Background Removal Tool Documentation

Overview

The Background Removal Tool is a Python program that utilizes the Pillow, tkinter, rembg, and pathlib libraries to remove backgrounds from PNG images and save the edited images as PNG files. The program provides a graphical user interface (GUI) for a user-friendly experience.

Prerequisites

1. Python 3.x installed on your system.
2. Required libraries: Pillow, tkinter, rembg, pathlib.

   pip install Pillow tkinter rembg

Usage

1. Nstallation
:Before running the program, ensure you have installed the required libraries as mentioned in the prerequisites.

 Using the GUI

Step 1
 Select Image File

Click the "Select Image" button to open a file dialog. Choose the PNG image file you want to process for background removal.
Step 2
 Select Output Directory
 Click the "Select Output Directory" button to choose a directory where the processed image will be saved.

Step 3
Enter File Name**: Enter a desired name for the processed image (without the file extension). The output image will be saved as "your_name.png" in the selected output directory

4. Step 4 - Remove Background**: After selecting the image file, output directory, and entering a file name, click the "Remove Background" button. The program will remove the background from the selected image and save it in the specified output directory.

5. View Output: Once the background removal process is complete, you can navigate to the selected output directory to find the processed image.

Code Structure

- **background_removal_tool.py**: The main Python script that implements the background removal tool using the tkinter GUI and the provided libraries.
- **/images**: This directory may contain sample PNG images for testing the program.

Examples

Example 1: Removing Background from an Image

1. Run the program using the steps outlined in the "Usage" section.
2. Click the "Select Image" button and choose a PNG image from the /images directory.
3. Click the "Select Output Directory" button and choose a directory to save the processed image.
4. Enter a desired name for the processed image.
5. Click the "Remove Background" button.
6. Navigate to the selected output directory to find the processed PNG image.

Notes

- The program uses the rembg library to perform background removal using a pre-trained neural network.
- Make sure the selected image is in PNG format for accurate background removal.

Conclusion

The Background Removal Tool simplifies the process of removing backgrounds from PNG images. Its intuitive GUI and underlying libraries make it a useful tool for users who want to quickly and easily edit images. Further customization and enhancements can be made to the program based on specific requirements.

Please note that this documentation outline serves as a starting point. You should customize and expand upon it based on your program's specific features and functionality. Include detailed code explanations, screenshots, and any additional information that helps users understand and use your program effectively.

```python
from pathlib import Path
from tkinter import filedialog
import tkinter as tk
from rembg import remove
from PIL import Image
from tkinter import simpledialog
from tkinter import messagebox

def select_file():
    file_name=filedialog.askopenfilename(filetypes=(("PNG files",
"*.png"),))
    file_path.insert(0,file_name)

def select_file_path_tosave():
    saved_file=filedialog.askdirectory()
    output_path1.insert(0,saved_file)

def removebg():

    input_path=file_path.get()


    # rename file to save
    re_name=simpledialog.askstring("Input", "Give a name to you are file
?")

    output_path=output_path1.get()
    lastsave=output_path+"/"+re_name+".png"
    # Processing the image

    input = Image.open(input_path)
    # # Removing the background from the given Image
    removebg_out = remove(input)
    # #Saving the image in the given path
    removebg_out.save(lastsave)
    messagebox.showinfo("Info","You file have saved in this
path\n"+lastsave)



window =tk.Tk()
```

```python
window.geometry("320x150")




# layout elemetys
open_file=tk.Button(text="Select Your File to Remove BG " ,
command=select_file)
file_path=tk.Entry()
save_path=tk.Button(text="Select Path to Save the File ",
command=select_file_path_tosave)
output_path1=tk.Entry()
remove_bg=tk.Button(text="Remove Background", bg="red",command=removebg)

#  layou control desgin
open_file.grid(row=0, column=0, sticky="ew", padx=5, pady=5)
file_path.grid(row=0, column=1,columnspan=3,padx=5, sticky="ew", pady=5)
save_path.grid(row=1, column=0, sticky="ew",padx=5, pady=5)
output_path1.grid(row=1, column=1,columnspan=3, sticky="ew",padx=5,
pady=5)
remove_bg.grid(row=2,column=0, sticky="ew",padx=5, pady=10)
window.resizable(False,True )
window.mainloop()
```