

USER INTERFACE DESIGN

EXP.NO:3

DATE:08.02.2025

TASK: To create a simple GUI (GRAPICS USER INTERFACE) , VUI (VOICEUSER INTERFACE) , CLI (COMMNAD LINE INTERFACE) using Python with required libraries.

GUI:

PYTHON CODE:

```
import tkinter as tk from tkinter import ttk
import ttkbootstrap as tb # Modern UI theme
from PIL import Image, ImageTk # For icons

def rename_file():
    old_name = old_file_entry.get()
    new_name = new_file_entry.get()
    if old_name and new_name:
        status_label.config(text=f'Renamed "{old_name}" to "{new_name}"', foreground="green")
    else:
        status_label.config(text="Please enter both filenames", foreground="red")

root = tb.Window(themename="superhero") # Stylish theme root.title("File
Renamer") root.geometry("1000x1000") root.resizable(False, False)
root.configure(bg="#D1E8E2") # Light pastel background

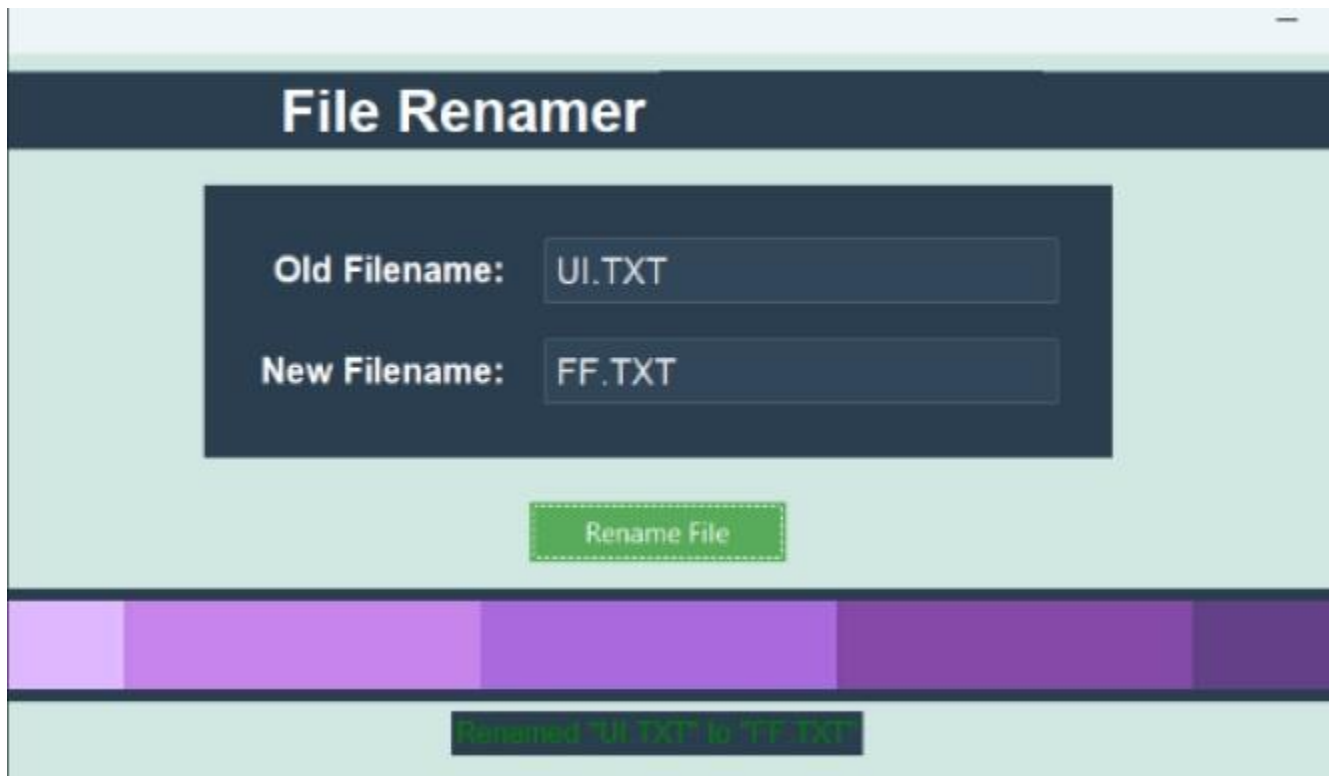
title_label = tk.Label(root, text="File Renamer by 230701246", font=("Arial", 20, "bold"), fg="BLACK",
bg="#4682B4") title_label.pack(fill="x", pady=10)
frame = tk.Frame(root, bg="#D1E8E2", padx=20, pady=20) frame.pack(pady=10) old_file_label =
ttk.Label(frame, text="Old Filename:", font=("Arial", 12, "bold")) old_file_label.grid(row=0, column=0, padx=10,
pady=10, sticky="e") old_file_entry = ttk.Entry(frame, width=25, font=("Arial", 12)) old_file_entry.grid(row=0,
column=1, padx=10, pady=10) new_file_label = ttk.Label(frame, text="New Filename:", font=("Arial", 12,
"bold")) new_file_label.grid(row=1, column=0, padx=10, pady=10, sticky="e") new_file_entry = ttk.Entry(frame,
width=25, font=("Arial", 12)) new_file_entry.grid(row=1, column=1, padx=10, pady=10) rename_button =
```

```

tb.Button(root, text="Rename File", bootstyle="success", command=rename_file, width=15)
rename_button.pack(pady=15) icon_img = Image.open("C:\sem 4\PUP.png").resize((1000, 50)) # Add your own
icon.png iconTk = ImageTk.PhotoImage(icon_img) title_frame = tk.Frame(root, bg="#4682B4", height=50)
title_frame.pack(fill="x") icon_label = tk.Label(title_frame, image=iconTk, bg="#4682B4")
icon_label.pack(side="left", padx=10, pady=5) status_label = tk.Label(root, text="", font=("Arial", 10),
bg="#D1E8E2") status_label.pack(pady=5)
root.mainloop()

```

OUTPUT:



VUI:

Python code:

```
import speech_recognition as sr

import os

def rename_file(old_name, new_name):

    try:

        if not os.path.exists(old_name):

            print(f"Error: The file '{old_name}' does not exist.")

            return os.rename(old_name, new_name)

        print(f"File successfully renamed from '{old_name}' to '{new_name}'.")

    except Exception as e:

        print(f"Error renaming file: {e}")

def parse_voice_command(command):

    try:

        command = command.lower()

        if "rename" in command and "to" in command:

            words = command.split()

            old_name_index = words.index("rename") + 1

            new_name_index = words.index("to") + 1

            old_name = words[old_name_index]

            new_name = words[new_name_index]

            return old_name, new_name

        else:

            print("Invalid command format. Please use: 'Rename <old_name> to <new_name>'.")

            return None, None

    except Exception as e:

        print(f"Error parsing command: {e}")

        return None, None

def listen_for_command():

    recognizer = sr.Recognizer()

    mic = sr.Microphone()
```

```

print("Listening for a command to rename a file...")

with mic as source:

    recognizer.adjust_for_ambient_noise(source)

    try:

        audio = recognizer.listen(source, timeout=20) except

    sr.WaitTimeoutError:

        print("Listening timed out. No command detected.")

    return

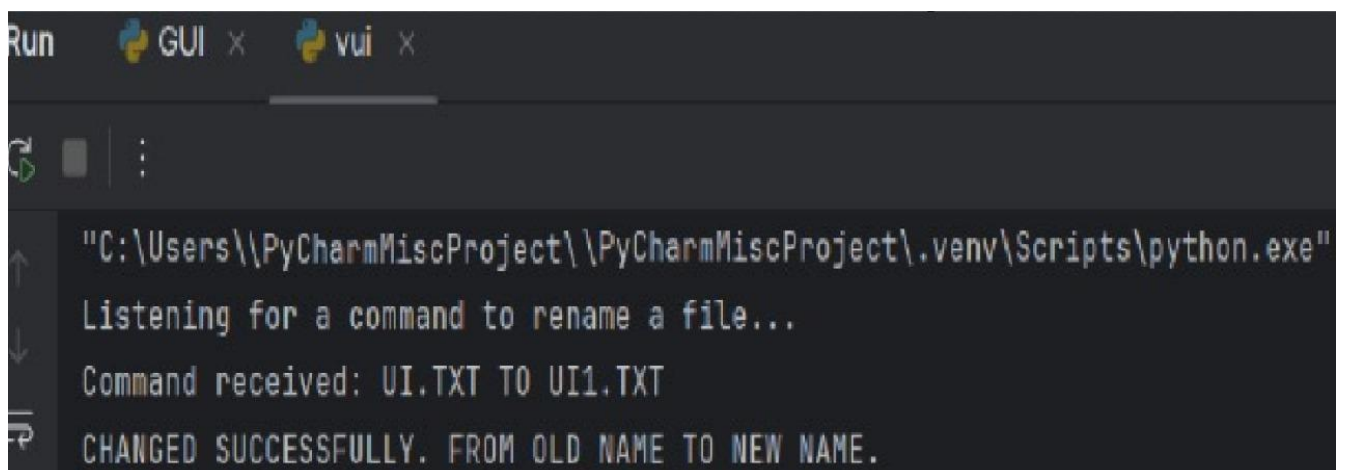
try:

    command = recognizer.recognize_google(audio) print(f"Command
received:      {command}")      old_name,      new_name      =
parse_voice_command(command) if old_name and new_name:
rename_file(old_name, new_name) except sr.UnknownValueError:
print("Sorry, I couldn't understand the command. Please try again.")
except sr.RequestError as e: print(f"Could not connect to Google Speech
Recognition service; {e}")

if __name__ == "__main__": listen_for_command()

```

OUTPUT:



```

Run  GUI x  vui x
"C:\Users\PyCharmMiscProject\PyCharmMiscProject\venv\Scripts\python.exe"
Listening for a command to rename a file...
Command received: UI.TXT TO UI1.TXT
CHANGED SUCCESSFULLY. FROM OLD NAME TO NEW NAME.

```

CLI:

Python code:

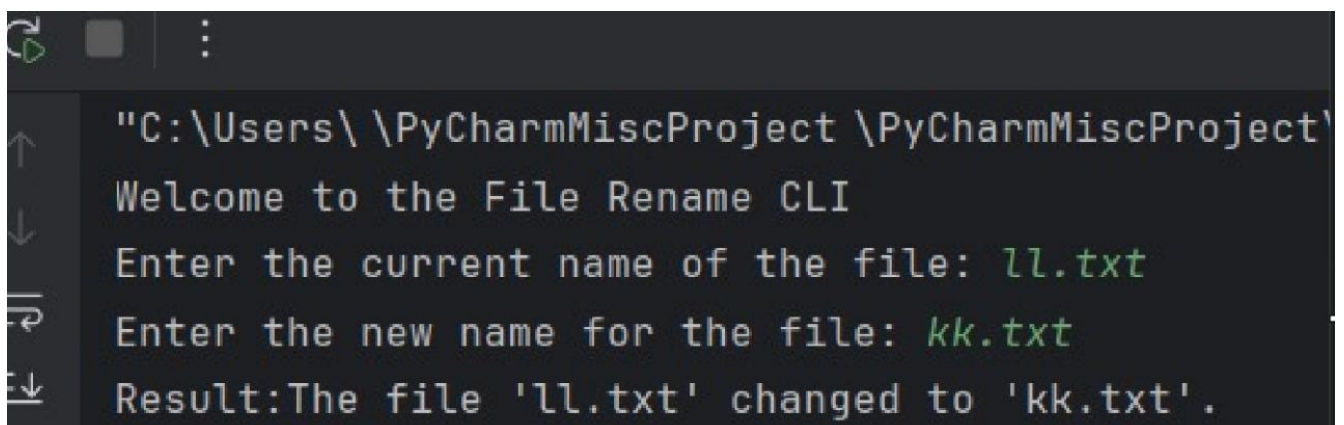
```
import os
import sys

def rename_file(old_name, new_name):
    try:
        os.rename(old_name, new_name)
        print(f"File renamed from '{old_name}' to '{new_name}' successfully.")
    except FileNotFoundError: print(f"Result:The file '{old_name}' changed to '{new_name}'.")
    except FileExistsError: print(f"Result: A file '{new_name}' is changed.")
    except Exception as e:
        print(f"An error occurred: {e}")

def main():
    print("Welcome to the File Rename CLI")
    old_name = input("Enter the current name of the file: ")
    new_name = input("Enter the new name for the file: ")
    rename_file(old_name, new_name)

if __name__ == "__main__":
    main()
```

OUTPUT:



```
"C:\Users\ \PyCharmMiscProject \PyCharmMiscProject\'
Welcome to the File Rename CLI
Enter the current name of the file: ll.txt
Enter the new name for the file: kk.txt
Result:The file 'll.txt' changed to 'kk.txt'.
```