Week Three: Evaluating User Interfaces: CLI, GUI, and VUI in File Renaming

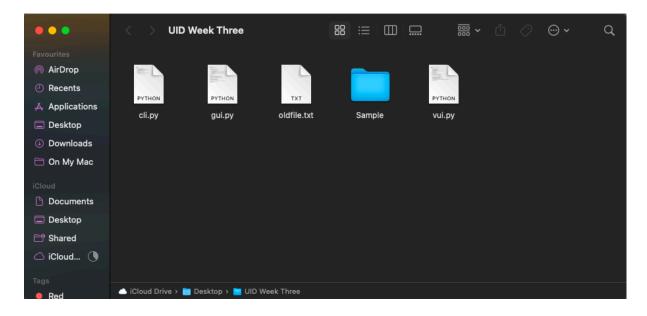
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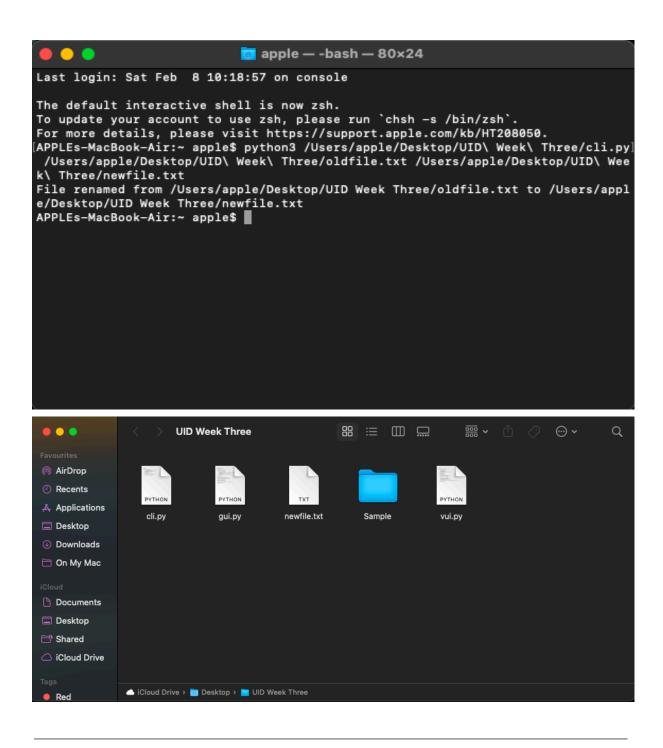
Introduction

In computing, user interfaces play a crucial role in determining the efficiency and ease of performing tasks. This experiment explores three different interfaces—Command Line Interface (CLI), Graphical User Interface (GUI), and Voice User Interface (VUI)—for performing a common file operation: renaming a file. Each interface is implemented using Python, leveraging OS operations for CLI, Tkinter for GUI, and SpeechRecognition for VUI.

Command Line Interface

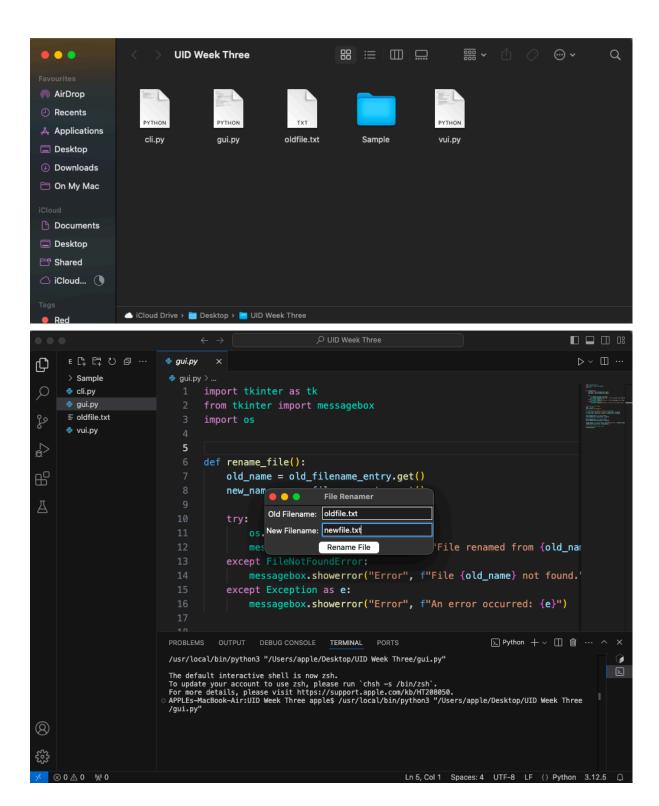
Before renaming the file, the folder contained its original contents. Using the terminal, the command was executed to rename the file. After the process, the folder now reflects the change—"oldfile.txt" has been successfully renamed to "newfile.txt".

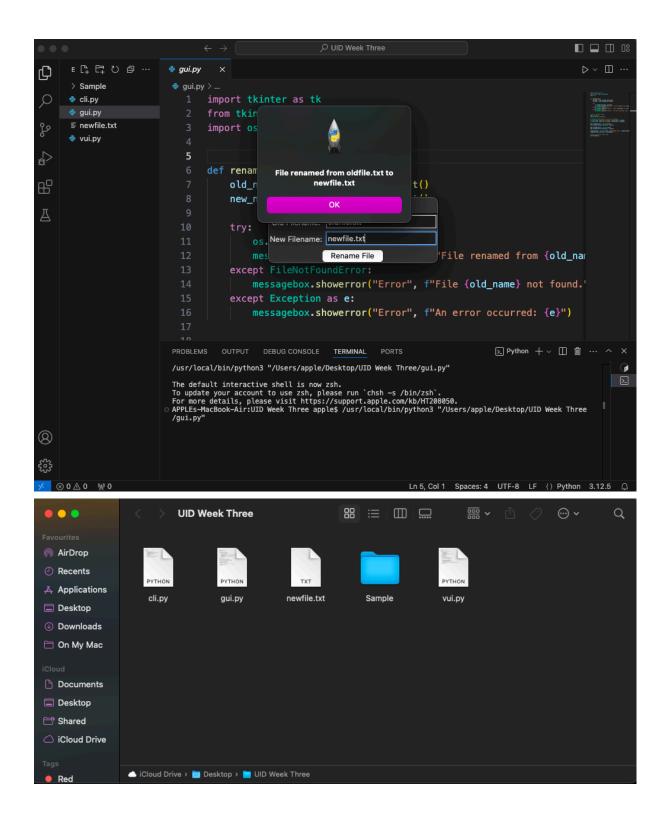




Graphical User Interface

Before renaming the file, the folder displayed its original contents. The code was executed using **VS Code**, prompting a **GUI** where the user entered the old file name to be searched and the new file name for renaming. After the process, the folder now reflects the change—"oldfile.txt" has been successfully renamed to "newfile.txt".





Voice User Interface

Initially, the folder contained a file named "Sample". Using Python's SpeechRecognition library, the Voice User Interface (VUI) processed a voice command to rename the file. Upon

successful execution, the file "Sample" was renamed to "file", demonstrating the hands-free functionality of VUI for file management.

