# **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 230701237", font=("Arial", 20, "bold"), fg="BLACK",
bg="#4682B4") title_label.pack(fill="x", pady=10)
     = 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:**



## VUI:

## Python code:

```
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>'.")
               None,
                      None
      return
                               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 × vui ×

"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:

def main():

### 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}")
```

```
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'.
```