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:

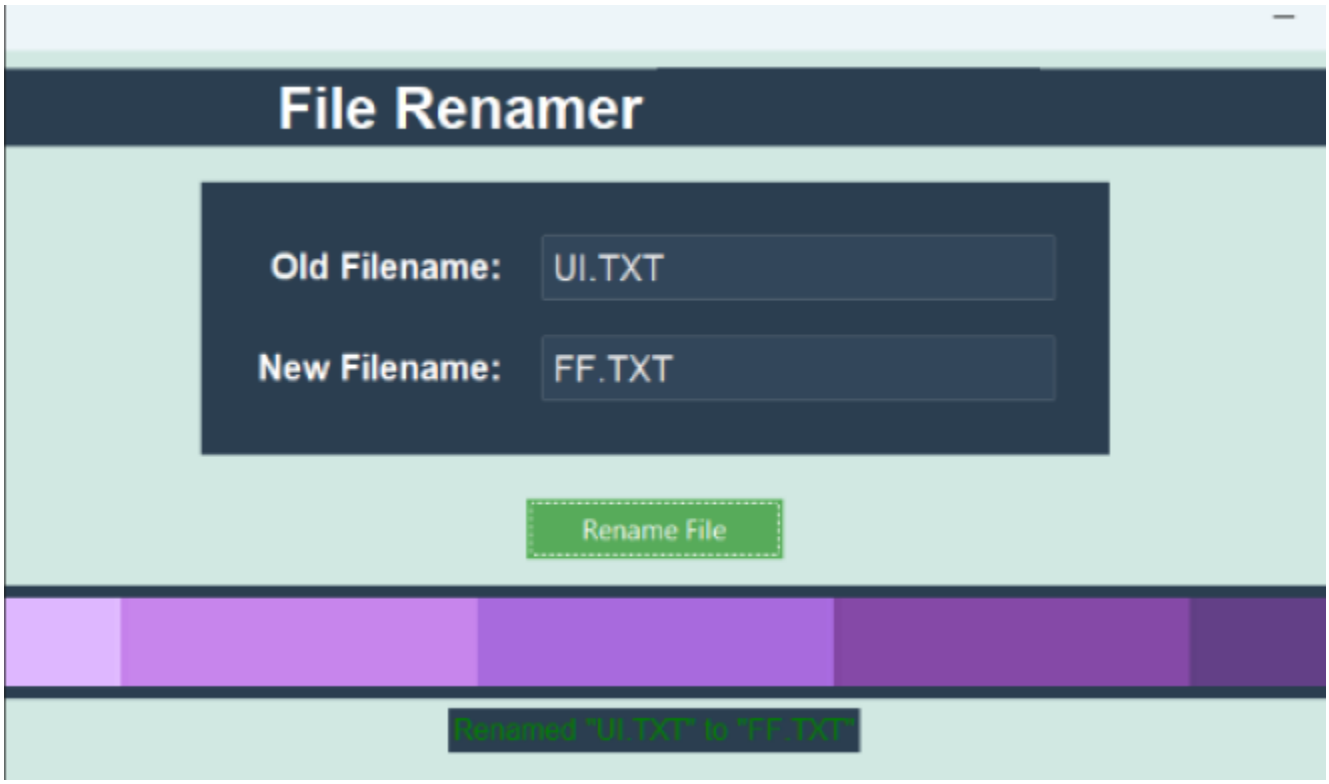
PYTHON CODE:

```
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
icon_tk = 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=icon_tk, 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:


File Renamer
Old Filename:
UI.TXT
New Filename:
FF.TXT
Rename File
Renamed "UI.TXT" to "FF.TXT"

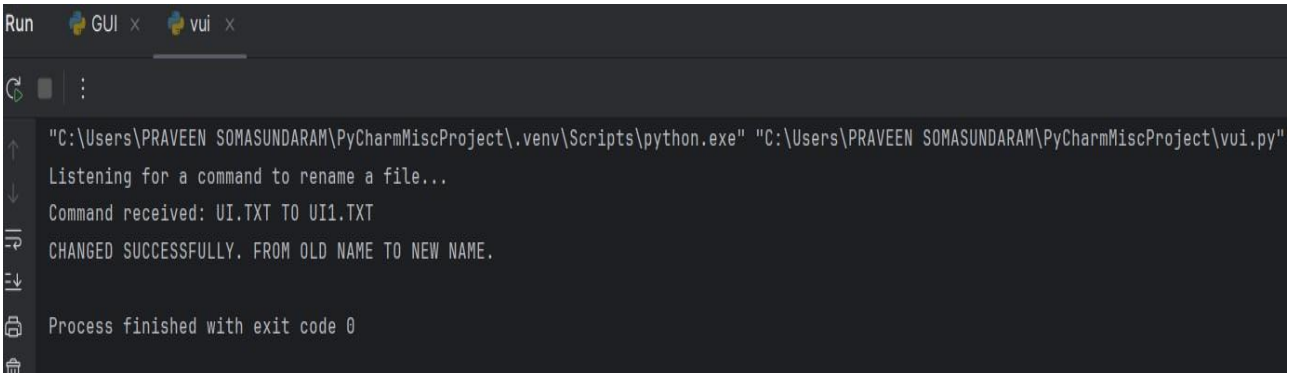
VUI:

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:



CLI:

Pyhton 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: