):

    os.makedirs(output\_directory)

# List to store paths of resized images for zipping

resized\_images\_paths = []

# Loop over all uploaded files and resize them

for filename in uploaded.keys():

    input\_image\_path = filename  # Get the uploaded image's name

    # Resize the image and get the path of the resized image

    resized\_image\_path = resize\_image(input\_image\_path, output\_directory)

    if resized\_image\_path:

        resized\_images\_paths.append(resized\_image\_path)

# Now, zip the resized images folder

shutil.make\_archive("resized\_images", "zip", output\_directory)

# Provide a way to download the resized images as a ZIP file

files.download("resized\_images.zip")

print("All images have been resized and are available for download as a ZIP file.")