File\_Renamer

Python Code Block:

import os

import tkinter as tk

from tkinter import filedialog, messagebox, ttk

from tkinter.ttk import Progressbar

# pyinstaller --onefile --noconsole --add-data "C:\Users\<User>\AppData\Local\Programs\Python\Python311\Lib\site-packages\tkinter;tkinter" your\_script\_name.py

def browse\_source():

folder = filedialog.askdirectory()

if folder:

source\_entry.delete(0, tk.END)

source\_entry.insert(0, folder)

def browse\_dest():

folder = filedialog.askdirectory()

if folder:

dest\_entry.delete(0, tk.END)

dest\_entry.insert(0, folder)

def rename\_files():

source\_folder = source\_entry.get()

dest\_folder = dest\_entry.get()

new\_name\_base = name\_entry.get()

start\_number\_str = number\_entry.get()

if not all([source\_folder, dest\_folder, new\_name\_base, start\_number\_str]):

messagebox.showerror("Error", "Please fill in all fields.")

return

try:

start\_number = int(start\_number\_str)

except ValueError:

messagebox.showerror("Error", "Invalid starting number. Please enter an integer.")

return

if not os.path.isdir(source\_folder):

messagebox.showerror("Error", f"Source folder not found: {source\_folder}")

return

if not os.path.isdir(dest\_folder): # Check destination folder exists

try:

os.makedirs(dest\_folder) #Create if doesn't exist

except Exception as e:

messagebox.showerror("Error", f"Could not create destination folder: {e}")

return

files = [f for f in os.listdir(source\_folder) if os.path.isfile(os.path.join(source\_folder, f))]

total\_files = len(files)

if total\_files == 0:

messagebox.showinfo("Info", "No files found in the source folder.")

return

for i, filename in enumerate(files):

try:

new\_filename = f"{new\_name\_base}{start\_number + i}{os.path.splitext(filename)[1]}"

source\_path = os.path.join(source\_folder, filename)

dest\_path = os.path.join(dest\_folder, new\_filename)

os.rename(source\_path, dest\_path)

progress\_bar["value"] = (i + 1) / total\_files \* 100

root.update\_idletasks()

except Exception as e: # Handle file rename errors

messagebox.showerror("Error", f"An error occurred while renaming {filename}: {e}")

return

messagebox.showinfo("Success", f"Successfully renamed {total\_files} files.")

root = tk.Tk()

root.title("File Renamer")

source\_label = tk.Label(root, text="Source Folder:")

source\_label.grid(row=0, column=0, padx=5, pady=5, sticky="w")

source\_entry = tk.Entry(root, width=40)

source\_entry.grid(row=0, column=1, padx=5, pady=5)

source\_button = tk.Button(root, text="Browse", command=browse\_source)

source\_button.grid(row=0, column=2, padx=5, pady=5)

dest\_label = tk.Label(root, text="Destination Folder:")

dest\_label.grid(row=1, column=0, padx=5, pady=5, sticky="w")

dest\_entry = tk.Entry(root, width=40)

dest\_entry.grid(row=1, column=1, padx=5, pady=5)

dest\_button = tk.Button(root, text="Browse", command=browse\_dest)

dest\_button.grid(row=1, column=2, padx=5, pady=5)

name\_label = tk.Label(root, text="New File Name:")

name\_label.grid(row=2, column=0, padx=5, pady=5, sticky="w")

name\_entry = tk.Entry(root, width=40)

name\_entry.grid(row=2, column=1, padx=5, pady=5, columnspan=2)

number\_label = tk.Label(root, text="Starting Number:")

number\_label.grid(row=3, column=0, padx=5, pady=5, sticky="w")

number\_entry = tk.Entry(root, width=10)

number\_entry.grid(row=3, column=1, padx=5, pady=5)

progress\_bar = Progressbar(root, length=300, mode="determinate")

progress\_bar.grid(row=4, column=0, columnspan=3, padx=5, pady=10)

rename\_button = tk.Button(root, text="Rename Files", command=rename\_files)

rename\_button.grid(row=5, column=0, columnspan=3, pady=10)

root.mainloop()

**Steps to compile your Python Tkinter app into an executable on Windows using PyInstaller:**

**1. Prepare Your Environment:**

* **Python Installation:** Ensure you have Python installed on your Windows system. You can download the latest version from python.org. During installation, check the box that says, "Add Python to PATH" (or add it manually later). This makes it easier to run Python commands from the command prompt or PowerShell.
* **Project Directory:** Create a dedicated folder for your project. Put your Python script (your\_script\_name.py in the examples) in this folder. This will keep things organized.

**2. Install PyInstaller:**

* **Open Command Prompt or PowerShell:** Search for "cmd" or "PowerShell" in the Windows Start Menu, right-click, and select "Run as administrator". Running as administrator can help avoid permission issues.
* **Install using pip:** In the command prompt/PowerShell, type the following command and press Enter:

pip install pyinstaller

**3. Find Your Tkinter Path:**

* This is the most critical step for Tkinter apps to compile correctly. You need the *full path* to the tkinter directory within your Python installation.
* **Common Location (adjust if needed):** The most likely location will be similar to this (but replace <YourUserName> and the Python version as appropriate):

C:\Users\<YourUserName>\AppData\Local\Programs\Python\Python311\Lib\site-packages\tkinter

* **Confirm Location:** To be absolutely sure, open a Python interpreter (by typing python in your command prompt/PowerShell). Then, run the following two lines of Python code:

import tkinter

print(tkinter.\_\_path\_\_)

This will print the correct path to the tkinter folder. Copy this path – you'll need it for the next step.

**4. Compile with PyInstaller:**

* **Navigate to Project Directory:** In your command prompt/PowerShell, use the cd command to change to the directory where your Python script is saved. For example:

cd C:\Path\To\Your\Project\Folder

* **Run PyInstaller:** Now, run the following command, *replacing the placeholder path with the actual path to your Tkinter installation you found in the previous step* and your\_script\_name.py with your file name:

pyinstaller --onefile --noconsole --add-data "C:\Users\<YourUserName>\AppData\Local\Programs\Python\Python311\Lib\site-packages\tkinter:tkinter" your\_script\_name.py

**5. Locate Your Executable:**

* **dist Folder:** After the compilation process is complete, PyInstaller will create a dist folder in your project directory.
* **Executable:** Inside the dist folder, you'll find your standalone executable file (your\_script\_name.exe).

**6. Test Your Executable:**

Double-click the .exe file to run your application. Ensure it functions as expected.

**Example (Putting it all together):**

Let's say your username is JaneDoe, you're using Python 3.9, your script is called file\_renamer.py, and your project is in C:\MyProjects\FileRenamer.

Here's what the process would look like:

1. **Tkinter Path:** You run import tkinter; print(tkinter.\_\_path\_\_) in Python and it outputs: ['C:\\Users\\JaneDoe\\AppData\\Local\\Programs\\Python\\Python39\\Lib\\site-packages\\tkinter']
2. **PyInstaller Command:**

cd C:\MyProjects\FileRenamer

pyinstaller --onefile --noconsole --add-data "C:\Users\JaneDoe\AppData\Local\Programs\Python\Python39\Lib\site-packages\tkinter:tkinter" file\_renamer.py

1. **Executable Location:** C:\MyProjects\FileRenamer\dist\file\_renamer.exe